

# \*\*\* 2007 Undergraduate Calendar



Life Impact The University of Adelaide

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# **CRICOS Provider Number 00123M**

ISSN 0810-0349



# The Arms of the University

The heraldic description of the Coat of Arms is as follows: Per pale Or and Argent an Open Book proper edged Gold on a Chief Azure five Mullets, one of eight, two of seven, one of six and one of five points of the second, representing the Constellation of the Southern Cross; and the Motto associated with the Arms is

# Sub Cruce Lumen

'The light (of learning) under the (Southern) Cross'

# The University of Adelaide - Graduate Attributes

The University of Adelaide is a research-intensive university which seeks to develop graduates of international distinction by supporting high quality education.

The University of Adelaide provides an environment where students are encouraged to take responsibility for developing the following attributes:

- Knowledge and understanding of the content and techniques of a chosen discipline at advanced levels that are internationally recognised.
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a
  planned and timely manner.
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.
- Skills of a high order in interpersonal understanding, teamwork and communication.
- A proficiency in the appropriate use of contemporary technologies.
- A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.
- An awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities.

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Note: The information in this volume is accurate as at 17 October 2006

For the benefit of readers, each academic program is listed below, under the relevant teaching area. As well, academic programs are listed in alphabetical order in the Academic Program Index (see page 785).

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\* This program is listed in the University of Adelaide Postgraduate Calendar, 2007

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Courses are listed in alphabetical order under the following disciplines:

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# Centre for Aboriginal Studies in Music

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# Associate Diploma in Aboriginal Studies in Music (New)

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• Associate Diploma in Aboriginal Studies in Music (New)

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

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# Associate Diploma in Aboriginal Studies in Music

# Academic Program Rules

# 1 General

The Associate Diploma is intended for Aboriginal and Torres Strait Islander people only.

# 2 Duration of program

The course of study for the Associate Diploma in Aboriginal Studies in Music (New) shall normally extend over two academic years of full-time study or equivalent.

# 3 Admission

- 3.1 Admission to this course shall normally be through satisfactory completion of the CASM Foundation Year
- 3.2 For those applicants who have not completed the CASM Foundation Year admission will be based upon equivalent studies passed at another tertiary institution, or relevant musical knowledge and experience and assessed ability.
- 3.3 An applicant will not be permitted to defer an offer of admission to the course.

# 4 Assessment and examinations

- 4.1 In determining a candidate's final result the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 4.2 There will be six classifications of pass in the final assessment of any course offered within the Associate Diploma in Aboriginal Studies in Music (New): Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, and Non Graded Pass.

A grade of Conceded Pass will not be offered for courses in this program.

4.3 Candidates are required to attend a minimum of 70% of classes for all enrolled CASIM courses. Formal approved leave provisions apply for variations to this rule. Students who do not comply with these requirements may be failed in a given course. Full details of attendance regulations and approved leave provisions are available

in the CASM Academic Program Handbook and from the CASM Coordinator (Academic Programs) and course lecturers.

- 4.4 A candidate who fails a course, and who desires to take that course again shall, unless exempted wholly or partially therefrom by the CASM Coordinator (Academic Programs), again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 4.5 A candidate who has twice failed any course may not enrol for that course again or for any other course which, in the opinion of CASM Coordinator (Academic Programs), contains a substantial amount of the same material, except by special permission of the CASM Coordinator (Academic Programs)and then only under such conditions as the CASM Coordinator (Academic Programs)may prescribe.

# 5 Qualification requirements

# 5.1 Academic program

- 5.1.1 The courses listed for each level under Program Rule 5.1.5 below need not all be taken in the one and same year. A candidate who has satisfied the prerequisite requirements for enrolment in later level courses may so enrol before completing all the courses of the preceding level.
- 5.1.2 The requirements for each course must normally be completed in one year of study. The CASM Coordinator (Academic Programs) may permit a candidate to complete the requirements of a course over a period of two years on such conditions as it may determine.
- 5.1.3 Except where otherwise determined by the CASM Coordinator (Academic Programs), a candidate who is eligible in any year to enrol in MUSIC 1009 A/B Practical Music Study I MS (and MUSIC 1002 A/B Practical Music Study I CM, MUSIC 2020 A/B Practical Music Study II MS or MUSIC 2006 A/B Practical Music Study II CM) and fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum audition standard for enrolment in the course in question before being authorised to so enrol.

5.1.4	Candidates must obtain the approval of the CASM Coordinator (Academic Programs), or nominee, for th proposed courses of study and are required to take p in the general practical work of the Centre for Aboriginal Studies in Music.			MUSIC 2006 A/B Practical Music Study II CM Pt 1 & 2 4 MUSIC 2009 A/B Performance II CM Pt 1 & 2 4 MUSIC 2023 A/B Research Studies (CASM) II CM Pt 1 & 2 4	
5.1.5	To qualify for the Associate Diploma candidates shall satisfactorily complete the requirements for the courses listed below:			and MUSIC 2005 A/B Practical Extension II Pt 1 & 2 2	
	Level I either			MUSIC 2011 A/B Aural Development(New) II Pt 1 & 2 1	
	MUSIC 1009 A/B Practical Music Study I MS			and either	
	Pt 1 & 2	4		MUSIC 2016 A/B Studies in Community & Culture II Pt 1 & 2 3	
	MUSIC 1010 A/B Theory of Music I MS Pt 1 & 2	3		Or	
	MUSIC 1011 A/B Research Studies (CASM) I MS Pt 1 & 2	3		MUSIC 2017 A/B General Studies (New) II Pt 1 & 2 3	
	MUSIC 1013 A/B Performance I MS Pt 1 & 2	4	5.1.6	A candidate who satisfactorily completes all of the	
	MUSIC 1021 A/B Style Studies I MS Pt 1 & 2 or	2		requirements of Level 1 of the program, but does not wish to proceed to the Associate Diploma may be	
	MUSIC 1001 A/B Style Studies I CM Pt 1 & 2	2		awarded, upon application, the Advanced Certificate in	
	MUSIC 1002 A/B Practical Music Study I CM			Aboriginal Studies in Music (New).	
	Pt 1 & 2	4	5.1.7	A candidate who holds the Certificate in Aboriginal Studies in Music or the Advanced Certificate in	
	MUSIC 1014 A/B Performance I CM Pt 1 & 2	4		Aboriginal Studies in Music shall surrender the	
	MUSIC 1016 A/B Research Studies (CASM) I CM Pt 1 & 2	3		Certificate before being admitted to the Associate Diploma.	
	MUSIC 1020 A/B Theory of Music I CM Pt 1 & 2	3	5.2	Unaccontable combinations of courses	
	and		0.Z	Unacceptable combinations of courses No candidate will be permitted to count towards an	
	MUSIC 1007 A/B Studies in Community & Culture I Pt 1 & 2	3		award any course, together with any other course, which, in the opinion of the Faculty concerned, contains	
	MUSIC 1015 A/B General Studies (New) I Pt 1 & 2	2		a substantial amount of the same material; and no course or portion of a course may be counted twice	
	MUSIC 1018 A/B Practical Extension I Pt 1 & 2	2		towards an award.	
	MUSIC 1024 A/B Aural Development (New) I		5.3	Graduation	
	Pt 1 & 2	1	010	Subject to Chapter 89 of the Statutes, candidates who	
	Level II			have satisfied the requirements for this award of the	
	either			University shall be admitted to the award at a	
	MUSIC 2002 A/B Style Studies II MS Pt 1 & 2	2		graduation ceremony for the purpose.	
	MUSIC 2003 A/B Theory of Music II MS Pt 1 & 2	4	6	Special circumstances	
	MUSIC 2004 A/B Performance II MS Pt 1 & 2	4		When in the opinion of the relevant Faculty special	
	MUSIC 2019 A/B Research Studies (CASM) II MS	4		circumstances exist, the Council, on the	
	Pt 1 & 2 MUSIC 2020 A/B Practical Music Study II MS	4		recommendation of the Faculty in each case, may vary	
	Pt 1 & 2	4		any of the provisions of the Academic Program Rules	
	or			for any particular award	
	MUSIC 2000A Theory of Music II CM Pt 1 & 2	4	Note:		
	MUSIC 2001 A/B Style Studies II CM Pt 1 & 2	2		notes Music Studies Stream	
			CM der	notes Community Musician Stream.	



# School of Architecture, Landscape Architecture and Urban Design

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Graduate Diploma in Design

# Graduate Diploma in Design Studies

Grad.Dip.Des.St.

# Graduate Diploma in Design Studies (Landscape)

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# www.arch.adelaide.edu.au

Program Rules - Architecture, Landscape Architecture and L
- Architecture,
Landscape A
Architecture ar
nd Urban Design
esign

# Undergraduate Awards in the School of Architecture, Landscape Architecture and Urban Design

- Degree of Bachelor of Architecture
- Degree of Bachelor of Design Studies
- Degree of Bachelor of Landscape Architecture
- Degree of Bachelor of Architecture/Bachelor of Landscape Architecture
- Honours degree of Bachelor of Design Studies
- Honours degree of Bachelor of Architecture
- Honours degree of Bachelor of Landscape Architecture
- Graduate Certificate in Design Studies
- Graduate Certificate in Design Studies (Landscape)
- Graduate Diploma in Design Studies
- Graduate Diploma in Design Studies (Landscape)

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

# Academic Program Rules

# 1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Design Studies. The Bachelor degree shall be awarded with a major in either Architectural Studies or Landscape Studies or Architectural and Landscape Studies.
- 1.2 A graduate of the University or of another educational institution who wishes to proceed to the degree of Bachelor of Design Studies may do so under the requirements of these Academic Program Rules.
- 1.3 A candidate who has completed courses under any repealed regulations for the Bachelor of Architectural Studies shall have status in equivalent courses under the Academic Program Rules.

# 2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent. Students shall pass courses to the value of at least 24 units at each of the three levels. The unit values of the courses are contained in Academic Program Rule 5.1.
- 2.2 A candidate may interrupt the program for such periods and on such conditions as may in each case be determined by the School.
- 2.3 Students wishing to interrupt their studies in accordance with 2.2 above must apply through the School Executive Officer for permission and obtain beforehand the approval of the Head on behalf of the School for leave of absence for a defined period.
- 2.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.2 above shall be deemed to have withdrawn his or her candidature for the degree but may reapply for admission to the program in accordance with the procedures in operation at the time.
- 2.5 Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Head of the School deems appropriate.

# 3 Admission

- 3.1 Status, exemption and credit transfer A candidate who has passed undergraduate, or equivalent, level courses in the Faculty or in other faculties of the University or in other educational institutions, may, on written application to the Head of the School of Architecture, Landscape Architecture and Urban Design, be granted such exemption from these Academic Program Rules as the Faculty may determine, save that a candidate shall always be required to satisfy the examiners in all courses of the final year of the program.
- 3.2 Articulation with other awards
- 3.2.1 It is possible for students in Design Studies to elect to complete both the Bachelor of Design Studies and Bachelor of Laws academic programs in a total of five and a half years of full-time study\*, provided they are accepted into the Bachelor of Laws academic program. Students wishing to pursue this academic plan may apply for admission through the South Australian Tertiary Admissions Centre by September of the year before they commence University study or in a later year of the program.

\*Some overload may be required for students taking the B.Des.St. (Landscape Studies major) or B.Des.St. (Architectural and Landscape Studies major).

The following program of study for the B.Des.St. (with an Architectural Studies major) is recommended

#### Level I

Courses listed in Academic Program Rule 5.1 at Level I of the degree of B.Des.St. to the value of at least 21 units together with LAW 1001 Introduction to Australian Law (4).

# Level II

DESST 2036 Technology in Design DESST 2037 Cultures, Histories and Designed Environments LAW 1002 Law of Torts LAW 1003 Law of Contract

# Level III

DESST 3027 Design for Sustainable Community DESST 3029 Architecture Design Studio Level III Electives to the value of at least 12 units from the LL.B degree.

Before enrolment in the Level III courses of the above scheme, students should consult the Law Program Adviser.

Students should seek advice about course choices if they wish to undertake the B.Des.St. (with a Landscape Studies major) or B.Des.St. (with an Architectural and Landscape Studies major) together with the Bachelor of Laws.

See also the Academic Program Rules of the LL.B. degree and in particular, the Introductory Notes to the LL.B. Syllabuses.

3.2.2 It is possible for students in Design Studies to elect to complete both the Bachelor of Design Studies and Bachelor of Commerce academic programs in a total of four years of full-time study by taking some overload, provided they are accepted into the Bachelor of Commerce academic program after they have completed at least one equivalent full-time year of the Bachelor of Design Studies. Students wishing to pursue this academic plan may apply for admission to the Bachelor of Commerce through the South Australian Tertiary Admissions Centre by September of their first year in the B.Des.St. program.

Students should seek advice regarding course choices in the B.Des.St. and B.Commerce programs.

3.2.3 A graduate in another faculty or other educational institution who wishes to qualify for the degree of Bachelor of Design Studies in the Faculty and to count towards that degree courses which have already been presented for another degree may do so providing such a candidate presents a range of courses which fulfils the requirements of Academic Program Rule 5.1 below, including courses to the value of 36 units which must include compulsory and elective Level III courses to the value of at least 24 units which have not been presented for any other degree.

# 4 Assessment and examinations

- 4.1 There shall be four classifications of pass: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the degree a limited number of courses for which a conceded pass has been awarded, as specified in the relevant Rule under these Academic Program Rules.
- 4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been

completed to the satisfaction of the teaching staff concerned.

- 4.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 4.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of School or Head of Department concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 4.5 Conceded passes cannot be presented for any compulsory Design Studies courses. A candidate may present for the degree Level I, II or III elective courses for which a conceded pass grade has been awarded to a maximum aggregate value of 6 units.
- 4.6 A candidate who has twice failed the examination in any elective course for the Bachelor degree may not enrol for that course again or for any other elective course which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as the School may prescribe.
- 4.7 There shall be three classifications of Pass in the final assessment of the course for the Honours degree as follows: First Class, Second Class and Third Class. The Second Class classification shall be divided into two divisions as follows: Division A and Division B.
- 4.8 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

# 5 Qualification requirements

# 5.1 Academic program

- 5.1.1 The Bachelor degree
- 5.1.1.1 To qualify for the degree of Bachelor of Design Studies with an Architectural Studies major a candidate shall pass the following courses to the value of at least 72 units:

	Level I	
	DESST 1027 Human Environments:	
	Design and Representation	6
	DESST 1028 Natural and Urban Systems	3
	DESST 1029 Construction and Design: Theories and Practice	6
	DESST 1030 History of Settlements	3
	Level   Electives to the value of 6 units	6
		0
	Level II DESST 2036 Technology in Design	8
	DESST 2030 reclinition of the Design DESST 2037 Cultures, Histories	0
	and Designed Environments	8
	Level II Electives to the value of 8 units	8
	Level III	
	DESST 3027 Design for Sustainable Community	6
	DESST 3029 Architecture Design Studio	6
	Level III Electives to the value of 12 units	12
5.1.1.2	To qualify for the degree of Bachelor of Design Studie with a Landscape Studies major a candidate shall pas the following courses to the value of at least 72 units	SS
	Level I	
	DESST 1027 Human Environments: Design and Representation	6
	DESST 1028 Natural and Urban Systems	3
	DESST 1029 Construction and Design: Theories and Practice	6
	DESST 1030 History of Settlements	3
	Level I Electives to the value of 6 units	6
	Level II	
	DESST 2036 Technology in Design	4
	DESST 2037 Cultures, Histories	
	and Designed Environments	8
	Level II Electives to the value of 8 units	8
	Level III	
	DESST 3027 Design for Sustainable Community	6
	DESST 3028 Natural and Landscape Systems	6
	DESST 3030 Landscape Architecture Design Studio	6
	Level III Electives to the value of 6 units	6
5.1.1.3	To qualify for the degree of Bachelor of Design Studie with an Architectural and Landscape Studies major a candidate shall pass the following courses to the valu of at least 72 units:	

# Level I

	Level I	
	DESST 1027 Human Environments:	_
	Design and Representation	6
	DESST 1028 Natural and Urban Systems	3
	DESST 1029 Construction and Design: Theories and Practice	6
	DESST 1030 History of Settlements	3
	Level I Electives to the value of 6 units	5 6
		D
		_
	DESST 2036 Technology in Design	8
	DESST 2037 Cultures, Histories and Designed Environments	8
	Level II Electives to the value of 8 units	8
		0
	Level III DESST 3027 Design for Sustainable Community	6
	DESST 3028 Natural and Landscape Systems	6
	DESST 3029 Architecture Design Studio	6
	DESST 3030 Landscape Architecture Design Studio	6
5.1.1.4	The following courses have been approved by the School of Architecture, Landscape Architecture and	
	Urban Design as electives towards the Bachelor degree	9.
	Design Studies courses	
	Bosign Otaaloo Obarooo	
	Level L II and III courses listed below (subject to	
	Level I, II and III courses listed below (subject to availability each year):	
	availability each year):	3
	availability each year): Level I	3 3
	availability each year): <b>Level I</b> DESST 1001 Special Topic in Design Studies IB	
	availability each year): Level I DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA	3
	availability each year): Level I DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA DESST 1009 Art History and Theories IA	3
	availability each year): Level I DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA DESST 1009 Art History and Theories IA DESST 1013 An Introduction to	3 3
	availability each year): <b>Level I</b> DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA DESST 1009 Art History and Theories IA DESST 1013 An Introduction to Contemporary Arab Culture and Architecture	3 3 3
	availability each year): Level I DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA DESST 1009 Art History and Theories IA DESST 1013 An Introduction to Contemporary Arab Culture and Architecture DESST 1019 Art History and Theories IB	3 3 3 3
	availability each year): Level I DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA DESST 1009 Art History and Theories IA DESST 1013 An Introduction to Contemporary Arab Culture and Architecture DESST 1019 Art History and Theories IB DESST 1026 Special Topic in Design Studies IC	3 3 3 3 3 3
	availability each year): Level I DESST 1001 Special Topic in Design Studies IB DESST 1007 Special Topic in Design Studies IA DESST 1009 Art History and Theories IA DESST 1013 An Introduction to Contemporary Arab Culture and Architecture DESST 1019 Art History and Theories IB DESST 1026 Special Topic in Design Studies IC DESST 1031 Special Topic in Design Studies ID	3 3 3 3 3 3
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DESST 2027 Special Topic in Design Studies IID
DESST 2032 Art History and Theories IIB
DESST 2033 Art History and Theories IIA

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# Level III

DESST 3000 Conservation in the Built Environment III	6
DESST 3005 Special Topic in Design Studies IIIA	6
DESST 3012 Colonial and Contemporary Issues in South Asian Architecture III	6
DESST 3014 Special Topic in Design Studies IIID	6
DESST 3016 Special Topic in Design Studies IIIC	6
DESST 3017 Special Topic in Design Studies IIIE	6
DESST 3018 Special Topic in Design Studies IIIF	6
DESST 3023 Islamic Architecture and Gardens III	6
DESST 3024 Special Topic in Design Studies IIIB	6
DESST 3031 Digital Media Studio	6

## **Economics courses**

Approved courses listed in the Academic Program Rules of the degree of Bachelor of Economics.

#### **Engineering courses**

## Level I

2
2
2
2
2

## **Humanities and Social Sciences courses**

Level I courses listed in Academic Program Rule 6.12.1, Level II courses listed in Academic Program Rule 6.12.2, and Level III courses listed in Academic Program Rule 6.12.3 of the degree of Bachelor of Arts.

#### Law courses\*

# Level I

LAW 1001 Introduction to Australian Law	4
Level II	
LAW 1002 Law of Torts	4
LAW 1003 Law of Contract	4
Level III	
LAW 1004 Law of Crime	4
LAW 1005 Property Law	4
Law elective	4
* available only to students who have gained admission to Law studies through SATAC	

#### **Mathematical and Computer Sciences courses**

Level I courses listed in Academic Program Rule 4.2.1.1, Level II courses listed in Academic Program Rule 4.2.2.1, and Level III courses listed in Academic

Program Rule 4.2.3.1 of the degree of Bachelor of Mathematical and Computer Sciences.

## **Music courses**

Level I courses listed in Academic Program Rules of the degree in the Elder School of Music and approved by that School.

# Science courses

Level I courses listed in the Academic Program Rules of the degree of Bachelor of Agricultural Science

Level I, II and III courses listed in Academic Program Rules 5.9.1, 5.9.3 and 5.9.7 of the degree of Bachelor of Sciences in the Faculty of Sciences.

Courses offered by other faculties but not listed above may be acceptable on application and subject to the recommendation of the Head of the School of Architecture, Landscape Architecture and Urban Design and the department concerned, and the approval of the School.

# **Courses from other institutions**

Such courses provided by other institutions as may be approved from time to time on the recommendation of the Head of School of Architecture, Landscape Architecture and Urban Design.

- 5.1.1.5 No candidate will be permitted to count for an award any course together with any other course which, in the opinion of the School contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for a degree.
- 5.1.1.6 A candidate who has completed courses under any repealed Academic Program Rules in the Bachelor of Architectural Studies degree prior to semesterisation and amendments of the program in 1989, or in the Bachelor of Architectural Studies program between 1989 to 1996, or in the Bachelor of Design Studies program between 1997 to 2005, shall have status in equivalent courses under these Academic Program Rules.
- 5.1.1.7 When in the opinion of the Faculty special circumstances exist for a candidate affected by Academic Program Rules 1.3 and 5.1, the Council on the recommendation of the Faculty in each case may vary any of the provisions of these Academic Program Rules.

# 5.1.2 The Honours degree

- 5.1.2.1 A candidate who wishes to proceed to the Honours degree must obtain the approval of the Head of School, normally by 15 December of the year preceding enrolment.
- 5.1.2.2 A candidate for the Honours degree of Bachelor of Design Studies shall pass examinations in DESST 4001 A/B Honours Design Studies which shall consist of either one topic to the value of 24 units or two topics to the value of up to 12 units each of an Honours course\*.
- 5.1.2.3 A candidate may, subject to the approval of the Head of School in each case, include in their Honours year a course to the value of 12 units taught in a department/school in another faculty; such candidates must consult the Head of the Department/Head of School concerned and must apply in writing to the School Executive Officer by 15 December of the year preceding the proposed Honours year, seeking the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
- 5.1.2.4 The work of the Honours year may not be commenced before a candidate has qualified for the Bachelor degree, or has qualified for a degree regarded by the School of Architecture, Landscape Architecture and Urban Design as equivalent and has completed such prerequisite courses (if any) as may be prescribed in the syllabuses.
- 5.1.2.5 The work of the Honours year must be completed in one year of full-time study, save that on the recommendation of the Head of School, the School may permit a candidate to spread the work over two years but not more, under such conditions as the School may determine.
- 5.1.2.6 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if the candidate's work is unsatisfactory at any stage of the program, or if the candidate withdraws from the program such fact shall be reported to the School. The Head of School may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as the Head may determine.
- 5.1.2.7 No exemption from any component of the requirements of 5.1.2 is permitted.
- 5.1.2.8 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

# 5.2 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

\* Information on the approved courses from which the prescribed combination may be chosen shall be advised in the preceding year by the School of Architecture, Landscape Architecture and Urban Design

**Note**: the courses to be offered in a particular year will depend upon the availability of staff.

#### Transition Arrangements from 2006 (not forming part of the Academic Program Rules)

- A student who has completed only one of DESST 1023 Computer-Aided Design I and DESST 1024 Drawing Architecture and Landscape I will be required to enrol in DESST 1027 Human Environments: Design and Representation and will be granted appropriate exemption from components of the course already completed.
- A student who has completed only one of DESST 1008 Composing Architecture and Landscape I and DESST 1014 Construction I will be required to enrol in DESST 1029 Construction and Design: Theories and Practice and will be granted appropriate exemption from components of the course already completed.
- A student who has completed only one of DESST 2005 Technology in the Built Environment II and DESST 2034 Domestic Scale Construction II will be required to enrol in DESST 2036 Technology in Design and will be granted appropriate exemption from components of the course already completed.
- A student who has completed only one of DESST 2023 Design and Environments II and DESST 2016 Twentieth Century Architecture and Landscapes II will be required to enrol in DESST 2037 Cultures, Histories and Designed Environments and will be granted appropriate exemption from components of the course already completed.

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# Bachelor of Design Studies - Graduate Attributes

#### Knowledge

- · To form and express deep criticism of architectural and landscape design objects from a broad perspective
- · To generate and present relevant proposals for intervention in situations in the built environment
- · To combine criticism and proposal generation into a working process of design.

# **Intellectual and Social Capabilities**

· Instrumental:

finding, ordering, sifting, filtering, organising information; intelligent use of library resources and research of library materials; information acquisition, collation and management from libraries and other sources.

Visualising, representing & manipulating spatial objects:

representing and manipulating spatial objects;

drawing and model making using hand and computer techniques.

• Writing:

designing, outlining, and refining thought expressed with the written word, using hand and computer techniques.

· Speaking:

designing, outlining, organising, and refining thought expressed with the spoken word.

· Computing:

computational techniques using algorithms and data relationships.

· Working in groups:

acting as both a leader and a member of a group of individuals.

#### **Attitudes and Values**

• Critical Thinking:

to present coherent intellectual structures within which observation, analysis, understanding and judgement of situations, texts and objects can be made;

to demonstrate the relevance of these structures.

• Creative Action:

to present current knowledge of the act of designing from both theoretical and practical perspectives;

to demonstrate its application to the management of the design process.

• Architecture and Landscape Architecture:

to present accounts of the built and human modified environments, the processes of its production, and the positions, values and preferences that influence its forms and patterns;

to demonstrate the relevance of these accounts;

to demonstrate the understanding of the synergies between architecture and landscape architecture.

# Academic Program Rules

# 1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Architecture. A candidate may obtain either the Bachelor degree or the Honours degree but not both.
- 1.2 A candidate for admission to the program of study for the degree of Bachelor of Architecture must have obtained:
  - (a) the degree and/or Honours degree of Bachelor of Design Studies of the University of Adelaide subject to successful completion of courses comprising the Architectural Studies major or
  - (b) the Graduate Diploma in Design Studies of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
  - (c) the degree and/or Honours degree of Bachelor of Landscape Architecture of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose.
- 1.3 The School may in special cases and subject to such conditions (if any) as the Head of the School of Architecture, Landscape Architecture and Urban Design may see fit to impose in each case, accept as a candidate for the Bachelor of Architecture an applicant who does not hold the qualifications specified in 1.2 above but who has given evidence satisfactory to the Head of School of fitness to undertake work for the Bachelor of Architecture.
- 1.4 A candidate accepted under 1.2 and 1.3 above may be required to satisfactorily complete such preliminary work or qualifying studies as the Head of School may determine.

# 2 Duration of program

- 2.1 The program of study for the degree shall extend over two years of full-time study or the equivalent. Students shall pass courses to the value of at least 24 units at each of the two levels. The unit values of the courses are contained in Program Rule 5.2.
- 2.2 A candidate may interrupt the program for such periods and on such conditions as may in each case be determined by the School.

- 2.3 Students wishing to interrupt their studies in accordance with 2.2 above must apply through the School Executive Officer for permission and obtain beforehand the approval of the Head on behalf of the School for leave of absence for a defined period.
- 2.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.2 above shall be deemed to have withdrawn his or her candidature for the degree but may reapply for admission to the program in accordance with the procedures in operation at the time.
- 2.5 Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Head of the School deems appropriate.

# 3 Admission

- 3.1 Status, exemption and credit transfer A candidate who has passed postgraduate level courses in the School or other faculties of the University or in other educational institutions, may on written application to the Head of School be granted such exemption from these Academic Program Rules as the School may determine, save that:
  - (a) no more than 12 units of the program may be undertaken through approved exchange programs and
  - (b) a candidate shall always be required to satisfy the examiners in all courses of the final year of the program.

# 4 Assessment and examinations

- 4.1 There shall be four classifications of pass: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, There shall also be a classification of Conceded Pass. Courses for which a conceded pass has been awarded may not be presented towards the degree.
- 4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

- 4.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 4.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- Note (not forming part of the Academic Program Rules):

Previous studies in the three-year Bachelor of Architecture under former Academic Program Rules and Regulations and Schedules.

Students who commenced their program of study towards the three-year Bachelor of Architecture under previous Specific Program Rules in 1995 or 1996, or Regulations and Schedules in 1994 or earlier, are subject to the following provision:

Students who commenced their studies towards the Bachelor of Architecture in previous years will normally complete their program of study under the provisions of the Specific Course Rules as published in Volume II of the University Calendar in 1996.

4.5 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

# 5 Qualification requirements

- 5.1 Qualifying studies
- 5.1.1 A candidate selected under 1.2 or 1.3 for admission to the Bachelor of Architecture program may be required to satisfactorily complete such qualifying studies as determined by the School after consideration of advice from the Head of School.
- 5.1.2 Candidates undertaking qualifying studies must successfully complete those studies before they may undertake courses of the Bachelor of Architecture.
- 5.1.3 On the recommendation of the Head of School, a supplementary examination may be offered to a candidate undertaking qualifying studies.

5.1.4 A candidate who fails all or part of the qualifying studies may repeat them in another year only with the permission of the School after it has considered advice from the Head of School.

# 5.2 Academic program

5.2.1 To qualify for the degree of Bachelor of Architecture a candidate shall pass the following courses to the value of at least 48 units:

## Level I

12 units of core courses:	
ARCH 4029 Architecture Studio	6
ARCH 4030 Urban Design Studio	6
12 units of elective courses, including at least one of Architecture Elective Studio A or Architecture Elective Studio B:	
ARCH 4028 Architecture Elective Studio A	6
ARCH 4031 Architecture Elective Studio B	6
LARCH 4018 Landscape Architecture Elective Studio A	6
LARCH 4020 Landscape Architecture Elective Studio B	6
Level II	
ARCH 5028 Professional Practice	4
ARCH 5029 Architecture Processes	6
ARCH 5030 Design Seminar	2
ARCH 5031 Architecture Project	10

5.2.2 A candidate may not enrol in Level II courses unless he or she has passed at least 12 units of core and 6 units of elective courses at Level I.

ARCH 5032 Architecture Seminar

2

# 5.3 Honours

- 5.3.1 A candidate who wishes to proceed to the Honours degree of Bachelor of Architecture must obtain the approval of the Head of School, normally by December 15 of the year preceding enrolment.
- 5.3.2 A document setting out guidelines approved by the School which contains requirements for admission and the criteria for the award of the Honours degree is available from the School Executive Officer.
- 5.3.3 A candidate for the Honours degree of Bachelor of Architecture must, in addition to completing the full program prescribed for the Bachelor degree, also pass an additional course ARCH 5002 Advanced Studies in Architecture II as well as achieving a high classification of pass in the Level II courses for the Bachelor degree.

- 5.3.4 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 5.3.5 A candidate who fails to obtain Honours shall be awarded a degree of Bachelor of Architecture provided all requirements for the Bachelor degree are satisfactorily completed.

# 5.4 Combined programs

It is possible for students to enhance their architecture qualification by combining their studies with courses from the Bachelor of Landscape Architecture.

#### 5.4.1 Direct entry

- (i) Students selected on academic merit and within the double-degree program quota may enrol directly in a program of study leading, after three years of full-time study (or the part time equivalent thereof) to the award of both the degree of Bachelor of Architecture and degree of Bachelor of Landscape Architecture in the School of Architecture, Landscape Architecture and Urban Design.
- Students enrolled in the double-degree program are required to complete satisfactorily the following courses:

# Year 1

ARCH 4029 Architecture Studio	6
ARCH 4030 Urban Design Studio	6
LARCH 4019 Landscape Architecture Studio	6
either	
ARCH 4031 Architecture Elective Studio B*	6
or	
LARCH 4020 Landscape Architecture Elective	
Studio B*	6
Option A	
Option A Year 2	
•	4
Year 2	4
Year 2 ARCH 5028 Professional Practice	
Year 2 ARCH 5028 Professional Practice ARCH 5029 Architecture Processes	6
Year 2 ARCH 5028 Professional Practice ARCH 5029 Architecture Processes ARCH 5030 Design Seminar	6 2

# Year 3

LARCH 5031 Landscape Architecture Processes	6
LARCH 5032 Landscape Architecture Project	10
LARCH 5033 Landscape Architecture Seminar	2
either	
ARCH 4028 Architecture Elective Studio A*	6
or	

LARCH 4018 Landscape Architecture Elective Studio A\*

\* B.Arch./B.L.Arch. double-degree students must complete either Architecture Elective Studio B and Landscape Architecture Elective Studio A, *or* Landscape Architecture Elective Studio B and Architecture Elective Studio A.

6

# Option B

# Year 2

(iii)

(iv)

(v)

Year 2	
ARCH 5028 Professional Practice	4
ARCH 5030 Design Seminar	2
LARCH 5031 Landscape Architecture Processes	6
LARCH 5032 Landscape Architecture Project	10
LARCH 5033 Landscape Architecture Seminar	2
Year 3	
ARCH 5029 Architecture Processes	6
ARCH 5031 Architecture Project	10
ARCH 5032 Architecture Seminar	2
either	
ARCH 4028 Architecture Elective Studio A*	6
0ľ	
LARCH 4018 Landscape Architecture Elective Studio A*	6
*Note: B.Arch/B.L.Arch. double-degree students must complete either Architecture Elective Studio B and Landss Architecture Elective Studio A; or Landscape Architecture Elective Studio B and Architecture Elective Studio A.	
A candidate may not enrol in Level II courses unless or she has passed at least 18 units of core courses Level I.	
A candidate must complete all courses in Years 1 ar of their study plan before proceeding to courses in Year 3.	nd 2
A candidate who completes all course in Year 1 as w as Year 2 of Option A will be eligible for the award o the Degree of Bachelor of Architecture.	
A candidate who completes all courses in Year 1 as well as Year 2 of Option B will be eligible for the away	ard

(vi) A candidate who completes all courses in Year 1 as well as Year 2 of Option B will be eligible for the award of the Degree of Bachelor of Landscape Architecture.

- (vii) A candidate who completes all courses in Year 1 as well as Years 2 and 3 of either Option A or Option B will be eligible for the award of the Degree of Bachelor of Architecture and Bachelor of Landscape Architecture.
- 5.5 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

# 5.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Architecture – Graduate Attributes

#### Knowledge

- · Acquired knowledge and skills for exploration of creative process and ideas
- Acquired knowledge and skills sufficient for early stages of directed activity in an existing architectural practice, including ability to design and document projects
- Developed intellectual and creative approaches and adaptability to form a basis for continued learning and development throughout professional life.

#### **Intellectual and Social Capabilities**

• Designing:

the practice of architectural design, emphasising the pervasion of design from planning to detailing and the interrelationship of aesthetic, economic, environmental, legal, societal and individual reactions, and technical factors, and the nature of design as a group activity.

· Surveying:

the principles of building measurement, documentation and land surveying.

· Communicating:

the communication and documentation of designs for presentation to clients and other stakeholders, and for construction; the preparation of professional reports.

Managing:

the management and operation of an architectural practice.

#### **Attitudes and Values**

• The profession of architecture:

ethics;

environmental sustainability;

cultural, social, economic and legal responsibilities of the profession of architecture.

· Architectural services:

the recognition of situations where an architect can contribute, the formulation of appropriate strategies, and appropriate predesign, design, documentation, project management and post construction services

processes in developing designs, including the development of a brief, and the outline, assessment and detailed design of proposals in conformity with codes and other requirements;

the organisation, management and documentation associated with building construction and the administration of building contracts;

the marketing of architectural services.

· The technology of architecture:

building planning, construction, structure and services as they relate to new buildings and alterations to existing buildings.

• The architect in relation to other professions, organisations and the building industry:

the relationship of architects to builders, structural and building services engineers, landscape architects, interior designers, urban designers, planners, and others involved in the creation of the built environment;

the relationship of the profession of architecture to statutory authorities and to the building industry.

· Architecture and Landscape Architecture:

the demonstration of the synergies between architecture and landscape architecture, urban design and master planning.

# Academic Program Rules

# 1 General

- 1.1 A candidate for admission to the program of study for the degree of Bachelor of Landscape Architecture must have obtained:
  - (a) the degree and/or Honours degree of Bachelor of Design Studies of the University of Adelaide subject to successful completion of courses comprising the Landscape Studies major or
  - (b) the Graduate Diploma in Design Studies (Landscape) of the University of Adelaide, or an equivalent award from another educational institution accepted by the University for the purpose or
  - (c) the degree and/or Honours degree of Bachelor of Architecture of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose.
- 1.2 Subject to the approval of the Faculty, the Head of School of Architecture, Landscape Architecture and Urban Design may in special cases and subject to such conditions (if any) as the Head of School may see fit to impose in each case, accept as a candidate for the Bachelor of Landscape Architecture an applicant who does not hold the qualifications specified in 1.1 above but who has given evidence satisfactory to the Head of School of fitness to undertake work for the Bachelor of Landscape Architecture.
- 1.3 A candidate accepted under 1.1 and 1.2 above may be required to satisfactorily complete such preliminary work or qualifying studies as the Head of School may determine.

# 2 Duration of program

- 2.1 The program of study for the degree shall extend over two years of full-time study or the equivalent. Students shall pass courses to the value of at least 24 units at each of the two levels. The unit values of the courses are contained in Academic Program Rule 5.2.
- 2.2 A candidate may interrupt the program for such periods and on such conditions as may in each case be determined by the School.

- 2.3 Students wishing to interrupt their studies in accordance with 2.2 above must apply through the School Executive Officer for permission and obtain beforehand the approval of the Head on behalf of the School for leave of absence for a defined period.
- 2.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.2 above shall be deemed to have withdrawn his or her candidature for the degree but may reapply for admission to the program in accordance with the procedures in operation at the time.
- 2.5 Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Head of the School deems appropriate.

# 3 Admission

- 3.1 Status, exemption and credit transfer A candidate who has passed postgraduate level courses in the Faculty or in other faculties of the University or in other educational institutions, or Level IV courses in a Bachelor of Landscape Architecture program of another educational institution, may on written application to the Head be granted such exemption from these Academic Program Rules as the Faculty may determine, save that:
  - (a) no more than 12 units of the program may be undertaken through approved exchange programs and
  - (b) a candidate shall always be required to satisfy the examiners in all courses of the final year of the program.

# 4 Assessment and examinations

- 4.1 There shall be four classifications of pass: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, There shall also be a classification of Conceded Pass. Courses for which a conceded pass has been awarded may not be presented towards the degree.
- 4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

- 4.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 4.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.

# 4.5 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

# 5 Qualification requirements

- 5.1 Qualifying studies
- 5.1.1 A candidate may be selected for admission to the Bachelor of Landscape Architecture program under 1.1 or 1.2 subject to satisfactory completion of such qualifying studies as determined by the Faculty after consideration of advice from the Head of School.
- 5.1.2 Candidates undertaking qualifying studies must successfully complete those studies before they may undertake courses of the Bachelor of Landscape Architecture.
- 5.1.3 On the recommendation of the Head of School, a supplementary examination may be offered to a candidate undertaking qualifying studies.
- 5.1.4 A candidate who fails all or part of the qualifying studies may repeat them in another year only with the permission of the School after it has considered advice from the Head of School.
- 5.2 Academic program
- 5.2.1 To qualify for the degree of Bachelor of Landscape Architecture a candidate shall pass the following courses to the value of at least 48 units:

#### Level I

12 units of core courses
ARCH 4030 Urban Design Studio
LARCH 4019 Landscape Architecture Studio

6 6 12 units of elective courses, including at least one of Landscape Architecture Elective Studio A or Landscape Architecture Elective Studio B:

ARCH 4028 Architecture Elective Studio A	6
ARCH 4031 Architecture Elective Studio B	6
LARCH 4018 Landscape Architecture Elective Studio A	6
LARCH 4020 Landscape Architecture Elective Studio B	6
Level II	
ARCH 5028 Professional Practice	4
ARCH 5030 Design Seminar	2
LARCH 5031 Landscape Architecture Processes	6
LARCH 5032 Landscape Architecture Project	10
LARCH 5033 Landscape Architecture Seminar	2

5.2.2 A candidate may not enrol in Level II courses unless he or she has passed at least 12 units of core and 6 units of elective courses at Level I.

# 5.3 Honours

- 5.3.1 A candidate who wishes to proceed to the Honours degree of Bachelor of Landscape Architecture must obtain the approval of the Head of School, normally by December 15 of the year preceding enrolment.
- 5.3.2 A document setting out guidelines approved by the School which contains requirements for admission and the criteria for the award of the Honours degree is available from the School Executive Officer.
- 5.3.3 A candidate for the Honours degree of Bachelor of Landscape Architecture in addition to completing the full program prescribed for the degree shall also pass an additional course LARCH 5028 Advanced Studies in Landscape Architecture II.
- 5.3.4 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 5.3.5 A candidate who fails to obtain Honours shall be awarded a degree of Bachelor of Landscape Architecture provided all requirements for the Bachelor degree are satisfactorily completed.

# 5.4 Combined programs

It is possible for students to enhance their landscape architecture qualification by combining their studies with courses from the Bachelor of Architecture.

#### 5.4.1 Direct entry

- (i) Students selected on academic merit and within the double-degree program quota may enrol directly in a program of study leading, after three years of full-time study (or the part time equivalent thereof) to the award of both the degree of Bachelor of Architecture and degree of Bachelor of Landscape Architecture in the School of Architecture, Landscape Architecture and Urban Design.
- Students enrolled in the double-degree program are required to complete satisfactorily the following courses:

# Year 1

ARCH 4029 Architecture Studio	6
ARCH 4030 Urban Design Studio	6
LARCH 4019 Landscape Architecture Studio	6
either	
ARCH 4031 Architecture Elective Studio B*	6
or	
LARCH 4020 Landscape Architecture Elective Studio B*	6
Option A	
Year 2	
ARCH 5028 Professional Practice	4
ARCH 5029 Architecture Processes	6
ARCH 5030 Design Seminar	2
ARCH 5031 Architecture Project	10
ARCH 5032 Architecture Seminar	2
Year 3	
LARCH 5031 Landscape Architecture Processes	6
LARCH 5032 Landscape Architecture Project	10
LARCH 5033 Landscape Architecture Seminar	2
either	
ARCH 4028 Architecture Elective Studio A*	6
Or	
LARCH 4018 Landscape Architecture Elective Studio A*	6
*Note: B.Arch./B.L.Arch. double-degree students must	

complete either Architecture Elective Studio B and Landscape Architecture Elective Studio A; or Landscape Architecture Elective Studio B and Architecture Elective Studio A.

# Option B

(iii)

(iv)

(v)

(vi)

(vii)

5.5

5.6

graduation ceremony for the purpose.

Year 2	
ARCH 5028 Professional Practice	4
ARCH 5030 Design Seminar	2
LARCH 5031 Landscape Architecture Processes	6
LARCH 5032 Landscape Architecture Project	10
LARCH 5033 Landscape Architecture Seminar	2
Year 3	
ARCH 5029 Architecture Processes	6
ARCH 5031 Architecture Project	10
ARCH 5032 Architecture Seminar	2
ither	
ARCH 4028 Architecture Elective Studio A*	6
or and the second se	
ARCH 4018 Landscape Architecture Elective Studio A*	6
Note: B.Arch./B.L.Arch. double-degree students must complete either Architecture Elective Studio B and Lan Architecture Elective Studio A; or Landscape Architectu Elective Studio B and Architecture Elective Studio A.	dscape
A candidate may not enrol in Level II courses unle or she has passed at least 18 units of core course .evel I.	
A candidate must complete all courses in Years 1 of their study plan before proceeding to courses ir /ear 3.	
A candidate who completes all courses in Year 1 a vell as Year 2 of Option A will be eligible for the a if the Degree of Bachelor of Architecture.	
A candidate who completes all courses in Year 1 a well as Year 2 of Option B will be eligible for the a of the Degree of Bachelor of Landscape Architectu	ward
A candidate who completes all courses in Year 1 a well as Years 2 and 3 in either Option A or Option be eligible for the award of the Degree of Bachelo Architecture and Bachelor of Landscape Architect	B will r of
No candidate will be permitted to count towards a award any course, together with any other course which, in the opinion of the Faculty concerned, co a substantial amount of the same material; and no course or portion of a course may be counted twi owards an award.	e, ntains D
Graduation	
Subject to Chapter 89 of the Statutes, candidates have satisfied the requirements for any award of t University shall be admitted to that award at a	

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Landscape Architecture – Graduate Attributes

#### Knowledge

- · Acquired knowledge and skills sufficient for exploration of creative process and ideas
- Acquired knowledge and skills sufficient for early stages of directed activity in an existing landscape architectural practice, including ability to design and document projects
- Developed intellectual and creative approaches and adaptability to form a basis for continued learning and development throughout professional life

#### **Intellectual and Social Capabilities**

• Designing:

the practice of landscape architectural design, emphasising the pervasion of design from planning to detailing and the interrelationship of aesthetic, economic, environmental, legal, societal and individual reactions, and technical factors, and the nature of design as a group activity.

• Site Planning:

the practice of comprehending and taking advantage of variables relevant to site planning including flora, fauna, soils, water systems, energy systems, building materials, human activities and desires, heritage conservation and the poetics of space, site and structure assembly and arrangement.

· Surveying:

the principles of land surveying.

• Communication:

the communication and documentation of designs for presentation to clients and other stakeholders and for construction,; the preparation of professional reports.

• Managing:

the management and operation of a landscape architectural practice

#### **Attitudes and Values**

• The profession of landscape architecture:

ethics;

environmental sustainability;

cultural, social, economic and legal responsibilities of the profession of landscape architecture.

• Landscape architectural services:

the recognition of situations where a landscape architect can contribute, the formulation of appropriate strategies, and appropriate pre-design, design, documentation, project management and post construction services;

processes in developing designs, including the development of a brief, and the outline, assessment and detailed design of proposals in conformity with codes and other requirements;

the organisation, management and documentation associated with construction and the administration of contracts;

the marketing of landscape architectural services.

# Bachelor of Landscape Architecture: Graduate Attributes - cont'd.

• The technology of landscape architecture:

site planning, construction, vegetation and habitat provision, water systems and hydrology, structures and services as they relate to new projects, alterations, site planning and design interventions.

• The landscape architect in relation to other professions, organisations and the building industry:

the relationship of landscape architects to builders, structural and building services engineers, architects, interior designers, urban designers, planners, and others included in the creation of the built environment and human-dominated and shaped landscapes;

the relationship of the profession of landscape architecture to statutory authorities and to the design industry.

• Landscape Architecture and Architecture:

the demonstration of the synergies between landscape architecture and architecture, urban design and master planning.

# Bachelor of Architecture/Bachelor of Landscape Architecture – Graduate Attributes

## Knowledge

- · Acquired knowledge and skills sufficient for exploration of creative process and ideas
- Acquired knowledge and skills sufficient for early stages of directed activity in an existing architectural or landscape architectural practice including ability to design and document projects
- Developed intellectual and creative approaches and adaptability to form a basis for continued learning and development throughout professional life.

#### **Intellectual and Social Capabilities**

• Designing:

the practice of architectural and landscape architectural design, emphasising the pervasion of design from planning to detailing and the interrelationship of aesthetic, economic, environmental, legal, societal and individual reactions, and technical factors, and the nature of design as a group activity.

· Site Planning:

the practice of comprehending and taking advantage of variables relevant to site planning including flora, fauna, soils, water systems, energy systems, building materials, human activities and desires, heritage conservation and the poetics of space, site and structure assembly and arrangement.

• Surveying:

the principles of building measurement, documentation and land surveying.

· Communicating:

the communication and documentation of designs for presentation to clients and other stakeholders, and for construction; the preparation of professional reports.

• Managing:

the management and operation of an architectural practice.

# **Attitudes and Values**

The profession of architecture and landscape architecture:

ethics;

environmental sustainability;

cultural, social, economic and legal responsibilities of the professions of architecture and landscape architecture

• Architectural and Landscape architectural services:

the recognition of situations where a architect or landscape architect can contribute, the formulation of appropriate strategies, and appropriate pre-design, design, documentation, project management and post construction services; processes in developing designs, including the development of a brief, and the outline, assessment and detailed design of proposals in conformity with codes and other requirements;

the organisation, management and documentation associated with construction and the administration of contracts; the marketing of architectural and landscape architectural services.

# Bachelor of Architecture/Landscape Architecture: Graduate Attributes - cont'd.

• The technology of architecture and landscape architecture:

site planning, construction, vegetation and habitat provision, water systems and hydrology, structures and services as they relate to new projects, alterations, site planning and design interventions;

building planning, construction, structure and services as they relate to new buildings and alterations to existing buildings.

• The architect or landscape architect in relation to other professions, organisations and the building industry:

the relationship of architects landscape architects to builders, structural and building services engineers, architects, interior designers, urban designers, planners, and others included in the creation of the built environment and human-dominated and shaped landscapes

the relationship of the profession of architecture and landscape architecture to statutory authorities and to the design industry

• Landscape Architecture and Architecture:

the demonstration of the synergies between architecture and landscape architecture, urban design and master planning.

# Graduate Certificate in Design Studies Graduate Certificate in Design Studies (Landscape) Graduate Diploma in Design Studies Graduate Diploma in Design Studies (Landscape)

# Academic Program Rules

# 1 Duration of programs

- 1.1 Except with the permission of the School of Architecture, Landscape Architecture and Urban Design, the program for the Graduate Certificate in Design Studies or the Graduate Certificate in Design Studies (Landscape) shall be completed in not less than one semester and not more than one year of full-time study and in not less than one year and not more than two years of part-time study.
- 1.2 Except with the permission of the School of Architecture, Landscape Architecture and Urban Design, the program for the Graduate Diploma in Design Studies or the Graduate Diploma in Design Studies (Landscape) shall be completed in not less than two semesters and not more than three semesters of fulltime study and in not less than one year and not more than two years of part-time study.

# 2 Admission

2.1 Applications for admission to the program shall be made through the South Australian Tertiary Admissions Centre (SATAC) on the appropriate form by the required date. Successful applicants to the program may not defer their studies to the following year.

> An applicant for admission to the program of study for the Graduate Certificate in Design Studies or the Graduate Certificate in Design Studies (Landscape) must have obtained:

- (a) the degree or Honours degree of Bachelor of Design Studies of the University of Adelaide or
- (b) a degree or Honours degree of the University of Adelaide or an equivalent award from another educational institution accepted by the University for that purpose, subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
- 2.2 An applicant for admission to the program of study for the Graduate Diploma in Design Studies must have obtained:

- (a) the Graduate Certificate in Design Studies of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
- (b) the degree or Honours degree of Bachelor of Design Studies of the University of Adelaide *or*
- (c) a Bachelor or Honours degree of the University of Adelaide or an equivalent award from another educational institution accepted by the University for that purpose, subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
- 2.3 An applicant for admission to the program of study for the Graduate Diploma in Design Studies (Landscape) must have obtained:
  - (a) the Graduate Certificate in Design Studies (Landscape) of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
  - (b) the degree or Honours degree of Bachelor of Design Studies of the University of Adelaide *or*
  - (c) a Bachelor or Honours degree of the University of Adelaide or an equivalent award from another educational institution accepted by the University for that purpose, subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
- 2.4 The Faculty may in special cases and subject to such conditions (if any) as the Head of the School of Architecture, Landscape Architecture and Urban Design may see fit to impose in each case, accept as a candidate for the Graduate Certificate in Design Studies or Graduate Certificate in Design Studies (Landscape), or Graduate Diploma in Design Studies (Landscape), an applicant who does not hold the qualifications specified in 2.1, 2.2 or 2.3 above but who has given evidence satisfactory to the Head of School of fitness to

undertake work for the Graduate Certificate in Design Studies or Graduate Certificate in Design Studies (Landscape) or Graduate Diploma in Design Studies or Graduate Diploma in Design Studies (Landscape).

- 2.5 Status, exemption and credit transfer
- 2.5.1 A candidate who has passed postgraduate level courses in the School of Architecture, Landscape Architecture and Urban Design or in other faculties of the University or in other educational institutions may on written application to the School Executive Officer be granted such exemption from Academic Program Rule 5.1 as the Head of School may determine.
- 2.5.2 Candidates who have previously completed the requirements of the Graduate Certificate in Design Studies shall receive full status towards the Graduate Diploma in Design Studies for studies undertaken in the Graduate Certificate.
- 2.5.3 Candidates who have previously completed the requirements of the Graduate Certificate in Design Studies (Landscape) shall receive full status towards the Graduate Diploma in Design Studies (Landscape) for studies undertaken in the Graduate Certificate.
- 2.5.4 No candidate may be granted more than 12 units of status towards the Graduate Diploma in Design Studies or the Graduate Diploma in Design Studies (Landscape).
- 2.6 Articulation with other awards
- 2.6.1 A candidate who holds a Graduate Certificate in Design Studies of the University of Adelaide shall surrender it before being admitted to the Graduate Diploma in Design Studies.
- 2.6.2 A candidate who holds a Graduate Certificate in Design Studies (Landscape) of the University of Adelaide shall surrender it before being admitted to the Graduate Diploma in Design Studies (Landscape).

# 3 Assessment and examinations

- 3.1 There shall normally be four classifications of pass in the final assessment of any course for the Graduate Certificate and Graduate Diploma awards, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification is in two divisions a pass in the higher division may be prescribed in the syllabuses as a prerequisite for admission to further studies in that course or to other courses. Results in certain courses as specified in the Academic Program Rules will not be classified.
- 3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

- 3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of School, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.5 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

# 4 Qualification requirements

# 4.1 Academic program

- 4.1.1 To qualify for the Graduate Certificate in Design Studies a candidate shall pass a combination of the courses listed in Rule 4.1.3 to the value of at least 12 units.
- 4.1.2 To qualify for the Graduate Certificate in Design Studies (Landscape) a candidate shall pass a combination of the courses listed in Rule 4.1.4 to the value of at least 12 units.
- 4.1.3 To qualify for the Graduate Diploma in Design Studies a candidate shall pass the following courses to the value of at least 24 units:

DESST 6000 Special Topic (Design) IVA*	6
DESST 6006 Special Topic (Design) IVB*	6
DESST 6018 Technology in Design IV	6
DESST 6019 Cultures, Histories and Designed Environments IV	6
DESST 6020 Design for Sustainable Community IV	6
DESST 6022 Architecture Design Studio IV	6
To qualify for the Graduate Diploma in Design Studies (Landscape) a candidate shall pass the following courses to the value of at least 24 units:	
	DESST 6006 Special Topic (Design) IVB* DESST 6018 Technology in Design IV DESST 6019 Cultures, Histories and Designed Environments IV DESST 6020 Design for Sustainable Community IV DESST 6022 Architecture Design Studio IV To qualify for the Graduate Diploma in Design Studies (Landscape) a candidate shall pass the following

DESST 6019 Cultures, Histories and Designed Environments IV

DESST 6020 Design for Sustainable Community IV

6

6

6

DESST 6021 Natural and Landscape Systems IV 6

DESST 6023 Landscape Architecture Design Studio IV

\*Students should consult the Head of the School of Architecture, Landscape Architecture and Urban Design about availability of courses.

4.1.5 Course substitutions will normally be selected from a list available from the School Executive Officer; in unusual cases the Head of the School of Architecture, Landscape Architecture and Urban Design may approve different studies upon application by a candidate. In considering an application for a course substitution the Head of School shall have regard to the candidate's previous academic and practical experience.

# 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Transition Arrangements from 2006 (not forming part of the Academic Program Rules)

 A student who has completed only one of DESST 6009 Design and Environments IV and DESST 6015 Twentieth Century Architecture and Landscapes IV will be required to enrol in DESST 6019 Culture and Design IV and will be granted appropriate exemption from components of the course already completed.

### Graduate Certificate/Diploma in Design Studies Graduate Certificate/Diploma in Design Studies (Landscape) – Graduate Attributes

### Knowledge

- · To form and express deep criticism of architectural and landscape design objects from a broad perspective;
- · To generate and present relevant proposals for intervention in situations in the built environment;
- To combine criticism and proposal generation into a working process of design.

### **Intellectual and Social Capabilities**

Instrumental:

finding, ordering, sifting, filtering, organising information;

intelligent use of library resources and research of library materials;

information acquisition, collation and management from libraries and other sources;

visualising, representing and manipulating spatial objects;

drawing and model making using hand and computer techniques.

Writing:

designing, outlining, and refining thought expressed with the written word, using hand and computer techniques.

Speaking:

designing, outlining, organising, and refining thought expressed with the spoken word.

Computing:

computational techniques using algorithms and data relationships.

· Working in groups:

acting as both a leader and a member of a group of individuals.

### **Attitudes and Values**

· Critical Thinking:

to present coherent intellectual structures within which observation, analysis, understanding and judgement of situations, texts and objects can be made;

to demonstrate the relevance of these structures.

• Creative Action:

to present current knowledge of the act of designing from both theoretical and practical perspectives;

to demonstrate its application to the management of the design process.

• Architecture and Landscape Architecture:

to present accounts of the built and human modified environments, the processes of its production, and the positions, values and preferences that influence its forms and patterns;

to demonstrate the relevance of these accounts;

to demonstrate the understanding of the synergies between architecture and landscape architecture.



# School of Commerce

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### www.commerce.adelaide.edu.au

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B.Com.(International Business)

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- Degree of Bachelor of Business Information Technology
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- Degree of Bachelor of Commerce (Management)
- Degree of Bachelor of Commerce (Marketing)
- Degree of Bachelor of Bachelor of Finance
- Degree of Bachelor of Bachelor of Finance (International)
- Degree of Bachelor of Bachelor of Finance (Quantitative)
- Honours degree of Bachelor of Commerce

### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

# Bachelor of Business Information Technology

### Academic Program Rules

### 1 General

There shall be a degree of Bachelor of Business Information Technology.

### 2 Duration of program

The program for the degrees shall extend over three years of full-time study or the part-time equivalent.

### 3 Assessment and examinations

- 3.1 A candidate for the degree shall attend lectures and pass examinations in accordance with the Academic Program Rules.
- 3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.4 There shall be five classifications of pass in each course for the degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, conceded Pass.
- 3.5 A candidate may present a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.3 below.
- 3.6 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the department concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.7 A candidate who has twice failed the examination in any course for the degree may not enrol for that course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

### 3.8 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4 Qualification requirements

- 4.1 To qualify for the degree of Bachelor of Business Information Technology, candidates must pass courses with a combined total of not less than 72 units, including:
  - (a) not more than 24 units at Level I, including ACCTING 1002 Accounting for Decision Makers I COMP SCI 1008 Computer Science IA, COMP SCI 1009 Computer Science IB, ECOMMRCE 1000 Information Systems I ECON 1000 Principles of Macroeconomics I ECON 1004 Principles of Microeconomics I either
     MATHS 1008 Mathematics

for Information Technology I

or both

MATHS 1001 Mathematics IA and

MATHS 1012 Mathematics IB,

and either

STATS 1000 Statistical Practice I

or

ECON 1008 Business Data Analysis I

- (b) ECOMMRCE 2004 Internet Commerce II plus 8 units of Level II Commerce courses
- (c) ECOMMRCE 3016 Electronic Commerce III plus 8 units of Level III Commerce courses
- (d) COMP SCI 2000 Computer Systems,
   COMP SCI 2002 Database and Information Systems
   COMP SC 2004 Data Structures and Algorithms

COMP SCI 2006 Introduction to Software Engineering

- (e) COMP SCI 3002 Programming Techniques, COMP SCI 3006 Software Engineering and Project plus 6 units of Level III Computer Science courses.
- 4.2 In determining a candidate's eligibility for the award of the degree, the Faculty may disallow any course passed more than 10 years previously.
- 4.3 A candidate may present for the degree Level II and Level III courses for which a conceded pass has been awarded to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses listed in 4.1 above and the Bachelor of Commerce Academic Program Rules.
- 4.4 Candidates who have completed courses for the degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Head.
- 4.5 A candidate may not count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the School of Commerce.
- 4.6 To qualify for the degree, a student who transferred into the program from another degree program or another university and has been granted status for studies completed prior to transfer must satisfy all conditions in 4.1 and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 8 units of Level III Commerce courses and 8 units of Level III Computer Science courses. However, this requirement may be waived in special circumstances approved by the School.
- 4.7 A candidate for the degree who wishes to undertake courses elsewhere towards the degree must satisfy all conditions in 4.1 and present courses taught at the University of Adelaide having a minimum value of 48 units, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School of Commerce. However, these requirements may be waived in special circumstances approved by the School.
- 4.8 (a) Graduates of the University of Adelaide (except those specified in 4.8(b) below) or of other institutions, who wish to proceed to the Business Information Technology degree and to count towards that degree courses which they have already presented for another qualification, may be

permitted to do so subject to the following conditions:

- (i) they may present for the degree such courses to a maximum aggregate value of 24 units
- (ii) they shall present at least 16 units of courses at Level III which have not been presented to any other degree and
- (iii) they shall present a range of courses which fulfil the requirements for 4.1 above.
- (b) Graduates of the University of Adelaide who wish to proceed to the Business Information Technology degree and to count towards that degree courses which they have already presented for the Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Economics, Bachelor of Mathematical and Computer Sciences, Bachelor of Finance, Bachelor of Arts, Bachelor of Design Studies, or Bachelor of Wine Marketing degree may be permitted to do so subject to the following conditions:
  - (i) they may present for the degree such courses to a maximum aggregate value of 48 units
  - they shall present at least 24 units of Level III Commerce and/or Computer Science courses which have not been presented to any other degree
  - (iii) they shall present a range of courses which fulfil the requirements for 4.1 above
  - (iv) they hold only one of the degrees listed in 4.8(b).

### 4.9 Academic program

In addition to the compulsory courses specified in 4.1 above, a candidate may present Level II and III Commerce courses listed in the Academic Program Rules for the Bachelor of Commerce degree, and Level II and III Computer Science courses listed in the Academic Program Rules for the Bachelor of Computer Science degree.

### 4.10 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

- Notes (not forming part of the Academic Program Rules)
- Students are advised that a knowledge of mathematics is helpful for several of the courses in this program.
- 2 Studies in Law within the degree of Bachelor of Business Information Technology
  - (1) Candidates who have successfully completed courses to the value of 24 units of the B.Bus.IT degree may apply for admission to Law Studies. Applications for admission to Law must be made through SATAC by the closing date of the year during which the 24 units are completed. Students will remain candidates for the degree of B.Bus.IT.
  - (2) See also the Academic Program Rules of the LL.B. degree and the Introductory Notes to the LL.B. Syllabuses
  - (3) Candidates who wish to present for the B Bus.IT degree Law courses passed prior to 1999 should apply in writing to the School of Commerce to have their position determined. Such candidates will not be disadvantaged by the transition.
- 3 Students from other programs will be considered for eligibility for the Bachelor of Business Information Technology degree in accordance with the Academic Program Rules of the Bachelor of Business Information Technology degree which are applicable in the year in which the student first enrols in one of its compulsory courses.
- 4 Candidates may enrol for the degree of Bachelor of Business Information Technology concurrently with one of the degrees Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Design Studies, Bachelor of Economics, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences or Bachelor of Wine Marketing. Candidates already enrolled in the degrees of B.A, B.Com, B.Comp.Sc, B.Des.St, B.Ec, B.Fin, B.Ma & Comp.Sc. or B.Wine.Mark wishing to proceed to the B.Bus.IT concurrently may apply for admission to the

B.Bus.IT. Candidates already enrolled in the B.Bus.IT wishing to proceed to one of these other degrees concurrently may apply towards the end of their first year for admission to the second degree in the following year.

- The combined degrees may be completed in a minimum of four years of full-time study provided appropriate courses are selected. Candidates should seek program advice regarding course choice.
- (2) Candidates must complete all of the requirements for the Bachelor of Business Information Technology, together with the following minimum requirements for the other degree:
  - (i) Candidates must complete the compulsory courses for that degree
  - (ii) Candidates must complete all of the Level III requirements in accordance with the Academic Program Rules for that degree. Courses presented to complete the Level III requirements for the other degree must include at least 24 units which have not been presented for the Bachelor of Business Information Technology degree.

(3) Candidates should note that an enrolment in courses exceeding a total value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload.

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### Bachelor of Business Information Technology - Graduate Attributes

### Knowledge

- · An understanding of the application of information technology to the development of business solutions
- · The knowledge for a career in the development, implementation and management of business information systems
- A general understanding of accounting, economics, information systems, electronic commerce, computer science, computer systems, database management, software engineering, networks and data communications.

### Intellectual and social capabilities

- · Developed skills in business problem analysis and the design and development of information systems
- · Good literacy, numeracy, oral communication, interpersonal and decision-making skills
- · The ability to keep up-to-date in the discipline of information systems
- · A commitment to intellectual curiosity and lifelong learning.
- · Teamwork and leadership capabilities
- · Confidence in their professional and interpersonal skills.

### Attitudes and values

- · An awareness of the ethical standards expected of information systems professionals
- Being informed about social, moral and cultural issues in Australia and the rest of the world.
- · A commitment to the highest standards of ethical behaviour in the community.

# Bachelor of Commerce Bachelor of Commerce (Accounting) Bachelor of Commerce (Corporate Finance) Bachelor of Commerce (International Business) Bachelor of Commerce (Management) Bachelor of Commerce (Marketing)

3

### Academic Program Rules

### 1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Commerce. A candidate may obtain either degree or both.
- 1.2 On satisfying the admission requirements for entry to undergraduate studies in the School of Commerce, students will enrol in a program of study to allow them to qualify for one of the following degrees:

Degree of Bachelor of Commerce

Degree of Bachelor of Commerce (Accounting) Degree of Bachelor of Commerce (Corporate Finance) Degree of Bachelor of Commerce (International Business) Degree of Bachelor of Commerce (Management)

Degree of Bachelor of Commerce (Marketing).

A student may not hold two concurrent places in the Bachelor of Commerce degree. After completion of their first Bachelor of Commerce degree in a particular specialisation, a student may apply for a further place in the Bachelor of Commerce degree in a different specialisation. Students entering the Bachelor of Commerce for a second time may be granted status up to a maximum of 48 units

1.3 The degree of Bachelor of Commerce was awarded for the first time in May 1993. Candidates graduating later than May 1993, who were originally enrolled for another degree may graduate with one of the above degrees provided that all requirements for that degree are satisfied.

### 2 Duration of program

The program for the Bachelor degrees shall extend over three years of full-time study or the part-time equivalent.

### Assessment and examinations

- 3.1 A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the Academic Program Rules.
- 3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.4 There shall be five classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, Conceded Pass.
- 3.5 A candidate may present, for the Bachelor degree a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.7.2 below.
- 3.6 A candidate who fails a course and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the Department concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.7 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same

material, except by permission of the School and then only under such conditions as the School may prescribe.

### 3.8 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4 Qualification requirements

### 4.1 Bachelor of Commerce

To qualify for the degree of Bachelor of Commerce, candidates must pass courses with a combined total of not less than 72 units drawn from 4.8 below including:

- (a) not more than 24 units at Level I, including ACCTING 1002 Accounting for Decision Makers I, ECON 1004 Principles of Microeconomics I, ECON 1000 Principles of Macroeconomics I, and ECON 1008 Business Data Analysis I or STATS 1000 Statistical Practice I
- (b) at least 12 units of Level II Commerce courses
- (c) 12 units of Level III Commerce courses and
- (d) either
  - (i) a further 4 units of Level III Commerce courses or
  - (ii) a further 12 units of Level III courses in 4.8 below.
- 4.2 Bachelor of Commerce (Accounting)
- 4.2.1 To qualify for the degree of Bachelor of Commerce (Accounting), candidates must satisfy all conditions in 4.1 above.
- 4.2.2 In addition, the courses presented must include the accounting courses in 4.8.1 below required to meet the educational requirements for entry into the accounting profession.
- 4.3 Bachelor of Commerce (Corporate Finance)
- 4.3.1 To qualify for the degree of Bachelor of Commerce (Corporate Finance), candidates must satisfy all conditions in 4.1 above. For the purpose of qualifying for this degree ECON 2012 Financial Economics II is considered a Commerce course.

4.3.2 In addition, the courses presented must include CORPFIN 2006 Business Finance II CORPFIN 3008 Corporate Finance Theory III CORPFIN 3019 Corporate Investment and Strategy III

ECON 2012 Financial Economics II

and one other Level III Corporate Finance course from 4.8.1 below to the value of 4 units, or such courses as approved by the Head of the School of Commerce.

- 4.4 Bachelor of Commerce (International Business)
- 4.4.1 To qualify for the degree of Bachelor of Commerce (International Business), candidates must satisfy all conditions in 4.1 above.
- 4.4.2 In addition, the courses presented must include:

COMMGMT 2008 Management II COMMGMT 3001 International Management III MARKETNG 2009 Marketing II MARKETNG 3015 International Marketing III

- 4.4.3 In addition, one of the following must be included: *either* 
  - (i) at least 4 units of Level II Humanities and Social Sciences courses and 12 units of study undertaken at an approved institution abroad or
  - (ii) at least 8 units of approved Level II Humanities and Social Sciences courses *or*
  - (iii) at least 14 units of foreign language studies or
  - (iv) completion of the Diploma of Languages .
- 4.5 Bachelor of Commerce (Management)
- 4.5.1 To qualify for the degree of Bachelor of Commerce (Management), candidates must satisfy all conditions in 4.1 above.
- 4.5.2 In addition, the courses presented must include COMMGMT 2008 Management II, COMMGMT 2007 Organisational Behaviour II, and Level III Management courses from 4.8.1 below to the value of 12 units, or such courses as approved by the Head of the School of Commerce.
- 4.6 Bachelor of Commerce (Marketing)
- 4.6.1 To qualify for the degree of Bachelor of Commerce (Marketing), candidates must satisfy all conditions in 4.1 above.
- 4.6.2 In addition, the courses presented must include MARKETNG 2009 Marketing II, MARKETNG 2011 Consumer Behaviour II, and Level III Marketing courses

from 4.8.1 below to the value of 12 units, or such courses as approved by the Head of the School of Commerce.

- 4.7 All degrees
- 4.7.1 In determining a candidate's eligibility for the award of the degree, the School may disallow any course passed more than 10 years previously.
- 4.7.2 A candidate may present for the degree Level II and Level III courses for which a conceded pass has been awarded to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses listed in 4.4.3, 4.8.1 and 4.8.2 below.
- 4.7.3 Candidates who have completed courses for the degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Head.
- 4.7.4 A candidate may not count for the degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the School of Commerce.
- 4.7.5 To qualify for an undergraduate degree in the School of Commerce a student who has transferred into Commerce from another degree program or from another university and has been granted status for courses completed prior to transfer must satisfy all conditions in 4.1 above and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 12 units of Level III Commerce courses. However, this requirement may be waived in special circumstances approved by the School of Commerce.
- 4.7.6 A candidate for an undergraduate degree in the School of Commerce at the University of Adelaide, who wishes to undertake courses elsewhere towards that degree, must satisfy all conditions in 4.1 above and present courses taught at the University of Adelaide having a minimum value of 48 units, including at least 12 units of Level II or III Commerce courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the School of Commerce.
- 4.7.7 (a) Graduates of the University of Adelaide (except those specified in 4.7.7(b) below) or of other institutions, who wish to proceed to an undergraduate degree in the School of Commerce and to count towards that degree courses which they have already presented for another

qualification may be permitted to do so subject to the following conditions:

- they may present for the degree such courses to a maximum aggregate value of 24 units. No such course/s may be presented in lieu of 12 units of Level II Commerce courses and 12 units of Level III Commerce courses
- (ii) they shall present at least 16 units of courses at Level III, which have not been presented to any other degree and
- (iii) they shall present a range of courses which fulfil the requirements for 4.1 above.
- (b) Graduates of the University of Adelaide who wish to proceed to an undergraduate degree in the School of Commerce and to count towards that degree courses which they have already presented for the Bachelor of Arts, Bachelor of Business Information Technology, Bachelor of Computer Science, Bachelor of Design Studies, Bachelor of Economics, Bachelor of Engineering (Telecommunications), Bachelor of Environmental Studies, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, Bachelor of International Studies, Bachelor of Social Sciences or Bachelor of Wine Marketing degree, may be permitted to do so subject to the following conditions:
  - (i) they may present for the degree such courses to a maximum aggregate value of 48 units
  - they shall present at least 24 units which have not been presented to any other degree, comprising *either*

16 units of Level III Commerce courses and an additional 8 units of Level II or III courses from 4.8 below, *or* 

12 units of Level III Commerce courses and an additional 12 units of Level III courses from 4.8 below

- (iii) they shall present the courses specified in 4.1(a) and 4.1(b) above
- (iv) they hold only one of the degrees listed in 4.7.7(b).

### 4.8 Academic program

The following courses may be presented for an undergraduate degree in the School of Commerce:

4.8.1 Commerce courses

### Level I

ACCTING 1002 Accounting for Decision Makers I@ 3 ACCTING 1005 Accounting Method I@ 3

	COMMLAW 1004 Commercial Law I(S)@	3
	ECOMMRCE 1000 Information Systems I@	3
	Level II	
	ACCTING 2001 Management Accounting II@	4
	ACCTING 2010 Financial Accounting II@	4
	COMMGMT 2007 Organisational Behaviour II <sup>+</sup>	4
	COMMGMT 2008 Management II+	4
	COMMLAW 2000 Commercial Law II@	4
	CORPFIN 2005 Investment Analysis and Valuation $\mathrm{II}^{\#}$	4
	CORPFIN 2006 Business Finance II@#	4
	ECOMMRCE 2003 Information Systems II	4
	ECOMMRCE 2004 Internet Commerce II	4
	MARKETNG 2009 Marketing II*	4
	MARKETNG 2011 Consumer Behaviour II*	4
	Level III	
	ACCTING 3006 Accounting Theory III@	4
	ACCTING 3011 Corporate Accounting III@	4
	ACCTING 3012 Auditing III@	4
	ACCTING 3018 Management Accounting	
	for Business Advice III	4
	COMMGMT 3001 International Management III+	4
	COMMGMT 3007 Strategic Management III+	4
	COMMGMT 3014 Human Resource Management III $^{\rm +}$	4
	COMMGMT 3015 Organisational Dynamics III $^+$	4
	COMMLAW 3010 Income Tax Law III@	4
	CORPFIN 3008 Corporate Finance Theory III#	4
	CORPFIN 3009 Portfolio Theory and Management $\mathrm{III}^{\#}$	4
	CORPFIN 3013 Options, Futures & Risk Management III <sup>#</sup>	4
	CORPFIN 3019 Corporate Investment & Strategy III#	4
	ECOMMRCE 3016 Electronic Commerce III	4
	MARKETNG 3000 Marketing Communications III*	4
	MARKETNG 3015 International Marketing III*	4
	MARKETNG 3017 Market Research and Project III*	4
	<ul> <li>Accounting course</li> </ul>	т
	# Corporate Finance course	
	+ Management course	
	* Marketing course	
4.8.2	Economics courses	
	Courses listed in the Academic Program Rules of the degree of Bachelor of Economics. Some Economics	
	courses are compulsory for the undergraduate degree	S
	in the School of Commerce.	

4.8.3	Courses degree Quantit Program the Aca	nities and Social Sciences courses s listed in the Academic Program Rules of the of Bachelor of Arts, excluding PURE MTH 1002 ative Methods Using Computers I. Note that the n Rules include courses in Psychology (listed in ademic Program Rules of the Degree of Bachelor th Sciences).
4.8.4	Law c	ourses
	Acaden Laws (s	s, to a maximum of 27 units, listed in the nic Program Rules of the degree of Bachelor of see note 2 of the notes (not forming part of the nic Program Rules) below)
4.8.5	Finan	ce courses
		s listed in the Academic Program Rules of the of Bachelor of Finance
4.8.6	Wine	Marketing courses
		s listed in the Academic Program Rules of the of Bachelor of Wine Marketing, excluding:
	WINEN	IKTG 1013WT Food and Wine Marketing
	WINEN	IKTG 2011WT Applied Marketing Research II
		IKTG 2014WT International Marketing of Wine ricultural Products II
	WINEN	IKTG 2033WT Consumer Behaviour Analysis
	WINEN	IKTG 2034WT Strategic Marketing Management II
	WINEN	IKTG 3034WT Advertising and Promotion III
4.8.7		date may not present both ECON 3034 Economic III and 4367 Applied Economics III for the degree.
4.8.8	Comme	date may not present COMMLAW 1004 ercial Law I(S) for the degree if passed after LAW aw of Contract.
4.8.9	Comme	date may not present COMMLAW 2000 rcial Law II for the degree if passed after LAW orporate Law.
4.8.10	0 The F	lonours degree
4.8.10.1 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.		
4.8.10.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:		s shall be awarded the Honours degree, but the shall decide within which of the following
	1	First Class
	2A	Second Class div A
	2B	Second Class div B
	3	Third Class
	NAH	Not awarded.

- 4.8.10.3 A candidate may, subject to the approval of the Head of the School of Commerce, proceed to the Honours degree in the following course: COMMERCE 4000 A/B Honours Commerce.
- 4.8.10.4 A candidate may, subject to the approval of the Heads of Schools or Departments concerned, proceed to the Honours degree taught jointly by the School of Commerce and another department. Candidates must apply in writing for the proposed program of study to be approved in advance by the School of Commerce.
- 4.8.10.5 (a) A candidate preparing for the Honours year taught by the School of Commerce must complete the requirements for a Bachelor degree of the School of Commerce (or the equivalent elsewhere) before proceeding with the Honours year, and must obtain a high standard in courses presented for the Bachelor degree.
  - (b) A candidate who has satisfied the requirements for admission to Honours as set out in previous schedules is also eligible to apply for admission to the Honours year as above.
- 4.8.10.6 The work of the Honours year is normally completed in one year of full-time study. The School may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.
- 4.8.10.7 A candidate who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program shall be reported to the School, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine.
- 4.9 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

**Notes** (not forming part of the Academic Program Rules)

- Students are advised that a knowledge of Mathematics is helpful for Commerce courses and is assumed knowledge for some Corporate Finance courses.
- 2 Studies in Law within the degree of Bachelor of Commerce
  - (1) Candidates who have successfully completed courses to the value of 24 units of the B.Com. degree may

apply for admission to Law Studies. Applications for admission to Law must be made through SATAC by the closing date of the year during which the 24 units are completed. Students will remain candidates for the degree of B.Com. and may present for the degree of B.Com. Law courses up to the value of 27 units.

- (2) See also the Academic Program Rules of the LL.B. degree and the Introductory Notes to the LL.B. Syllabuses.
- (3) Candidates who wish to present for the B.Com. degree Law courses passed prior to 1999 should apply in writing to have their position determined by the School of Commerce. Such candidates will not be disadvantaged by the transition.
- 3 Students from other Faculties will be considered for eligibility for the Bachelor of Commerce degree in accordance with the Regulations and Academic Program Rules of the Bachelor of Commerce degree which are applicable in the year in which the student first enrols in a course offered by the Economics or Commerce Schools.
- Δ Candidates may enrol for the degree of Bachelor of Commerce concurrently with one of the degrees Bachelor of Arts, Bachelor of Business Information Technology, Bachelor of Computer Science, Bachelor of Design Studies, Bachelor of Economics, Bachelor of Engineering (Telecommunications). Bachelor of Environmental Studies, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, Bachelor of Social Science, Bachelor of International Studies or Bachelor of Wine Marketing. Candidates already enrolled in the degrees of B.A., B.B.I.T., B.Des.St., B.Ec., B.E (Tele.), B.Env.St., B.Fin., B.Ma & Comp.Sc., B.Media, B Soc Sc,. B Int St, or B.Comp.Sc. wishing to proceed to the B.Com. concurrently, may apply for admission to the B.Com. Candidates already enrolled in the B.Com, wishing to proceed to one of these other degrees concurrently, may apply towards the end of their first year for admission to the second degree in the following year.
  - The combined degrees (apart from B.Com/BE (IT&T) may be completed in a minimum of four years of full time study provided appropriate courses are selected. Candidates should seek program advice regarding course choice.
  - (2) Candidates must complete all of the requirements for the Bachelor of Commerce, together with the following minimum requirements for the other degree:
    - (i) Candidates must complete the compulsory courses for that degree
    - (ii) Candidates must complete all of the Level III requirements in accordance with the Academic Program Rules for that degree. Courses presented to complete the Level III requirements for the other degree must include at least 24 units which have not been presented to the Bachelor of Commerce degree.
  - (3) Candidates should note that an enrolment in courses exceeding a total units value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload.

Bachelor of Commerce Bachelor of Commerce (Accounting) Bachelor of Commerce (Corporate Finance) Bachelor of Commerce (International Business) Bachelor of Commerce (Management) Bachelor of Commerce (Marketing) – Graduate Attributes

#### Knowledge

- A thorough knowledge and understanding of the content of their major discipline at levels that are internationally recognised
- · Some understanding of other related disciplines.

#### Intellectual and social capabilities

- · Ability to research, analyse and evaluate information in their chosen discipline from a wide variety of sources
- · Ability to identify problems and apply critical thinking and problem solving skills both independently and cooperatively
- · A high level of literacy and numeracy and the ability to verbally communicate information and ideas
- · Ability to work effectively individually and as a team member
- · A general understanding of and an ability to use modern information technology
- · Ability to keep up-to-date in their chosen discipline
- · A commitment to intellectual curiosity and life-long learning
- · Ability to adapt to a changing environment
- · Confidence in their professional and interpersonal skills
- · Ability to take a leadership role in their chosen discipline and in the wider community
- · Ability to work to the highest standard in their chosen discipline
- · Ability to act in a professional manner.

#### **Attitudes and values**

- · An awareness of and commitment to the ethical standards expected in their chosen discipline
- · Being informed about social, ethical and cultural issues in Australia and the rest of the world
- · A commitment to the highest standards of ethical behaviour in the community.

# Bachelor of Finance Bachelor of Finance (International) Bachelor of Finance (Quantitative)

### Academic Program Rules

Note: SACE Stage 2 Mathematical Studies (or equiv.) is a prerequisite for the Bachelor of Finance (Quantitative) degree.

### 1 General

- 1.1 There shall be a degree and an Honours degree of Bachelor of Finance. A candidate may obtain either degree or both.
- 1.2 On satisfying the admission requirements for entry into the Bachelor of Finance degree, students will enroll in a program of study to allow them to qualify for one of the following:

Degree of Bachelor of Finance

Degree of Bachelor of Finance (International) Degree of Bachelor of Finance (Quantitative).

### 2 Duration of program

The program of study for the degree of Bachelor of Finance shall extend over three years of full-time study or its part-time equivalent. A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the Academic Program Rules.

### 3 Assessment and examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be five classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, Conceded Pass.

- 3.4 A candidate may present, for the Bachelor degree, a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.8.
- 3.5 A candidate who fails a course and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School or Head of the Department concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.6 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by permission of the School and then only under such conditions as the School may prescribe.
- 3.7 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4 Qualification requirements

### 4.1 Bachelor of Finance

To qualify for the degree of Bachelor of Finance, candidates must pass courses with a combined total of not less than 72 units drawn from 4.9 including:

 (a) not more than 24 units at Level I, including: ACCTING 1002 Accounting for Decision Makers I ECON 1000 Principles of Macroeconomics I ECON 1004 Principles of Microeconomics I ECON 1008 Business and Data Analysis I or STATS 1000 Statistical Practice I ECON 1009 International Financial Institutions and Markets I

MATHS 1009 Introduction to Financial Mathematics I and MATHS 1010 Applications of Quantitative Methods in Finance I MATHS 1011/1012 Mathematics | A/B nr MATHS 1011/1013 Mathematics IA/IMA or MATHS 1011 Mathematics I A and MATHS 1013 Mathematics IM A. (b) at least 24 units at Level II, including: CORPEIN 2006 Business Finance II ECON 2012 Financial Economics II and either FCON 2006 Economic and Financial Data Analysis II or both STATS 2002 Introduction to Mathematical Statistics II and STATS 2003 Statistical Practice II (c) at least 12 units of Level III Finance courses from 4.9.1(a) below including CORPFIN 3009 Portfolio Theory and Management III and either APP MTH 3011 Financial Modelling Techniques III or CORPFIN 3013 Options, Futures & Risk Management III plus either (i) an additional 12 units at Level III from 4.9.1 below nr (ii) an additional 4 units of Level III Finance courses from 4.9.1(a) below and an additional 8 units at Level II or III from 4.9.1 below.

- 4.2 Bachelor of Finance (International)
- 4.2.1 To qualify for the degree of Bachelor of Finance (International), candidates must satisfy all conditions in 4.1 above.

- 4.2.2 In addition, the courses presented must include:
   ECON 2009 Consumers, Firms & Markets II
   ECON 3032 International Finance III
   ECON 3035 Money, Banking and Financial Markets III.
- 4.3 Bachelor of Finance (Quantitative)
- 4.3.1 To qualify for the degree of Bachelor of Finance (Quantitative), candidates must satisfy all conditions in 4.1 above, including 16 units of Level III Finance courses from 4.9.1(a) below.
- 4.3.2 In addition, the courses presented must include: MATHS 1011/1012 Mathematics I A/B MATHS 1011/1013 Mathematics IA/IM A STATS 1000 Statistical Practice I APP MTH 2005 Financial Computing II MATHS 2004 Mathematics IIM or STATS 2002 Introduction to Mathematical Statistics II STATS 2003 Statistical Practice II APP MTH 3011 Financial Modelling Techniques III MATHS 3014 Mathematics of Finance III.
- 4.4 To qualify for a Bachelor of Finance degree a student who transferred into the Bachelor of Finance from another university and has been granted status for studies completed prior to transfer must satisfy all conditions in 4.1, 4.2 or 4.3 above and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 12 units of Level III Finance courses. However, this requirement may be waived in special circumstances approved by the School.
- 4.5 A candidate for a Bachelor of Finance degree at the University of Adelaide who wishes to undertake courses elsewhere towards their degree, must satisfy all conditions in 4.1, 4.2 or 4.3 above and present courses taught at the University of Adelaide having a minimum value of 48 units, including at least 12 units of Level III Finance courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the School.
- 4.6 (a) Graduates of the University of Adelaide (except those specified in 4.4(b)) or of other institutions, who wish to proceed to the degree of Bachelor of Finance and to count towards that degree courses which they have already presented for another qualification may be permitted to do so subject to the following conditions:

- they may present for the degree such courses to a maximum aggregate value of 24 units. No such course/s may be presented in lieu of 8 units Level II Finance courses and 12 units Level III Finance courses
- they shall present at least 16 units for courses at Level III, which have not been presented to any other degree and
- (iii) they shall present a range of courses which fulfil the requirements of 4.1, 4.2 or 4.3.
- (b) Graduates of the University of Adelaide who wish to proceed to a Bachelor of Finance degree and to count towards that degree courses which they have already presented for the Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Economics, Bachelor of Engineering (Chemical), Bachelor of Engineering (Civil), Bachelor of Engineering (Civil & Environmental), Bachelor of Engineering (Computer Systems), Bachelor of Engineering (Electrical & Electronic), Bachelor of Engineering (IT&T), Bachelor Engineering (Mechanical) or Bachelor of Mathematical and Computer Sciences, degree may be permitted to do so subject to the following conditions:
  - (i) they may present for the degree such courses to a maximum aggregate value of 48 units
  - they shall present at least 24 units which have not been presented to any other degree comprising at least 12 units of Level III Finance courses from 4.9.1(a) below, plus

either

an additional 12 units at Level III from 4.9.1 below

or

an additional 4 units of Level III Finance courses from 4.9.1(a) below and an additional 8 units at Level II or III from 4.9.1 below *and* 

- (iii) they shall present the courses specified in 4.1, 4.2 or 4.3 above
- (iv) they hold only one of the degrees listed in 4.6(b) above.
- 4.7 In determining a candidate's eligibility for the award of the degree, the Schools of Economics, Commerce and Mathematical and Computer Sciences may disallow any course passed more than 10 years previously.
- 4.8 A candidate may present for a Bachelor of Finance degree Level II and Level III courses for which a Conceded Pass has been awarded, to a maximum aggregate value of 6 units, providing that each course

does not exceed 3 units. Conceded passes cannot be presented for those courses in 4.9.1(a) and 4.9.1(b) below.

### Notes (not forming part of the Academic Program Rules)

- Students are advised that a knowledge of mathematics is helpful for finance, commerce and economics courses and is essential for some courses.
- 2 Studies in Law within a Bachelor of Finance degree
  - (1) It is possible for students in Finance to elect to complete both the Bachelor of Finance and Bachelor of Laws academic program in a total of 5.5 years of fulltime study, provided they are accepted into the Bachelor of Laws academic program. Students wishing to pursue this academic plan may apply for admission through the South Australian Tertiary Admission Centre by September of the year before they commence university study or in a later year of the program.
  - (2) Students will enrol concurrently for the degree of B.Fin. and LL.B and may present for the degree of B.Fin. the Law courses listed in the Academic Program Rules for the degree of Bachelor of Laws. Students must complete all the requirements for the B.Fin. before they can obtain their LL.B degree.
  - (3) See also the Academic Program Rules of the LL.B degree and Introductory Notes to the LL.B Syllabuses.

### 4.9 Academic program

4.9.1 The following courses may be presented for the Bachelor degree:

### (a) Finance courses

### Level I

ACCTING 1002 Accounting for Decision Makers I	3
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
ECON 1008 Business Data Analysis	3
ECON 1009 International Financial Institutions and Markets I	3
MATHS 1009 Introduction to Financial Mathematics I	3
MATHS 1010 Applications of Quantitative Metho in Finance I	ds 3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA	3
MATHS 1014 Mathematics IMB	3
STATS 1000 Statistical Practice I	3
Level II	
APP MTH 2005 Financial Computing II	4
CORPFIN 2005 Investment Analysis and Valuation II	4

CORPFIN 2006 Business Finance II	4
ECON 2000 International Trade	
and Investment Policy II	4
ECON 2006 Economic and Financial Data	
Analysis II	4
ECON 2009 Consumers, Firms & Markets II	4
ECON 2011 Macroeconomic Theory & Policy II	4
ECON 2012 Financial Economics II	4
STATS 2002 Introduction	
to Mathematical Statistics II	2
STATS 2003 Statistical Practice II	2
Level III	
APP MTH 3003 Life Contingencies III	3
APP MTH 3011 Financial Modelling Techniques III	4
CORPFIN 3008 Corporate Finance Theory III	4
CORPFIN 3009 Portfolio Theory	
and Management III	4
CORPFIN 3013 Options, Futures and	_
Risk Management III	4
CORPFIN 3019 Corporate Investment	
and Strategy III	4
ECON 3021 International Trade III	4
ECON 3023 Econometrics III	4
ECON 3032 International Finance III	4
ECON 3034 Economic Theory III	4
ECON 3035 Money, Banking	
and Financial Markets III	4
MATHS 3014 Mathematics of Finance III	3
STATS 3005 Time Series III	3

(b) Other Economics and Commerce courses

All other courses listed in the Academic Program Rules for the degrees of Bachelor of Economics and Bachelor of Commerce.

(c) Other Mathematical & Computer Sciences courses

All other courses listed in the Academic Program Rules for the degrees of Bachelor of Mathematical and Computer Sciences and Bachelor of Computer Science.

(d) Humanities and Social Sciences courses Courses listed in the Academic Program Rules of the degree of Bachelor of Arts (which include courses offered by other Faculties), excluding PURE MTH 1002 Quantitative Methods Using Computers IH and COMP SCI 1004 Computer Literacy I.

	(e) Law courses For students who have obtained a place in the Bachelor of Laws, courses, to a maximum of 27 units, listed in the Academic Program Rules of the degree of the Bachelor of Laws (see note 2 of the Notes (not forming part of the Academic Program Rules) above).
4.9.2	Candidates who have completed courses for a Bachelor of Finance degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the School.
4.9.3	A candidate may not count for a Bachelor of Finance degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the Schools of Economics, Commerce or Mathematical and Computer Sciences.
4.9.4	Except with the permission of the School, a candidate may not enrol in non-Finance courses at Level II to the value of more than 8 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses CORPFIN 2006 Business Finance II, ECON 2006 Economic and Financial Data Analysis II and ECON 2012 Financial Economics II (or equivalent). These non-Finance courses to the value of not more than 8 units shall not include courses in which the candidate has previously failed or from which they candidate has withdrawn.

4.9.5 Except with the permission of the School, a candidate may not enrol in non-Finance courses at Level III to the value of more than 8 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses CORPFIN 2006 Business Finance II, ECON 2006 Economic and Financial Data Analysis II and ECON 2012 Financial Economics II (or equivalent), and has already passed or is concurrently enrolled in Level III Finance courses to the value of 12 units. These non-Finance courses to the value of not more than 8 units shall not include courses in which the candidate has previously failed or from which the candidate has withdrawn.

### 4.10 The Honours degree

4.10.1 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

- 4.10.2 A candidate may, subject to the approval of the Heads of the Schools of Commerce and Economics, and Heads of the Departments of Mathematics, Applied Mathematics or Statistics, proceed to the Honours degree in the course COMMERCE 4005 A/B Honours Commerce.
- 4.10.3 A candidate may, subject to the approval of the Heads of the Schools/Departments concerned, proceed to the Honours degree taught jointly by more than one Department/School. Candidates must apply in writing to the School for the proposed program of study to be approved in advance.
- 4.10.4 (a) A candidate preparing for the Honours year must complete the requirements for a Bachelor of Finance degree before proceeding with the Honours year, including ECON 3023 Econometrics III (ECON 3023 Econometrics III (ECON 3023 Econometrics III may be waived by permission of the Head of the School), and must obtain a high standard in courses presented for the Bachelor degree (or their equivalent elsewhere)
  - (b) A candidate who has satisfied the requirements for admission to Honours as set out in previous Academic Program Rules is also eligible to apply for admission to the Honours year as above.
- 4.10.5 The work of the Honours year is normally completed in one year of full-time study. The School may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.
- 4.10.6 A candidate who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program shall be reported to the School, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine.
- 4.10.7 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 4.11 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

### Bachelor of Finance Bachelor of Finance (International) Bachelor of Finance (Quantitative) – Graduate Attributes

### Knowledge

Knowledge and understanding of the content of economics and finance at levels that are internationally recognised. This
includes core analytical knowledge, appropriate quantitative skills, and an understanding of the relevant institutional
context.

### Intellectual and social capabilities

- Cognitive skills such as the ability to analyse, evaluate and synthesise financial information, both quantitative and qualitative, from a wide variety of sources.
- · Critical thinking and problem-solving skills, especially as these apply to the analysis of financial problems.
- · Numeracy skills, especially in statistics and econometrics.
- · Literacy and verbal communication skills of a high order in the presentation of arguments or evidence of a financial nature.
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and cooperatively with other professional finance specialists.
- Capacity for future employment based on a professional education that appropriately balances the reflective, intuitive, and decision-making requirements of work in the finance areas.
- · To stimulate and maintain intellectual curiosity and a commitment to continuous learning.
- The ability to take a leadership role in the finance profession as well as in the wider community, and a commitment to high standards of professional ethics.
- · Proficiency in the use of computer-based technologies.

### Attitudes and values

- A desire to be an informed, responsible and critically discriminating participant in academic, social, cultural and ethical issues, in the community of finance specialists, in the workforce more generally, and both in Australia and abroad.
- · A commitment to the highest community standards of ethical behaviour.
- · An abiding sense of curiosity and enquiry both within and beyond the discipline.



# School of Economics

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- Degree of Bachelor of Economics
- Degree of Bachelor of Economics (International Agricultural Business)
- Honours degree of Bachelor of Economics

### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

### Academic Program Rules

### 1 General

There shall be a degree and an Honours degree of Bachelor of Economics. A candidate may obtain either degree or both.

### 2 Duration of program

The program of study for the degree of Bachelor of Economics shall extend over three years of full-time study or its part-time equivalent. A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

### 3 Assessment and examinations

- 3.1 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
  - (b) For the purposes of these Academic Program Rules a candidate who has failed to comply with the provisions of 3.1(a) above shall be deemed to have failed the examination.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the degree a limited number of courses for which a conceded pass has been awarded, as specified in the relevant Rules under these Academic Program Rules. A pass of a certain standard may be prescribed in the syllabuses as a prerequisite for admission to further studies in other courses. A candidate may present, for the degree of Bachelor of Economics, a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.6 below.

- 3.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School of Economics, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.5 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by permission of the School and then only under such conditions as School may prescribe.
- 3.6 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Bachelor of Economics, candidates must pass courses with a combined total of not less than 72 units drawn from 4.7 including:

(a) not more than 24 units from Level I, including:

ECON 1000 Principles of Macroeconomics I

- ECON 1004 Principles of Microeconomics I
- ECON 1008 Business Data Analysis I or

STATS 1000 Statistical Practice I

**Note:** candidates who have not completed SACE Stage 2 Mathematical Studies or equivalent, must complete ECON 1005 Mathematics for Economists I before proceeding to Level II Economics courses.

(b) the following Level II courses:

ECON 2009 Consumers, Firms & Markets II ECON 2011 Macroeconomic Theory & Policy II ECON 2006 Economic and Financial Data Analysis II or STATS 2002 Introduction to Mathematical Statistics II

and

STATS 2003 Statistical Practice II

- (c) either
  - at least 16 units of Level III Economics courses from those listed in 4.7.1(a) with the remaining units from courses at Level II (or higher) included in 4.7 or
  - (ii) 12 units of Level III Economics courses, with at least another 12 units of Level III courses from those listed in 4.7(see note (d)).
- (d) Included in the 72 units there must be:
  - (i) at least one of the following Economic History courses:

ECON 2007 Australian Economic History II ECON 3030 International Economic History III

- see also note 5.4 (a) below, covering prerequisites for the Bachelor of Economics (Honours) degree.
- 4.2 To qualify for the degree of Bachelor of Economics a student who transferred into the Bachelor of Economics from another university and has been granted status for studies completed prior to transfer must satisfy all conditions in 4.1 and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 12 units of Level III Economics courses. However, this requirement may be waived in special circumstances approved by the School.
- 4.3 A candidate for the degree of Bachelor of Economics at the University of Adelaide, who wishes to undertake courses elsewhere towards their degree, must satisfy all conditions in 4.1 above and present courses taught at the University of Adelaide having a minimum value of 48 units, including at least 12 units of Level III Economics courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the School.
- 4.4 (a) Graduates of the University of Adelaide (except those specified in 4.4 (b) below) or of other institutions who wish to proceed to the degree of Bachelor of Economics and to count towards that degree courses which they have already presented for another qualification may be permitted to do so subject to the following conditions:
  - (i) they may present for the degree such courses to a maximum aggregate value of 24 units

- they shall present at least 16 units for courses at Level III, which have not been presented to any other degree, including at least 12 units for Economics courses and
- (iii) they shall present a range of courses which fulfil the requirements of 4.1 above
- (b) Graduates of the University of Adelaide who wish to proceed to the degree of Bachelor of Economics and to count towards that degree courses which they have already presented for the Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Engineering (Chemical), Bachelor of Engineering (Civil & Environmental), Bachelor of Engineering (Civil & Structural), Bachelor of Engineering (Computer Systems), Bachelor of Engineering (Electrical & Electronic), Bachelor of Engineering (Mechanical), Bachelor of Engineering (Mechatronic), Bachelor of Engineering (Telecommunications), Bachelor of Finance, Bachelor of Finance (International), Bachelor of Finance (Quantitative), Bachelor of International Studies, Bachelor of Mathematical and Computer Sciences, Bachelor of Media and Bachelor of Social Sciences degree may be permitted to do so subject to the following conditions:
  - (i) they may present for the degree such courses to a maximum aggregate value of 48 units
  - (ii) they shall present at least 24 units which have not been presented for any other degree comprising either at least 16 units of Level III Economics courses from those listed in 4.7(a) with the remaining units from courses at Level II or Level III included in 4.7 or

12 units of Level III Economics courses, with at least another 12 units of Level III courses from those listed in 4.7 *and* 

- (iii) they shall present the courses specified in 4.1(a), 4.1(b) and 4.1(d) above
- (iv) they hold only one of the degrees listed in 4.4(b).
- 4.5 In determining a candidate's eligibility for the award of the degree, the School may disallow any course passed more than 10 years previously.
- 4.6 A candidate may present for the degree Level I, II and III courses for which a Conceded Pass has been awarded to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses listed in 4.7.1(a), 4.7.1(b) and 4.7.1(e).

#### Notes (not forming part of the Academic Program Rules)

- 1 Not all Level II and Level III courses will be offered every year. Courses will be offered according to numbers of students enrolled and staff availability. Students can increase their flexibility by taking ECON 2009 Consumers, Firms & Markets II in their second semester concurrently with ECON 1000 Principles of Macroeconomics I and ECON 2011 Macroeconomic Theory & Policy II in their third semester so that some Level III courses will be available in their third semester and almost all by their fourth semester.
- 2 Students are advised that a knowledge of mathematics is helpful for economics courses and is essential for some courses. Students who are particularly interested in Mathematics, and are intending to apply for Honours, are encouraged to take some courses in the School of Mathematical and Computer Sciences. (For example: MATHS 1011/1012 Mathematics I A/B or MATHS 1013/1014 Mathematics IM A/B. STATS 1000 Statistical Practice I instead of ECON 1008 Business Data Analysis I: and both of the 2-unit courses STATS 2003 Statistical Practice II and STATS 2002 Introduction to Mathematical Statistics II instead of ECON 2006 Economic & Financial Data Analysis II).
- 3 Studies in Law within the Degree of Bachelor of Economics.
  - It is possible for students in Economics to elect to (1)complete both the Bachelor of Economics and Bachelor of Laws academic program in a total of 5.5 years of full-time study, provided they are accepted into the Bachelor of Laws academic program. Students wishing to pursue this academic plan may apply for admission through the South Australian Tertiary Admission Centre by September of the year before they commence university study or in a later year of the program.
  - Students will enrol concurrently for the degree of B.Ec. (2) and LL.B and may present for the degree of B.Ec. the Law courses listed in the Academic Program Rules for the degree of Bachelor of Laws. Students must complete all the requirements for the B.Ec. before they can obtain their LL.B degree.
  - See also the Academic Program Rules of the LL.B (3) degree and Introductory Notes to the LL.B Syllabuses.
  - Candidates undertaking study for the degree of Bachelor of Economics and one of the degrees of Bachelor of Commerce, Bachelor of Finance, Bachelor of Mathematical and Computer Sciences or Bachelor of Computer Science concurrently:

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Candidates may enrol for the degree of Bachelor of Economics concurrently with one of the degrees of Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Engineering (Chemical), Bachelor of Engineering (Civil and Environmental), Bachelor of Engineering (Civil & Structural), Bachelor of Engineering (Computer Systems), Bachelor of Engineering (Electrical & Electronic), Bachelor of Engineering (Mechanical), Bachelor of Engineering (Telecommunications), Bachelor of Finance, Bachelor of Finance (International), Bachelor of Finance (Quantitative), Bachelor of International Studies, Bachelor of Mathematical and Computer Sciences. Bachelor of Media. or Bachelor of Social Sciences, if they apply for admission and are admitted to both programs. Candidates already enrolled in the Bachelor of Economics wishing to proceed to one of these additional degrees concurrently, may apply towards the end of their first

year for admission to the B.A., B.Com., B.E. (Chem.), B.E.(Civil), B.E.(Civil & Env.), B.E.(Comp.Sys.), B.E.(Elect.), B.E.(I T & T), B.E.(Mech.), B.E.(Mechatronic), B.Fin., B.Ma. & Comp. Sc. or B.Comp.Sc. in the following year.

- The combined degrees may be completed in a (1) minimum of four years of full-time study provided appropriate courses are selected. Candidates should seek program advice regarding course choice.
- Candidates must complete all of the requirements for (2)the Bachelor of Economics, together with the following minimum requirements for the other degree:
  - they must complete the compulsory courses for that degree
  - they shall present 24 units for courses at Level III which have not been presented to the Bachelor of Economics degree.
- (3) Candidates should note that an enrolment in courses exceeding a total unit value of 24 units per year will result in a program overload and is subject to approval. Candidates should be aware of the full implications of their choice to take a program overload.
- 5 Students following the Accounting pathway may count ACCTING 3011 Corporate Accounting III as a fourth Level III Economics course, if the student has three (3) Level III Economics courses as part of their program.

#### 4.7 Academic program

4.7.1 The following may be presented for the Bachelor degree: (Note that the teaching period of each course is one semester)

(a) Economics courses

### Level I

l evel II	
ECON 1009 International Financial Institutions and Markets I	3
ECON 1008 Business Data Analysis I	3
ECON 1005 Mathematics for Economists I	3
ECON 1004 Principles of Microeconomics I	3
ECON 1002 Australia & the Global Economy *	3
ECON 1000 Principles of Macroeconomics I	3

ECON 2000 International Trade and Investment Policy II	4
ECON 2001 Resource and Environmental Economics II	4
ECON 2003 East Asia Economics II	4
ECON 2005 Mathematical Economics II	4
ECON 2006 Economic & Financial Data Analysis II	4
ECON 2007 Australian Economic History II	4
ECON 2009 Consumers, Firms & Markets II	4
ECON 2011 Macroeconomic Theory & Policy II	4
ECON 2012 Financial Economics II	4

### Level III

ECON 3003 Resource	
& Environmental Economics	4
ECON 3006 Development Economics III	4
ECON 3013 Applied Econometrics III	4
ECON 3016 Strategic Thinking for Decision	
Making III	4
ECON 3017 Labour Economics III *	4
ECON 3021 International Trade III	4
ECON 3023 Econometrics III	4
ECON 3024 Public Economics III	4
ECON 3030 International Economic History III	4
ECON 3032 International Finance III	4
ECON 3034 Economic Theory III	4
ECON 3035 Money, Banking	
and Financial Markets III	4
ECON 3037 Public Finance III	4
* not available in 2007	

### (b) Commerce courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Commerce.

(c) Humanities and Social Sciences courses Courses listed in the Academic Program Rules of the degree of Bachelor of Arts, (which include courses offered by other Faculties) not listed in (a) or (b) above and excluding PURE MTH 1002 Quantitative Methods Using Computers IH.

### (d) Law courses

For students who have obtained a place in the Bachelor of Laws, courses to a maximum of 27 units, listed in the Academic Program Rules of the degree of Bachelor of Laws (see note 4 of the Notes (not forming part of the Academic Program Rules).

### (e) Finance courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Finance.

- 4.7.2 A candidate may not present COMMLAW 1004 Commercial Law I(S) for the degree if passed after 3731 Contract or LAW 1003 Law of Contract.
- 4.7.3 A candidate may not present COMMLAW 2000 Commercial Law II for the degree if passed after LAW 4035 Associations.
- 4.7.4 Candidates who have completed courses for the degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Head.

- 4.7.5 A candidate may not count for the degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material, and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the School of Economics Office.
- 4.7.6 Except with the permission of the School, a candidate may not enrol in non-Economics courses at Level II to the value of more than 12 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses ECON 2006 Economic and Financial Data Analysis II, ECON 2009 Consumers, Firms & Markets II and ECON 2011 Macroeconomic Theory & Policy II (or equivalents). These non-Economics courses to the value of not more than 12 units shall not include courses in which the candidate has previously failed or from which the candidate has withdrawn.
- 4.7.7 Except with the permission of the School, a candidate may not enrol in non-Economics courses at Level III to the value or more than 8 units unless he or she has already passed or is concurrently enrolled in the compulsory Level II courses ECON 2006 Economic and Financial Data Analysis II, ECON 2009 Consumers, Firms & Markets II and ECON 2011 Macroeconomic Theory & Policy II (or equivalents) and has already passed or is concurrently enrolled in Level III

Economics courses to the value of 12 units. These non-Economics courses to the value of not more than 8 units shall not include courses in which the candidate has previously failed or from which the candidate has withdrawn.

- 4.8 The Honours degree
- 4.8.1 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.
- 4.8.2 A candidate may, subject to the approval of the Head of the School of Economics, proceed to the Honours degree in the course ECON 4003 A/B Honours Economics.
- 4.8.3 A candidate may, subject to the approval of the Head of the Schools concerned, proceed to the Honours degree taught jointly by the School of Economics and another Department. Candidates must apply in writing for the proposed program of study to be approved in advance by the School.
- 4.8.4 (a) A candidate preparing for the Honours year taught by the School of Economics must complete the requirements for the Bachelor degree of B.Ec. or its equivalent including ECON 3034 Economic Theory III or its equivalents (such as the previously

offered courses FCON 3010 Microeconomics III and ECON 3011 Macroeconomics III), ECON 3023 Econometrics III and at least one other Level III course in economics, and must obtain at least a high credit standard in all three of these courses. together with a high standard in other courses presented for the Bachelor degree, subject to approval from the School of Economics, ECON 3013 Applied Econometrics IV may serve as a substitute for ECON 3023 Econometrics III. Students who have not passed ECON 2005 Mathematical Economics II (or MATHS 1011/1012 Mathematics I A/B or MATHS 1013/1014 Mathematics IM A/B) may be required to undertake preliminary work in those areas before proceeding to the Honours Year.

- (b) A candidate who has satisfied the requirements for admission to Honours as set out in previous schedules is also eligible to apply for admission to the Honours year as above.
- 4.8.5 The work of the Honours year is normally completed in one year of full-time study, after completion of the Bachelor degree or its equivalent. The School may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.
- 4.8.6 A candidate who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program shall be reported to the School, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine.
- 4.8.7 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 4.8.8 A graduate who has obtained the Honours Degree of Bachelor of Arts in Economics may not obtain the Honours degree of Bachelor of Economics.
- 4.9 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for this award of the University shall be admitted to the award at a graduation ceremony for the purpose.

### 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Economics (International Agricultural Business)

### Academic Program Rules

### 1 General

There shall be a degree and an Honours degree of Bachelor of Economics (International Agricultural Business). A candidate may obtain either degree or both.

### 2 Duration of program

The program of study for the degree of Bachelor of Economics (International Agricultural Business) shall extend over three years of full-time study or its parttime equivalent. A candidate for the Bachelor degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

### 3 Assessment and examinations

- 3.1 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
  - (b) For the purposes of these Academic Program Rules a candidate who has failed to comply with the provisions of 3.1(a) above shall be deemed to have failed the examination.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A Conceded Pass may not be used to satisfy prerequisite requirements. A candidate may present for the degree a limited number of courses for which a conceded pass has been awarded, as specified in the relevant Rules under these Academic Program Rules.. A pass of a certain standard may be prescribed in the syllabuses as a prerequisite for admission to further studies in other courses. A

candidate may present, for the degree of Bachelor of Economics (International Agricultural Business), a limited number of courses for which a Conceded Pass has been obtained, as specified in 4.5 below.

- 3.4 A candidate who fails a course or who obtains a lower division pass and who wishes to repeat that course shall, unless exempted wholly or partially therefrom by the Head of the School of Economics, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.5 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by permission of the School and then only under such conditions as School may prescribe.

### 3.6 Review of academic progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Bachelor of Economics (International Agricultural Business), candidates must pass courses with a combined total of not less than 70 units drawn from 4.6 including

(a) not more than 24 units from Level I, including:
 ACCTING 1002 Accounting for Decision Makers I 3
 COMMLAW 1004 Commercial Law I (S) 3
 ECON 1000 Principles of Macroeconomics I 3
 ECON 1004 Principles of Microeconomics I 3
 ECON 1008 Business Data Analysis I 3
 WINEMKTG 1013WT Wine and Food Marketing Principles 3

**Note:** candidates who have not completed SACE Stage 2 Mathematical Studies or equivalent, must complete ECON 1005 Mathematics for Economists I before proceeding to Level II Economics courses.

(b) the following Level II courses:

AGRIBUS 2004WT Issues in Australian Agribusiness II ECON 2006 Economic and Financial Data Analysis II

ECON 2009 Consumers, Firms & Markets II

(c) the following Level III course:

AGRIBUS 3041WT International Business Environment III

and either

- an additional 8 units of Level III Economics courses from those listed in 4.6.1(a) with at least another 12 units of Level III courses from those listed in 4.6 or
- (ii) an additional 12 units of Level III Economics from those listed in 4.6.1(a) with the remaining courses at Level II or higher included in 4.6.
- 4.2 To qualify for the degree of Bachelor of Economics (International Agricultural Business) a student who transferred into the Bachelor of Economics (International Agricultural Business) from another university and has been granted status for studies completed prior to transfer must satisfy all conditions in 4.1 above and must pass at least 24 units of Level II or III courses taught at the University of Adelaide. These must include 8 units of Level III Economics courses and AGRIBUS 3041WT International Business Environment III. However, this requirement may be waived in special circumstances approved by the School.
- 4.3 A candidate for the degree of Bachelor of Economics (International Agricultural Business) at the University of Adelaide, who wishes to undertake courses elsewhere towards their degree, must satisfy all conditions in 4.1 above and present courses taught at the University of Adelaide having a minimum value of 48 units, including at least 12 units of Level III Economics courses, and also arrange for the proposed scheme of study elsewhere to be approved in advance by the School. However, this requirement may be waived in special circumstances approved by the School.
- 4.4 In determining a candidate's eligibility for the award of the degree, the School of Economics may disallow any course passed more than 10 years previously.
- 4.5 A candidate may present for the degree Level I, II and III courses for which a Conceded Pass has been awarded

to a maximum aggregate value of 6 units, providing that each course does not exceed 3 units. Conceded passes cannot be presented for those courses listed in 4.6.1(a), 4.6.1(b), 4.6.1(d) and 4.6.1(e).

### Notes (not forming part of the Academic Program Rules)

- 1 Not all Level II and Level III courses will be offered every year. Courses will be offered according to numbers of students enrolled and staff availability. Students can increase their flexibility by taking ECON 2009 Consumers, Firms & Markets II in their second semester concurrently with ECON 1000 Principles of Macroeconomics I so that some Level III courses will be available in their third semester and almost all by their fourth semester.
- 2 Candidates should note that an enrolment in courses exceeding a total units value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload

### 4.6 Program of study

4.6.1 The following may be presented for the Bachelor degree:

(a) Economics courses

for Decision Making III

### Level I

ECON 1000 Principles of Macroeconomics I	3
ECON 1002 Australia & the Global Economy *	3
ECON 1004 Principles of Microeconomics I	3
ECON 1005 Mathematics for Economists I	3
ECON 1008 Business Data Analysis I	3
ECON 1009 International Financial Institutions	
and Markets I	3
Level II	
ECON 2000 International Trade	
and Investment Policy II	4
ECON 2001 Resource	
& Environmental Economics II	4
ECON 2003 East Asian Economies II	4
ECON 2005 Mathematical Economics II	4
ECON 2006 Economic & Financial Data Analysis II	4
ECON 2007 Australian Economic History II	4
ECON 2009 Consumers, Firms & Markets II	4
ECON 2011 Macroeconomic Theory & Policy II	4
ECON 2012 Financial Economics II	4
Level III	
ECON 3003 Resource	
and Environmental Economics III	4
ECON 3006 Development Economics III	4
ECON 3013 Applied Econometrics III	4
ECON 3016 Strategic Thinking	

ECON 3017 Labour Economics III*	4
ECON 3021 International Trade III	4
ECON 3023 Econometrics III	4
ECON 3024 Public Economics III	4
ECON 3030 International Economic History III	4
ECON 3032 International Finance III	4
ECON 3034 Economic Theory III	4
ECON 3037 Public Finance III	4
* Not available in 2007.	
(b) Sciences courses	
Level I	
WINEMKTG 1013WT Wine and Food Marketing	
Principles	3
Level II	
AGRIBUS 2004WT Issues in Australian Agribusiness II	4
WINEMKTG 2010WT Strategic Marketing	4
Management II	4
WINEMKTG 2011WT Applied Marketing	
Research II	4
WINEMKTG 2014WT International Marketing of Wine and Agricultural Products II	4
WINEMKTG 2037WT Applied Management	
Science II	4
Level III	
AGRIBUS 3041WT International Agri-business Environment III	4
WINEMKTG 3014WT Food Marketing III	4
WINEMKTG 3034WT Advertising	·
and Promotion III	4
WINEMKTG 3040WT Wine Retail and Distribution	
Management III	4
WINEMKTG 3047WT Internet Marketing	
& E-Commerce	4
WINEMKTG 3065WT Database Marketing for Food and Wine Business	4
(c) Humanities and Social Sciences course	es
Courses listed in the Academic Program Rules of the degree of Bachelor of Arts, (which include courses offered by other Faculties) not listed in (a) or (b) abov and excluding PURE MTH 1002 Quantitative Methods	е

### (d) Commerce courses

Using Computers I.

Courses listed in the Academic Program Rules of the degree of Bachelor of Commerce.

(e) Finance courses Courses listed in the Academic Program Rules of the degree of Bachelor of Finance. 4.6.2 Candidates who have completed courses for the degree under previous schedules may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Head of School. 4.6.3 Unacceptable combinations of courses A candidate may not count for the degree any course together with any other course which, in the opinion of the School, contains a substantial amount of the same material, and no course may be counted twice towards the degree. A table of unacceptable combinations of courses is available from the School of Economics Office 4.7 Graduation Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose. 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Economics Bachelor of Economics (International Agricultural Business) - Graduate Attributes

### Knowledge

Knowledge and understanding of the content of economics at levels that are internationally recognised. This includes core
analytical knowledge, appropriate quantitative skills and an understanding of the relevant institutional context.

### Intellectual and social capabilities

- Cognitive skills such as the ability to analyse, evaluate and synthesise economic information, both quantitative and qualitative, from a wide variety of sources
- · Critical thinking and problem-solving skills, especially as these apply to the analysis of economic problems
- · Numeracy skills, especially in economic statistics and econometrics
- Literacy and verbal communication skills of a high order in the presentation of arguments or evidence of an economic nature
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and cooperatively with other professional economics specialists
- Capacity for future employment based on a professional education that appropriately balances the reflective, intuitive and decision-making requirements of work in the economics areas
- To stimulate and maintain intellectual curiosity and a commitment to continuous learning
- The ability to take a leadership role in the economics profession as well as in the wider community, and a commitment to high standards of professional ethics
- · Proficiency in the use of computer-based technologies.

### Attitudes and values

- A desire to be an informed, responsible and critically discriminating participant in academic, social, cultural and ethical issues, in the community of economists specialists and in the workforce more generally, in both Australia and abroad
- · A commitment to the highest community standards of ethical behaviour
- · An abiding sense of curiosity and enquiry both within and beyond the discipline.



# School of Education

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### **Bachelor of Teaching**

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### • Degree of Bachelor of Teaching

### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

### Academic Program Rules

### 1 General

There shall be a degree of Bachelor of Teaching.

### 2 Duration of program

To qualify for the Bachelor of Teaching as part of a double degree program, a student shall satisfactorily complete a program of 4 years of full time study or equivalent part time study in the two degrees concerned.

### 3 Admission

An applicant for admission will have been accepted for enrolment in a University of Adelaide Bachelor program that is approved by the Head of the School of Education as one appropriate to be taken concurrently with the Bachelor of Teaching.

- 3.1 Status, exemption and credit transfer.
- 3.1.1 No student may be granted more than 12 units of status to the required Education courses listed in 5.1 below.
- 3.1.2. A candidate who has had practical teaching experience may, after enrolment, apply in writing to the School of Education for status in teaching practice.

### 4 Assessment and examinations

4.1 There shall be one of two systems of classification of pass in individual courses for the Bachelor of Teaching: either

Non-Graded Pass

or

Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. There shall also be a classification of Conceded Pass. Courses for which a conceded pass has been awarded may not be presented towards the degree nor to satisfy prerequisite requirements within any education course.

- 4.2 Review of academic progress
- 4.2.1 A student who fails a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe.

- 4.2.2. A student who has twice failed a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.
- 4.2.3. For the purposes of this clause a student who is refused permission to sit for an examination, or who does not, with a reason accepted by the Head of the School of Education as adequate, attend all or part of a final examination (or supplementary examination if granted) after having enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the examination.

### 5 Qualification requirements

### 5.1 Academic Program

A Bachelor of Teaching is a double degree qualification. To qualify for the Bachelor of Teaching a candidate shall successfully complete courses towards the double degree with a combined value of not less than 96 units, which satisfy the following requirements:

- (a) a candidate must qualify for a degree in Arts, Economics, Science or Mathematical and Computer Sciences at the University of Adelaide
- (b) a candidate must pass courses including:
- 5.1.1 Level I EDUC 1000 Primary School Interaction 3
- 5.1.2 Level II EDUC 2000 Issues in Contemporary Education 4
- 5.1.3 Level III EDUC 3000 Secondary School Interaction 2
- 5.1.4 Level IV Education courses

Students must successfully complete courses to the value of 24 units comprising 6 units of Teaching Practice courses, 6 units of Curriculum and Methodology courses, 6 units of Curriculum Issues in Australian Schools courses and 6 units of Education Studies courses, as follows:

### Teaching Practice

EDUC 4702 Teaching Practice Part I (UG)	3
EDUC 4703 Teaching Practice Part II (UG)	3

Curriculum and Methodology	
Courses to a value of 6 units chosen from:	
Humanities	
EDUC 4320 A/B Geography Curriculum and Methodology (UG)	2
EDUC 44322 A/B History Curriculum & Methodology (UG)	2
EDUC 4334 A/B Studies of Society and Environment (UG)	2
Business	
EDUC 4308 A/B Accounting Curriculum & Methodology (UG)	2
EDUC 4311 A/B Business Studies Curriculum and Methodology (UG)	2
EDUC 4315 A/B Economics Curriculum & Methodology (UG)	2
English	
EDUC 4319 A/B General English Curriculum	
and Methodology (UG)	2
EDUC 4332 A/B Senior English Curriculum and Methodology (UG)	2
Languages other than English	
EDUC 4313 A/B Chinese Curriculum & Methodology (UG)	2
EDUC 4316 A/B English as a Second Language (UG)	2
EDUC 4318 A/B French Curriculum & Methodology (UG)	2
EDUC 4321 A/B German Curriculum & Methodology (UG)	2
EDUC 4333 A/B Indonesian Curriculum	2
& Methodology (UG)	2
EDUC 4326 A/B Italian Curriculum and Methodology (UG)	2
EDUC 4327 A/B Japanese Curriculum	L
& Methodology (UG)	2
EDUC 4330 A/B Language Methodology (UG)	2
EDUC 4339 A/B Languages Education for TESOL (UG)	2
EDUC 4335 A/B Spanish Curriculum & Methodology (UG)	2
EDUC 4336 A/B Other Languages Curriculum	
and Methodology (UG) EDUC 4337 A/B Vietnamese Curriculum	2
and Methodology (UG)	2
EDUC 4338 A/B Modern Greek Curriculum and Methodology (UG)	2

Mathematics EDUC 4324 A/B Information Technology Curriculum and Methodology (UG)	2
EDUC 4328 A/B Junior Mathematics Curriculum and Methodology (UG)	2
EDUC 4333 A/B Senior Mathematics Curriculum and Methodology (UG)	2
Music	
EDUC 4314 A/B Classroom Music Curriculum and Methodology (UG)	3
EDUC 4325 A/B Instrumental Music Curriculum and Methodology (UG)	3
Science	
EDUC 4310 A/B Biology Curriculum and Methodology (UG)	2
EDUC 4312 A/B Chemistry Curriculum and Methodology (UG)	2
EDUC 4329 A/B Junior Science Curriculum and Methodology (UG)	2
EDUC 4331 A/B Physics Curriculum and Methodology (UG)	2
EDUC 4340 A/B Psychology Curriculum and Methodology	2
General	
EDUC 4309 A/B Adult Learner Curriculum & Methodology (UG)	2
EDUC 4317 A/B Extended Specialist Curriculum (UG)	2
Curriculum Issues in Australian Schools EDUC 4704 Professional Practice & ICT	0
for Teachers (UG) EDUC 4705 Curriculum & Assessment	2
of Learning (UG)	2
EDUC 4707 Culture, Education & Society (UG)	2
Education Studies	
EDUC 4701 Student-Teacher Interaction in the Classroom Pt 1(UG)	2
EDUC 4706 Student-Teacher Interaction in the Classroom Pt 2(UG)	2
EDUC 4700 Families, Schools & Students' Outcomes (UG)	2
No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contai a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.	ns

5.2

#### 5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Teaching – Graduate Attributes

#### Attributes

- Knowledge and understanding of the students' chosen discipline areas.
- Cognitive skills in analysing, evaluating and synthesising information.
- · The capacity for critical thinking and problem solving.
- · Interpersonal and communication skills of a high order.
- · The ability to fulfil leadership roles within the teaching profession and community at large.
- · Proficiency in the appropriate and responsible use of modern technologies.
- A commitment to participate responsibly and critically within their discipline and their profession, as well as their local communities and the wider world.
- · A strong sense of social justice and commitment to moral standards and cultural diversity.

#### Skills

- A significant understanding of basic domains of knowledge gained through the discipline-based undergraduate degree.
- A competence in constructing a pedagogical approach to teaching in the classroom gained through the courses in the Bachelor of Teaching and in courses that might be designed especially in the other degree.
- A capacity to integrate the particular and special concerns of families, peers and neighbourhoods into their teaching gained from ongoing experiences in a variety of schools, from Year 1 of the double degree.
- An understanding of the existing school systems and the ability to explore how the next generation of schools might most appropriately be designed.



# Faculty of Engineering, Computer and Mathematical Sciences

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## Undergraduate Awards in the Faculty of Engineering, Computer and Mathematical Sciences

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- Degree of Bachelor of Computer Science (Software Engineering)
- Degree of Bachelor of Engineering in Aerospace Engineering
- Degree of Bachelor of Engineering in Automotive Engineering
- Degree of Bachelor of Engineering in Chemical Engineering
- Degree of Bachelor of Engineering in Chemical (Energy & Environment)
- Degree of Bachelor of Engineering in Chemical (Process & Product Engineering))
- Degree of Bachelor of Engineering in Chemical (Food, Wine & Biomolecular))
- Degree of Bachelor of Engineering in Civil and Environmental Engineering
- Degree of Bachelor of Engineering in Civil and Structural Engineering
- Degree of Bachelor of Engineering in Computer Systems Engineering
- Degree of Bachelor of Engineering in Electrical and Electronic Engineering
- Degree of Bachelor of Engineering in Electrical and Electronic Engineering and Bachelor of Science (Physics)
- Degree of Bachelor of Engineering in Mechanical Engineering
- Degree of Bachelor of Engineering in Mechatronic Engineering
- Degree of Bachelor of Engineering in Mining Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering
- Degree of Bachelor of Engineering in Pharmaceutical Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Chemical Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Civil and Environmental Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Civil and Structural Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Engineering in Mechanical Engineering
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Science (Geology and Geophysics)
- Degree of Bachelor of Engineering in Petroleum Engineering and Bachelor of Science (Physics)
- Degree of Bachelor of Engineering in Software Engineering
- Degree of Bachelor of Engineering in Telecommunications Engineering
- Degree of Bachelor of Engineering and Bachelor of Arts\*
- Degree of Bachelor of Mathematical Sciences
- Degree of Bachelor of Mathematical and Computer Sciences
- Honours degree of Bachelor of Computer Science
- Honours degree of Bachelor of Mathematical Sciences
- · Honours degree of Bachelor of Mathematical and Computer Sciences
- \* Available in disciplines of Aerospace, Chemical, Civil, Computer Systems, Electrical & Electronic, Environmental, Mechanical, Mechanical and Telecommunications Engineering

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Bachelor of Computer Science Bachelor of Computer Science (Software Engineering)

### Academic Program Rules

#### 1 General

- 1.1 There shall be a degree of Bachelor of Computer Science in the Faculty of Engineering, Computer and Mathematical Sciences.
- 1.3 There shall be an Honours degree of Bachelor of Computer Science. A candidate may obtain either a degree of Bachelor of Computer Science or an Honours degree of Bachelor of Computer Science or both.
- 2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent part-time study.

#### 3 Assessment and examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.
- 3.4 A candidate who fails a course for the Bachelor degree or obtains a conceded pass result and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School

concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.

3.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

#### 4 Qualification requirements

- 4.1 General: the degree of Bachelor of Computer Science, Bachelor of Computer Science (Software Engineering)
- 4.1.1 The program of study for the degree of B.Comp.Sc. and B.Comp.Sc.(Software Eng.) shall extend over three years of full time study or equivalent.
- 4.1.2 To qualify for the Bachelor degree a candidate shall, subject to 4.1.5 below, present passes in courses from 4.2 to the value of at least 72 units including:
  - (a) at least 24 units for Level I courses
  - (b) at least 18 units for Level II courses
  - (c) at least 24 units for Level III courses
  - (d) at least 44 units for Level II and Level III courses.
- 4.1.3 The courses presented must include
  - (a) At least 9 units of Level I Computer Science courses including:
     COMP SCI 1008 Computer Science IA and COMP SCI 1009 Computer Science IB at Pass Division I or higher
  - (b) At least one of the following at a Level of Pass or higher:

MATHS 1008 Mathematics for Information Technology I MATHS 1012 Mathematics IB MATHS 2004 Mathematics IIM

A candidate shall not present both MATHS 1012 Mathematics IB and MATHS 2004 Mathematics IIM for the degree.

(c) At least 12 units of Level II Computer Science courses with at least 9 units at the level of Pass or higher. The courses at Pass or higher must include: COMP SCI 2000 Computer Systems and

COMP SCI 2004 Data Structures and Algorithms

- (d) MATHS 3015 Communication Skills III
- (e) At least 18 units of Level III Computer Science courses with at least 12 units at the level of Pass or higher. The courses at Pass or higher must include:

COMP SCI 3006 Software Engineering & Project 3

#### Notes: (not forming part of the Academic Program Rules).

A graduate who qualifies for the Bachelor of Computer Science or Bachelor of Computer Science (Software Engineering) will be considered to have qualified for a major in Computer Science.

- 4.1.4 Bachelor of Computer Science (Software Engineering)
  - (a) To qualify for the degree of Computer Science (Software Engineering), candidates must satisfy all conditions in 4.1.2. and 4.1.3 above.
  - (b) in addition, the courses presented must include at the level of Pass or higher:

 COMP SCI 2005 Systems Programming C

 and C++
 3

 COMP SCI 2006 Introduction

 to Software Engineering
 3

 COMP SCI 3013 Event Driven Computing
 3

- 4.1.5 A candidate may present for the degree courses passed at the Conceded Pass level within the following limits: courses with an aggregate units value of not more than 6 provided that no course thus presented has a units value of more than 3.
- 4.1.6 Subject to 4.1.5, students enrolled in an Engineering program offered by the Faculty may qualify for the B.Comp.Sc. by fulfilling the requirements of 4.1.8 (a) of these Academic Program Rules.

#### Notes (not forming part of the Academic Program Rules).

This clause enables Engineering students to complete the requirements of the B.Comp.Sc. degree before completing the requirements of the Bachelor of Engineering degree. Students wishing to qualify for the B.Comp.Sc. in this way must apply for admission to the B.Comp.Sc. program.

4.1.7 Except with the permission of the Faculty, a candidate may not enrol in courses to the value of more than 18 units taught by disciplines other than Applied Mathematics, Pure Mathematics, Statistics and Computer Science before obtaining at least a Division I pass in:

COMP SCI 1009 Computer Science IB

and either

MATHS 1008 Mathematics for Information Technology I or

MATHS 1011 Mathematics IA with MATHS 1013 Mathematics IMA

or

MATHS 1012 Mathematics IB with MATHS 1011 Mathematics IA.

The courses to the value of not more than 18 units shall not include courses in which a candidate has failed or courses from which a candidate has withdrawn.

4.1.8 A graduate who wishes to qualify for the Bachelor degree of Bachelor of Computer Science and to count towards that degree courses which have already been presented for another award may do so providing such a candidate

either

- (a) presents a range of courses which fulfils the requirements of 4.1.2 and 4.1.3 above, except that only 6 units of Level-I Computer Science are required. The courses presented must include Level II and Level III courses from 4.2.2 and 4.2.3 below to the value of at least 24 units, which have not been presented for any other degree. At least 18 units of the new courses must be at Level III or
- (b) presents a range of courses as determined by the Faculty in accordance with any formal articulation programs approved by the Faculty.
- 4.1.9 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the same degree. No candidate may present the same section of a course in more than one course for the degree.
- 4.1.10 Students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Computer Science will be required as a minimum to complete Level III courses from 4.2 with an aggregate units value of 24 satisfying the requirements of 4.1.3(d) and 4.1.3 (e).
- 4.1.11 With special permission of the Faculty, a student who has completed most of the courses for the degree of Bachelor of Computer Science at the University of Adelaide including Level III Computer Science courses with an aggregate units value of 12 may be permitted to complete the requirements for the degree at another

institution. All applications must be made in writing to the Faculty.

#### 4.2 Program of study for the degree of Bachelor of Computer Science

Note: Students are advised that some courses cannot be counted with others towards the degree of B.Comp.Sc.

Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of B.Comp.Sc. may not be offered in every calendar year. The availability of all courses is conditional upon the availability of staff and facilities.

#### 4.2.1 Level I

4.2.1.1 Mathematical and Computer Sciences courses

APP MTH 1000 Scientific Computing I	3
COMP SCI 1003 Internet Computing	3
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
MATHS 1008 Mathematics for	
Information Technology I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA	3
STATS 1000 Statistical Practice I	3

4.2.1.2 Humanities and Social Sciences courses

Level I courses listed in 6.12.1 for the degree of B.A. except MATHS 1002 Quantitative Methods Using Computers I and courses listed which are taught by the Schools of Economics and Commerce.

#### 4.2.1.3 Economics and Commerce courses

Courses listed in 4.7.1.(a) for the degree of B. Ec. except the course ECON 1005 Mathematics for Economists I and ECON 1008 Business Data Analysis I. Level I Courses listed in 4.8.1 for the degree of B. Com except for ECOMMRCE 1000 Information Systems I.

4.2.1.4 Law courses\*

3

LAW 1001 Introduction to Australian Law \* Available only to students who have been accepted for

candidature to the LL.B.

#### 4.2.1.5 Engineering courses

Level I Engineering courses listed in 6.5 for the degree of Bachelor of Engineering except CHEM ENG 1002 Engineering Computing I and C&ENVENG 1003 Engineering Modelling and Analysis I.

#### 4.2.1.6 Science courses

Level I Science courses listed in 5.6.1 for the degree of B.Sc. in the Faculty of Sciences.

#### 4.2.1.7 Design Studies courses

Level I Design Studies courses listed in 5.1.1 for the degree of Bachelor of Design Studies

#### 4.2.2 Level II

4.2.2.1 Mathematical and Computer Sciences courses

Applied and Pure Mathematics MATHS 2004 Mathematics IIM	4
Applied Mathematics APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis	2
APP MTH 2003 Modelling	
with Differential Equations II APP MTH 2008 Operations Research II	2
Computer Science	
COMP SCI 2000 Computer Systems	3
COMP SCI 2002 Database and Information Systems	3
COMP SCI 2003 Numerical Methods	3
COMP SCI 2004 Data Structures and Algorithms	3
COMP SCI 2005 Systems Programming in C and C+ $\pm$	3
COMP SCI 2006 Introduction to Software Engineering	3
Mathematical Physics PHYSICS 2001 Classical Mechanics II	2
PHYSICS 2002 Classical Fields and Mathematical Methods II	2
Pure Mathematics	
PURE MTH 2000 Discrete Mathematics II	2
PURE MTH 2002 Algebra II PURE MTH 2003 Real Analysis II	2
PURE MTH 2005 Multivariable Calculus II	2
Statistics	
STATS 2002 Introduction to Mathematical Statistics II	2
STATS 2003 Statistical Practice II	2
STATS 2011 Statistical Modelling II	2
Humanitias and Social Sciences courses	

## 4.2.2.2 Humanities and Social Sciences courses

Level II courses listed in 6.12.2 for the degree of B. A. except LBST 2010 Democratic Organising Technology II and LING 2033 Language, Communication and Technology.

4.2.2.3	B Economics and Commerce courses		COMP SCI 3005 Computer Architecture	3
	Courses listed in 4.7.1.(a) for the degree of B.E c.		COMP SCI 3006 Software Engineering and Project	3
	except the courses ECON 2006 Economic & Financial		COMP SCI 3007 Artificial Intelligence	3
	Data Analysis II and ECON 2005 Mathematical Economics II. Level II courses listed in 4.8.1 for the		COMP SCI 3009 Advanced Programming Paradigms	3
	degree of B. Com. Courses listed in 4.9.1(a) for the		COMP SCI 3012 Distributed Systems	3
	degree of B. Fin. except APP MTH 2005 Financial		COMP SCI 3013 Event Driven Computing	3
	Computing II.		COMP SCI 3014 Computer Graphics	3
4.2.2.4	Law courses*		Mathematical Physics	
	LAW 1002 Law of Torts	4	PHYSICS 3004 Quantum Mechanics III	3
	LAW 1003 Law of Contract	4	PHYSICS 3006 Advanced Dynamics and Relativity	3
	* Available only to students who have been accepted for		PHYSICS 3009 Statistical Mechanics	2
	candidature to the LL.B		PHYSICS 3022 Applied Quantum Mechanics	2
4.2.2.5	5 Engineering courses		Pure Mathematics	
	Level II Engineering courses listed in 6.5 for the degree	e	PURE MTH 3002 Topology and Analysis III	3
	of Bachelor of Engineering		PURE MTH 3003 Number Theory III	3
4.2.2.6	Science courses		PURE MTH 3005 Fractal Geometry III	3
	Level II Science courses listed in 5.6.3 for the degree	of	PURE MTH 3007 Groups and Rings III	3
	B.Sc. in the Faculty of Sciences.		PURE MTH 3009 Integration and Analysis III	3
4.2.3	Level III		PURE MTH 3012 Fields and Geometry III	3
4.2.3.1	Mathematical and Computer Sciences courses		PURE MTH 3018 Coding and Cryptology III	3
	Applied and Pure Mathematics		PURE MTH 3019 Complex Analysis III	3
	APP MTH 3018 Mathematics of Finance III	2	PURE MTH 3020 Methods	-
	Applied Mathematics		of Modern Mathematics III	3
	APP MTH 3000 Computational Mathematics III	3	PURE MTH 3021 Logic And Computability	3
	APP MTH 3001 Applied Probability III	3	Statistics	
	APP MTH 3002 Fluid Mechanics III	3	STATS 3000 Industrial Statistics III	2
	APP MTH 3003 Life Contingencies III	3	STATS 3001 Statistical Modelling III	3
	APP MTH 3004 Mathematical Biology III	3	STATS 3002 Environmental Statistics III	3
	APP MTH 3005 Mathematical Programming III	3	STATS 3003 Sampling Theory and Practice III	3
	APP MTH 3006 Industrial Mathematics III	3	STATS 3005 Time Series III	3
	APP MTH 3010 Variational Methods		STATS 3006 Mathematical Statistics III	3
	and Optimal Control III	3	STATS 3010 Experimental Design III	3
	APP MTH 3012 Financial Modelling III	3	STATS 3011 Bioinformatics III	3
	APP MTH 3013 Differential Equations III	3	STATS 3012 Elements of Time Series III	3
	APP MTH 3014 Optimisation III	3	4.2.3.2 Miscellaneous (non-Mathematical and Computer	
	APP MTH 3016 Telecommunication Systems		Sciences) courses	
	Modelling III	3	MATHS 3015 Communication Skills III	3
	APP MTH 3017 Waves III	3	MATHS 4003 Industry Practicum	
	Computer Science		(Maths. & Comp. Sc.)	2
	COMP SCI 3001 Computer Networks and	0	4.2.3.3 Humanities and Social Sciences courses	
	Applications	3	Level III courses listed in 6.12.3 for the degree of B.A.	
	COMP SCI 3002 Programming Techniques	3	except LING 3033 Language, Communication and	
	COMP SCI 3004 Operating Systems	3	Technology.	

#### 4.2.3.4 Economics and Commerce courses

Courses listed in 4.7.1(a) for the degree of B.Ec. Level III courses listed in 4.8.1 for the degree of B. Com. Courses listed in 4.9.1(a) for the degree of B. Fin., except for APP MTH 3011 Financial Modelling Techniques III.

#### 4.2.3.5 Law courses\*

Law 1004 Law of Crime	4
Law 1005 Property Law	4
Law electives to the value of 4 units	4

\* Available only to students who have been accepted for candidature to the LL.B.

#### 4.2.3.6 Engineering courses

Level III Engineering courses listed in 6.5 for the degree of Bachelor of Engineering

#### 4.2.3.7 Science courses

Level III Science courses listed in 5.6.5 for the degree of B. Sc. in the Faculty of Sciences.

#### 4.3 Honours programs

To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements for a Bachelor degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.
- 4.3.1 The Honours degree of Bachelor of Computer Science
- 4.3.1.1 A candidate may, subject to the approval of the Head of School of Computer Science, proceed to the Honours degree in one of the following courses, each with the value of 24 units:

APP MTH 4011 A/B Honours Applied Mathematics and Computer Science

COMP SCI 4999 A/B Honours Computer Science

PURE MTH 4004 A/B Honours Computer Science and Pure Mathematics.

STATS 4003A/B Honours Statistics and Computer Science.

- 4.3.1.2 The work of the Honours Program must be completed in one year of full-time study, save that on the recommendation of the Head of the School of Computer Science, the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.
- 4.3.1.3 Unless granted permission to spread the work of the Honours program over two years under 4.3.1.2, a candidate for the Honours degree shall not begin Honours work until he/she has qualified for the degree of Bachelor of Computer Science or any other degree as may be acceptable to the Faculty. A candidate who has been granted permission to spread the work of the Honours program over two years must fulfil the requirement for the Bachelor degree before beginning the work of the second year of the Honours program.
- 4.3.1.4 A candidate may not enrol a second time for the Honours program in Computer Science if he/she:
  - (a) has already qualified for Honours in that program or
  - (b) has presented himself/herself for examination in the Honours program in that course but has failed to obtain Honours

or

- (c) has withdrawn from the program unless the Faculty under 4.3.1.5 permits re-enrolment.
- 4.3.1.5 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if a candidate's work is unsatisfactory at any stage of the program, or if a candidate withdraws from the program, such fact shall be reported to Faculty. The Faculty may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as it may determine.

#### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Computer Science Bachelor of Computer Science (Software Engineering) – Graduate Attributes

The objectives of the undergraduate programs in Computer Science are to support the mission of the University of Adelaide (to advance knowledge, understanding and culture through scholarship, research, teaching and community service of international distinction and integrity), to provide an inclusive curriculum that allows all students to learn and progress unhindered through the program, and to produce graduates who:

- Have the basic skills and knowledge (Computer Science/Information Technology, problem solving skills, analytical skills, communication skills and flexibility) necessary for a successful career in Computer Science/Information Technology.
- Are able to apply knowledge of Computer Science fundamentals, including programming, computer and data structures and computer networks.
- Are able to design complex systems involving both hardware, software and networks, using software engineering techniques.
- · Have an appreciation of current technologies.
- · Have an appreciation of professional conduct and ethical issues in the IT industry.
- Are able to communicate effectively, not only with other computer scientists, but with the community at large on information technology issues.
- Can contribute effectively as members of multi-disciplinary and multi-cultural teams, with the capacity to be leaders or managers as well as effective team members.
- · Are able, by self directed study, to remain up to date with developments in their careers/professions.
- · Are innovative and creative, adaptable and able to guide developments in their careers/professions.
- · Are educated in a broad sense, are well informed and can take their place as leaders in the community.
- Have an appreciation of professional conduct and ethical issues pertinent to the information technology industry.

#### Academic Program Rules

#### 1 General

The degree of Bachelor of Engineering may be awarded in the Pass or Honours grade.

The award of the Honours grade shall be made for meritorious performance in the program with greatest weight given to performance in the later years.

The Honours grade may be awarded in one of the following classifications: First Class, Second Class Division A, Second Class Division B.

#### 2 Duration of program

The programs shall occupy four years of full-time study. Details of these programs are set out in 6.5.1- 6.5.14 below.

#### 3 Admission

#### 3.1 Transfers between programs

The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, permit a student to transfer with status from one Engineering program to another, or from any other program in the University or elsewhere to an Engineering program.

Any student contemplating such transfer should consult in the first instance, the Faculty of Engineering, Maths and Computer Science and, if necessary, apply for admission to the program through the South Australian Tertiary Admissions Centre in the appropriate manner.

The Faculty has considered Technical and Further Education programs and how they articulate with the Bachelor of Engineering and a scheme of credit transfer from certain TAFE programs has been developed. Following admission to the Bachelor of Engineering program any student wishing to claim status must apply to the Faculty. Students must apply for admission to the program through the South Australian Tertiary Admissions Centre.

#### 4 Enrolment

#### 4.1 Approval of program of study

During the enrolment period before the beginning of each academic year, students who are so directed must obtain the approval of the Dean or nominee of the Faculty of Engineering, Computer and Mathematical Sciences to enrol for the courses they wish to study. The Dean or nominee, in exceptional circumstances, may approve minor variations to the course completion requirements of individual candidates.

- 4.2 Unless exempted, all international students are required to undertake a specialist course in Engineering Communication ESL. The course provides language development in English as a second language for the purposes of oral and written communication in the context of the study of Engineering. Students normally undertake this course in their first semester at Adelaide and the assessment contributes to the requirements of the degree.
- 4.3 Except with the permission of the Faculty, students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Engineering will be required to complete courses from section 6 of these Academic Program Rules with an aggregate units value of 36, including Level III courses with an aggregate units value of at least 6, and Level IV courses with an aggregate units value of at least 18.

#### 5 Assessment and examinations

- A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- (ii) In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice of the way in which work will be taken into account and of its relative importance in the final result.
- (iii) There shall be four classifications of pass at an annual examination in any course for the degree, as follows:

Pass with High Distinction Pass with Distinction Pass with Credit Pass. There shall also be a classification of Conceded Pass. A candidate may present for the degree courses for which a Conceded Pass grade has been awarded within the following limits:

- (a) no course may be presented at the conceded pass level with a unit value greater than 3 units
- (b) for any single Bachelor of Engineering program no more than 10% of the courses presented may be at the conceded pass level with a limit of 9 units in total
- (c) for all double/combined programs no more than 10% of the courses presented may be at the conceded pass level with a limit of 12 units in total. All rules pertaining to the presentation of conceded passes within the individual programs must also be complied with
- (d) articulating students and students with credit transfer may present 10% of their units undertaken at Adelaide at the conceded pass level and this number will be rounded up to a multiple of 3 and will not exceed 9 units in total.
- (iv) A candidate who fails to pass in any course shall again complete the required work in that course to the satisfaction of the teaching staff concerned, unless exempted by the Faculty. Any such exemption shall hold for one academic year only.
- (v) A candidate who has twice failed to pass the examination in any course or division of a course may not present again for instruction or examination therein unless the candidate's plan of study is approved by the Dean or nominee. For the purpose of this Rule a candidate who is refused permission to sit for examination in any course or division of a course shall be deemed to have failed to pass the examination.

#### 6 Qualification requirements

#### 6.1 General

- A candidate shall regularly attend lectures and do written, laboratory, and other practical work (where such is required), and pass examinations in the courses prescribed for one of the following Engineering programs:
  - (a) Aerospace Engineering
  - (b) Automotive Engineering
  - (c) Chemical Engineering with the option of specialising in one of:
     Energy and Environment
     Food, Wine and Biomolecular or

Process and Product Engineering

- (d) Civil and Environmental Engineering
- (e) Civil and Structural Engineering
- (f) Computer Systems Engineering
- (g) Electrical and Electronic Engineering
- (h) Mechanical Engineering
- (i) Mechatronic Engineering
- (j) Mining Engineering
- (k) Petroleum Engineering
- (I) Pharmaceutical Engineering
- (m) Software Engineering
- (n) Telecommunications Engineering
- (ii) Before being admitted to the degree a candidate shall also submit satisfactory evidence of completion of a period of practical experience in work approved by the Faculty of Engineering, Computer and Mathematical Sciences as appropriate to the program which the candidate has followed.

#### 6.2 Completion of courses

It is not necessary for a candidate to take all the courses of any one level simultaneously or to complete all the courses set out for one level before enrolling for any course of the following level provided that the prerequisite courses have been passed. However a candidate who desires to take a Level III course before completing all Level I courses, or a Level IV course before completing all Level II courses, must obtain the permission of the Head of School.

The academic progress of any candidate may be reviewed in certain circumstances. Details are available from the Faculty Student Office.

#### Notes

- A Pass in MATHS 1012 Mathematics IB is required. With the approval of the Dean or nominee, students may be permitted to enrol concurrently in Mathematics IB and Level II Applied Mathematics courses.
- 6.3 Practical experience
- (i) General

For all engineering programs, a total of twelve weeks' practical experience (of which a minimum 6 weeks should be under the supervision of a professional engineer) is required and this should be undertaken during the University vacations and normally completed before beginning the work of Level IV of the program.

The Faculty may grant either partial or total exemption from these requirements to a candidate who produces satisfactory evidence of practical experience obtained before their first enrolment in the Faculty; and in special cases, the Faculty may grant dispensation from the requirements.

Credit will not normally be given for periods of less than three consecutive weeks.

A candidate should seek a variety of practical experience appropriate to the candidate's academic level.

Before beginning a period of practical experience, a candidate may ensure that it will be satisfactory to the Faculty by consulting the Head of the School or nominee, concerned.

Upon completion of each period of practical experience, a candidate is required to submit to the Faculty Student Office, on the prescribed form, a statement of practical experience gained, certified by the employer for approval by the Faculty of Engineering, Computer and Mathematical Sciences.

(ii) Chemical Engineering

It is desirable that at least half of the total number of weeks specified in clause (i) be spent in an approved chemical factory or research establishment on plant operation or industrial research or development.

(iii) Aerospace, Automotive, Mechanical and Mechatronic Engineering

Candidates must complete Workshop Practice, which will normally occupy a one-week period during a semester break. On satisfactory completion of this component of the course MECH ENG 2018 Design Practice, candidates will be automatically credited with one-week engineering experience towards the 12 week work experience requirement.

6.4 Combined programs and Double Programs

> It is possible for students to enhance their engineering qualification by combining studies in Engineering with studies in other Schools or Faculties. The current options are:

6.4.1 Bachelor of Engineering and Bachelor of Laws - B.E./LL.B

> It is possible for students in the Chemical, Civil and Environmental, Civil and Structural, Computer Systems, Electrical & Electronic, Mechanical, and Telecommunications Engineering programs to elect to complete both the Bachelor of Engineering and Bachelor of Laws degrees in a total of six and a half years of full-time study by taking some overload, provided they are accepted into the LL.B program. Students wishing to pursue this program of study may apply for admission through the South Australian Tertiary Admissions Centre by September of the year

before they commence university study or in a later year of the program.

For further details, see the Notes entitled Law studies within the B.E. program under Sections 6.5.2 - 6.5.8 of these Academic Program Rules.

6.4.2 Bachelor of Engineering and Bachelor of Science - B.E./B.Sc.

#### 6.4.2.1 Direct Entry

- (i) Students may enrol directly in a program of study leading, after five years of full-time study (or the part time equivalent thereof), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Science in the Faculty of Sciences. The following options are available:
  - B.E. (Aerospace)/B.Sc.
  - B.E. (Chemical)/B.Sc.
  - B.E. (Civil and Environmental)/B.Sc.
  - B.E. (Civil and Structural)/B.Sc.
  - B.E. (Mechanical)/B.Sc.
  - B.E. (Mining)/B.Sc.
- Students enrolled in one of these programs are required to complete satisfactorily the Level I courses specified for each Engineering program in (iii) to (vii) below, together with the Engineering and Science components described in (viii) to (ix).

#### (iii) Aerospace Engineering

The following shall be the courses of study at Level  ${\sf I}$ 

Science courses	to the value	of 18 units as follows:
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CHEM 1100 Chemistry IA	3
and	
CHEM 1200 Chemistry IB	3
PHYSICS 1100 Physics IA	3
and	
PHYSICS 1200 Physics IB	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
Engineering courses to the value of 8 units as follows	:
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
MECH ENG 1000 Dynamics	2

<i>(</i> )		
(iv)	Chemical Engineering The following shall be the courses of study at Level I	
	Science courses to the value of 18 units chosen from the following:	
	CHEM 1100 Chemistry IA and	3
	CHEM 1200 Chemistry IB either	3
	BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **	3
	or BIOLOGY 1102 Biology I: Molecules, Genes and Cells B **	3
	and either	
	BIOLOGY 1202 Biology I: Organisms or	3
	BIOLOGY 1201 Biology I: Human Perspectives	3
	PHYSICS 1100 Physics IA	3
	and	
	PHYSICS 1200 Physics IB	3
	or	
	GEOLOGY 1100 Earth's Interior I and	3
	GEOLOGY 1103 Earth Systems	3
	and either	
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	0r	
	MATHS 1013 Mathematics IMA *	3
	MATHS 1011 Mathematics IA*	3
	Engineering courses to the value of 6 units as follows	:
	CHEM ENG 1002 Engineering Computing I	2
	CHEM ENG 1003 Materials I	2
	CHEM ENG 1005 Process Heat Transfer	2
(v)	<i>Civil and Environmental Engineering</i> The following shall be the courses of study at Level I	
	Science courses to the value of 18 units chosen from the following:	
	CHEM 1100 Chemistry IA and	3
	CHEM 1200 Chemistry IB	3
	either	
	BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **	3

or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B **	3
and	
BIOLOGY 1202 Biology I: Organisms	3
or	
PHYSICS 1100 Physics IA and	3
PHYSICS 1200 Physics IB	3
or GEOLOGY 1100 Earth's Interior I and	3
GEOLOGY 1103 Earth Systems and either	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
Engineering courses to the value of 8 units as follows:	
C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
Civil and Structural Engineering The following shall be the courses of study at Level I	
Science courses to the value of 18 units chosen from the following:	
CHEM 1100 Chemistry IA	3
and CHEM 1200 Chemistry IB either	3
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **	3
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B ** and	3
BIOLOGY 1202 Biology I: Organisms	3
or PHYSICS 1100 Physics IA	3

(vi)

	and	
	PHYSICS 1200 Physics IB	3
	or	
	GEOLOGY 1100 Earth's Interior I	3
	and	
	GEOLOGY 1103 Earth Systems	3
	and either	
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	Or	
	MATHS 1013 Mathematics IMA *	3
	MATHS 1011 Mathematics IA*	3
	Engineering courses to the value of 8 units as follow	S:
	C&ENVENG 1000 Engineering Planning and Design	2
	C&ENVENG 1001 Statics	2
	C&ENVENG 1002 Civil & Environmental	
	Engineering 1	2
	C&ENVENG 1003 Engineering Modelling and Analysis I	2
/ "		2
(vii)	Mechanical Engineering The following shall be the courses of study at Level	
	Science courses to the value of 18 units as follows	
	CHEM 1100 Chemistry IA	3
	and	5
	CHEM 1200 Chemistry IB	3
	PHYSICS 1100 Physics IA	3
	and	
	PHYSICS 1200 Physics IB	3
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	or	
	MATHS 1013 Mathematics IMA *	3
	MATHS 1011 Mathematics IA*	3
	Engineering courses to the value of 8 units as follow	S:
	C&ENVENG 1001 Statics	2
	CHEM ENG 1002 Engineering Computing I	2
	CHEM ENG 1003 Materials I	2
	MECH ENG 1000 Dynamics	2
	* Students who have not taken SACE Stage 2 Specialist	
	Maths will be required to take MATHS 1013 Mathematics A and MATHS 1011 Mathematics IA in lieu of MATHS	s IM

1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

\*\* Students who have not taken SACE Stage 2 Biology will be required to take Biology I: Molecules, Genes and Cells A in lieu of Biology I: Molecules, Genes and Cells B (viii) Mining Engineering The following shall be the courses of study at Level 1: Sciences courses to the value of 18 units as follows: 3 GEOLOGY 1103 Earth Systems and GEOLOGY 1100 Earth Interior I 3 MATHS 1011 Mathematics 1A\* 3 and MATHS 1012 Mathematics 1B\* 3 nr MATHS 1013 Mathematics 1MA\* 3 and MATHS 1011 Mathematics 1A\* 3 PHYSICS 1100 Physics 1A 3 and PHYSICS 1200 Physics 1B 3 Engineering courses to the value of 6 units as follows: C&ENVENG 1001 Statics 2 C&ENVENG 1003 Engineering Modelling and Analysis I 2 C&ENVENG 1006 Introduction to Mining Engineering 2 \* Students who have undertaken SACE Stage 2 Specialist Maths will be required to enrol in Mathematics 1A followed by Mathematics 1B. \* Students who have not taken SACE Stage 2 Specialist Maths will be required to enrol in Mathematics IMA followed by Mathematics 1A and MATHS 1012 Mathematics1B. It is strongly recommended that students should enrol in Mathematics 1B in summer semester 2007 to complete the requirements of Level 1. The satisfactory completion of Mathematics 1MA is in addition to the normal requirements of the B.E. components but a requirement for students who do not have SACE Stage 2 Specialist Maths. Enrolment in summer will enable students to complete the program in the minimum amount of time. Timetabling is an issue, because students undertaking Level I Maths in second year may not be able to undertake second year Maths courses or, if they enrol in level 2 courses concurrently they will be over-loaded and face possible timetable clashes. The timetabling of this program requires students to undertake Maths IB over summer. Engineering Component

(ix)

To qualify for the award of the degree of B.E., students must complete satisfactorily the normal requirements for the degree at Level II, III and IV, as defined elsewhere in these Academic Program Rules, subject to such exemptions as shall be approved from time to

time on the recommendation of the Faculty. For details of the requirements of individual programs, see the Notes under Sections 6.5.1, 6.5.3-5, 6.5.8 of these Academic Program Rules.

- (x) Students required to take MATHS 1013/1011 Mathematics IMA/IA at Level I will be required to complete satisfactorily MATHS 2004 Mathematics IIM at Level II, in addition to the normal requirements of the B.E. plan.
- (xi) Science Component

To qualify for the award of the degree of B.Sc., students must complete satisfactorily courses listed in Academic Program Rule 5.6 of the Rules for the degree of Bachelor of Science in the Faculty of Sciences to a minimum units value of 50, as follows:

- (a) Level I courses to the value of not less than 18 units chosen from courses specified in one of (iii) to (vii) above
- (b) Level II courses to the value of not less than 8 units, being prerequisites for courses at Level III,and leading towards a major
- (c) Level III courses to the value of not less than 24 units that must lead to a major
- (d) Courses comprising a major in a science discipline, as defined in the Academic Program Rules for the degree of B.Sc. in the Faculty of Sciences.
- (xii) Students may need to take a course overload to complete the two degrees in five years, depending on the particular program of science courses studied.
- (xiii) Students who commence this program but who subsequently decide that they do not wish to proceed with both areas of study may, provided that they have completed satisfactorily at least the Level I courses listed in one of (iii) to (vii) above, transfer to enrolment in a program for the degree of B.E. or the degree of B.Sc. in the Faculty of Sciences, with appropriate credit for courses completed.

#### 6.4.2.2 Direct Entry B.E. (Elec.)/B.Sc. (Physics)

 Students may enrol directly in a program of study leading, after five years of full-time study (or the parttime equivalent) to the combined award of Bachelor of Engineering (Electrical and Electronic) and Bachelor of Science (Physics).

> To qualify for the combined award, students are required to complete satisfactorily the courses specified in the notes under Section 6.5.7 of these Academic Program Rules, which must include at least 12 units of Physics courses and a major in Physics or a major in Theoretical Physics as specified in Academic Program Rule 5.4 for the B.Sc.

- (ii) Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.
- (iii) Students who commence this program but who subsequently decide they do not wish to proceed with both areas of study may transfer to enrolment in the program for the B.E. (Elec) or the B.Sc. with appropriate credit for the courses completed.

#### 6.4.2.3 Direct Entry B.E. (Chem)/B.Sc. (Biotech)

 Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time equivalent) to the award of both the degrees of Bachelor of Engineering (Chemical) and Bachelor of Science (Biotechnology).

> To qualify for the award of both degrees, students are required to complete satisfactorily the courses specified in the notes under Section 6.5.3 of these Academic Program Rules.

- (ii) Students who have not taken SACE Stage 2 Specialist Mathematics will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. Satisfactory completion of Mathematics IIM is in addition to the normal requirement of the B.E. plan.
- (iii) Students who commence this program but who subsequently decide they do not wish to proceed with both areas of study may transfer to enrolment in the program for the B.E.(Chem) or the B.Sc(Biotech) with appropriate credit for the courses completed.
- 6.4.2.4 Direct Entry B.E.(Petroleum)/B.Sc (in either Geology and Geophysics, or Physics)
- Students may enrol directly in a program of study leading, after five years of full-time study (or the parttime equivalent) to the combined award of:

Bachelor of Engineering (Petroleum) and Bachelor of Science (Geology and Geophysics) or

Bachelor of Engineering (Petroleum) and Bachelor of Science (Physics).

To qualify for the combined award, students are required to complete satisfactorily the courses specified in the notes under Section 6.5.10 of these Academic Program Rules.

- (ii) Students who have not taken SACE Stage 2 Specialist Mathematics will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. Satisfactory completion of Mathematics IIM is in addition to the normal requirement of the B.E. plan.
- (iii) Students who commence this program but who subsequently decide they do not wish to proceed with both areas of study may transfer to enrolment in the program for the B.E. (Petroleum) or the B.Sc with appropriate credit for the courses completed.
- 6.4.3 Bachelor of Engineering and Bachelor of Mathematical and Computer Sciences -B.E./B.Ma.& Comp.Sc.
- 6.4.3.1 Direct Entry
- (i) Students may enrol directly in a program of study leading, after five years of full-time study (or the part time equivalent thereof), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Mathematical and Computer Sciences. The following options are available:
  - B.E.(Aerospace)/B.Ma. & Comp.Sc.
  - B.E.(Automotive)/B.Ma.&Comp.Sc
  - B.E. (Chemical)/B.Ma. & Comp.Sc.
  - B.E.(Civil & Environmental)/B.Ma. & Comp.Sc..
  - B.E. (Civil & Structural)/B.Ma. & Comp.Sc..
  - B.E.(Computer Systems)/B.Ma. & Comp.Sc.
  - B.E. (Electrical & Electronic)/B.Ma. & Comp.Sc.
  - B.E. (Mechanical)/B.Ma. & Comp.Sc.
  - B.E. (Mechatronic)/B.Ma. & Comp.Sc.
  - B.E. (Mining)/B.Ma. & Comp.Sc.
  - B.E.(Telecomm.)/B.Ma. & Comp.Sc.
- Students enrolled in one of these programs are required to complete satisfactorily the courses specified for each Engineering program together with the Mathematical and Computer Sciences component as described in (iii) to (v) below.
- (iii) Engineering Component

To qualify for the award of the degree of B.E. students must satisfactorily complete courses as described in the Academic Program Rules for the relevant degree of Bachelor of Engineering.

(iv) Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

(v) Mathematical and Computer Sciences Component To qualify for the award of the degree of B.Ma. & Comp.Sc. students must satisfactorily complete an additional 24\* units at Levels II and III which satisfy the following criterium:

> Level II and III Mathematical and Computer Sciences courses as listed in 4.2.2.1 and 4.2.3.1 for the degree of Bachelor of Mathematical and Computer Sciences up to the value of 24 units\*, which must include 20 units of Level 3 courses.

- Note (not forming part of the Academic Program Rules) \* The exact number of units required will depend on which Mathematical and Computer Sciences courses are undertaken within the student's Engineering degree.
- (vi) Students may need to take a course overload to complete the two degrees in five years, depending on the particular Level III courses they wish to present towards their B.Ma.& Comp.Sc. degree.

Note: Students wishing to undertake a major in Computer Science for their B.Ma.& Comp.Sc. should discuss their program with a Faculty Adviser.

- (vii) Students who commence this program but who subsequently decide that they do not wish to proceed with both areas of study may transfer to enrolment in a program for the degree of B.E. or the degree of B.Ma.& Comp.Sc., with appropriate credit for courses completed.
- 6.4.3.2 Later Year Entry
- (i) Students enrolled in the Computer Systems Engineering or Electrical and Electronic Engineering programs may intermit their Engineering studies for a year to undertake additional studies in Mathematical and Computer Sciences in order to qualify for the degree of B.Ma.& Comp.Sc. For further details (including application procedures), see the Notes under Section 6.5.6 Computer Systems Engineering, and 6.5.7 Electrical and Electronic Engineering.
- (ii) Students enrolled in the Automotive, Chemical, Civil and Environmental Civil and Structural, Mechanical, Mechatronic and Mining Engineering programs may alternatively combine their Engineering studies with additional studies in Mathematical and Computer Sciences in order to qualify for the degree of B.Ma.& Comp.Sc. Application for admission to Mathematical and Computer Sciences must be made through the South Australian Tertiary Admissions Centre and would

normally be made on completion of Level II of the Engineering program.

- 6.4.4 Bachelor of Engineering and Bachelor of Arts B.E./B.A.
- (i) There is a series of programs administered by the Faculty of Engineering, Computer and Mathematical Sciences and leading to the combined award of Bachelor of Engineering and Bachelor of Arts. The combined award is available in Aerospace, Chemical, Civil and Environmental, Civil and Structural, Electrical and Electronic, Computer Systems, Information Technology and Telecommunications, Mechanical and Mechatronic Engineering. Students may qualify for the combined award after five years of full-time study in which the requirements of the degrees of B.E. and B.A. have been merged. In some cases, students may need to take an overload to complete the program in five years.
- (ii) Students who commence this program but who subsequently decide that they do not wish to proceed with both areas of study may transfer to enrolment in a program for the B.E. or the B.A., with appropriate credit for courses completed.
- (iii) Students may transfer into the combined program after partially completing the requirements of either the B.E. or the B.A. degree. This may, however, affect the total time taken to complete the combined program. Such students should consult the Dean, or nominee, to discuss their proposed program of studies.
- (iv) Status

Status in the combined program, in respect of studies previously completed at the University of Adelaide or another approved institution, may be granted on application to the Faculty, provided that, in the case of studies completed other than at the University of Adelaide, status in Humanities and Social Sciences courses will normally only be granted in respect of studies valued at a maximum of 6 units, and normally not including studies in the major course at Level II or III.

(v) Program of Studies

The generic requirements of the B.E./B.A. program are given below. The details of a particular student's program will depend upon the Engineering specialisation and the Humanities and Social Sciences courses chosen. The order in which courses are taken will need to take into consideration any prerequisite requirements and candidates will need to discuss their program of studies with both Engineering and Humanities and Social Sciences Course Advisers.

To qualify for the combined award, candidates are required to complete satisfactorily:

(a) Engineering Component

The Engineering component comprises all the requirements of the related Bachelor of Engineering program except where credit is given for Humanities and Social Sciences courses. For details of the requirement of individual programs, see the Notes under Sections 6.5.1 - 6.5.9 of these Academic Program Rules.

Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

(b) Arts Component

The Arts component comprises a minimum of 32 units of courses offered by the Faculty of Humanities and Social Sciences as listed in Sections 6.12.1, 6.12..2 and 6.12..3 of the Academic Program Rules for the degree of Bachelor of Arts, including an approved major sequence.

The major sequence should comprise:

8 units at Level II (two semester courses)

12 units at Level III (two semester courses)

in an approved discipline offered by the Faculty of Humanities and Social Sciences.

The remaining 12 units should be selected from any discipline or disciplines offered by the Faculty of Humanities and Social Sciences.

#### (vi) Honours

In the Engineering component, Honours are awarded for meritorious performance in the program (taken over the Engineering courses only). In the Arts component, the award of Honours requires one further year of study devoted exclusively to the Honours program. Students wishing to gain a degree at Honours level in Arts should consult the Faculty of Humanities and Social Sciences for further details.

- 6.4.5 Bachelor of Engineering and Bachelor of Economics - B.E./B.Ec.
- (i) Students may enrol directly in a program of study leading, after five years of full-time study (or the parttime equivalent), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Economics. The following options are available:
  - B.E.(Aerospace)/B.Ec.
  - B.E.(Chemical)/B.Ec.

B.E. (Civil and Environmental)/B.Ec.

B.E.(Civil and Structural)/B.Ec.

B.E.(Computer Systems)/B.Ec.

B.E.(Electrical & Electronic)/B.Ec.

B.E. (Mechanical)/B.Ec.

B.E. (Mechatronic)/B.Ec.

B.E.(Telecomm.)/B.Ec.

- Students enrolled in one of these programs are required to complete satisfactorily the courses specified in the Notes under Sections 6.5.1, 6.5.3-6.5.9, 6.5.11 of these Academic Program Rules.
- (iii) Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.
- (iv) Students who commence this program but who subsequently decide they do not wish to proceed with both areas of study may transfer to enrolment in the program for the B.E. or the B.Ec. with appropriate credit for the courses completed.
- 6.4.6 Bachelor of Engineering and Bachelor of Finance - B.E./B.Fin.
- (i) Students may enrol directly in a program of study leading, after five years of full-time study (or the parttime equivalent), to the award of both the degree of Bachelor of Engineering and the degree of Bachelor of Finance. The following options are available:

B.E. (Chemical)/B.Fin.

- B.E.(Civil and Environmental)/B.Fin.
- B.E. (Civil and Structural)/B.Ec.
- B.E. (Computer Systems)/B.Fin.
- B.E.(Electrical & Electronic)/B.Fin.
- B.E. (Mechanical)/B.Fin.
- B.E.(Telecomm.)/B.Fin.
- Students enrolled in one of these programs are required to complete satisfactorily the courses specified in the notes under Sections 6.5.3 - 6.5.8, 6.5.11 of these Academic Program Rules.
- (iii) Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS

2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

- (iv) Students who commence this program but who subsequently decide they do not wish to proceed with both areas of study may transfer to enrolment in the program for the B.E. or the B.Fin. with appropriate credit for the courses completed.
- 6.4.7. Combined Engineering Degrees The following options are available:
  - B.E.(Civil and Structural)/B.E.(Civil and Environmental)
  - B.E. (Petroleum)/B.E. (Chemical)

B.E. (Petroleum)/B.E. (Civil and Environmental)

B.E.(Petroleum)/B.E.(Civil and Structural)

B.E. (Petroleum)/B.E. (Mechanical)

 Students may enrol directly in a program of study leading, after five years of full-time study (or the parttime equivalent) to the combined award of the degrees.

> To qualify for one of the combined awards, students are required to complete satisfactorily the courses specified in the notes under Section 6.5.5 or 6.5.10 of these Academic Program Rules.

- (ii) Students who have not taken SACE Stage 2 Specialist Mathematics will be required to take MATHS 1013 Mathematics IM A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. Satisfactory completion of Mathematics IIM is in addition to the normal requirement of the B.E. program.
- (iii) Students who commence this program but who subsequently decide they do not wish to proceed with both areas of study may transfer to enrolment in the program for one of the single BE degrees with appropriate credit for the courses completed
- 6.5 Academic programs
- 6.5.1 Aerospace Engineering

Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

#### Level I

C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
ELEC ENG 1008 Electrical Engineering IM	2
MATHS 1011 Mathematics IA	3

MATHS 1012 Mathematics IB	3
MECH ENG 1000 Dynamics	2
MECH ENG 1001 Design Graphics	2
MECH ENG 1005 Engineering Planning, Design	
and Communication M	3
PHYSICS 1003 Physics IHE	3
Level II	
APP MTH 2000 Differential Equations	
and Fourier Series	2
APP MTH 2002 Vector Analysis	~
and Complex Analysis	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
MECH ENG 2002 Stress Analysis and Design	2
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics and Control I	4
MECH ENG 2020 Materials and Manufacturing	з З
MECH ENG 2020 Materials and Manufacturing MECH ENG 2021 Thermo-Fluids I	-
MECH ENG 2021 Thermo-Fluids I	3
Level III	_
ENG 3002 Engineering Communication ESL *	2
MECH ENG 3016 Aeronautical Engineering I	2
MECH ENG 3017 Engineering and the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3025 Space Vehicle Design	2
	-
MECH ENG 3026 Aerospace Materials & Structures	3
MECH ENG 3027 Design and Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3031 Thermo-Fluids II	3
PHYSICS 2010 Space Science and Astrophysics II	4
* Available only to students whose native language is not English; may be presented in lieu of an elective at Level IV	
Level IV	
MECH ENG 4034 Aerospace Navigation & Guidance	2
MECH ENG 4035 A/B Aerospace Honours Project	2
Level IV # or	
MECH ENG 4051 A/B Aerospace Design Project	
Level IV #	8
MECH ENG 4036 Aerospace Propulsion I	2
MECH ENG 4038 Engineering Management	
& Professional Practice	2
MECH ENG 4040 High-Speed Aerodynamics	2
MECH ENG 4058 Aeronautical Eng II	2
Elective courses to the value of at least 6 units	6

Electives	
Electives to the value of 6 units to be selected from the following list. With the approval of the Head of the School of Mechanical Engineering, courses offered by other schools within the University may be included in the selection of electives. Of the four electives chosen three must be those offered by the School of Mechanical Engineering.	
APP MTH 4003 Aerodynamics **	2
APP MTH 4007 Computational Fluid Dynamics	
(Engineering) **	2
APP MTH 4043 Transform Methods and Signal Processing **	2
MECH ENG 4002 Combustion Technology	
and Emissions Control	2
MECH ENG 4003 Fracture Mechanics	2
MECH ENG 4004 Engineering Acoustics	2
MECH ENG 4011 Advanced Automatic Control	2
MECH ENG 4013 Air Conditioning	2
MECH ENG 4020 Advanced Vibrations	2
MECH ENG 4023 Advanced Topics in Fluid Mechanics	2
MECH ENG 4024 Materials Selection & Failure Analysis	2
MECH ENG 4025 Topics in Welded Structures	2
MECH ENG 4026 Environmental	
and Architectural Acoustics	2
MECH ENG 4027 Robotics M	2
MECH ENG 4033 Mechanical Signature Analysis	2
MECH ENG 4037 Aerospace Propulsion II	2
MECH ENG 4039 Finance for Engineers	2
MECH ENG 4046 Computation Technique	
for Engineering Applications	2
MECH ENG 4054 Intro to Biomedical Engineering	2
MECH ENG 4055 Stresses in Plates and Shells	2
MECH ENG 4057 Biomechanical Engineering	2
MECH ENG 4059 Finite Element Analysis	_
of Structures	2
* Not all electives are offered each year.	
** Not offered by the School of Mechanical Engineering # Students accepted into the Honours stream will take	
Aerospace Honours Project Level IV and other students will take take Aerospace Design Project Level IV.	

#### Notes

1 Program of study for the direct entry B.E(Aerospace)/ B.A program (see also Section 6.4.4 of these Rules)

> To qualify for the award of the degrees of BE(Aerospace) and BA candidates are required to complete satisfactorily:

First Year (25 units)	
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
ELEC ENG 1008 Electrical Engineering IM	2
MECH ENG 1000 Dynamics	2
PHYSICS 1003 Physics IHE	3
either	
MATHS 1011 Mathematics IA	3
and	
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA*	3
and	
MATHS 1011 Mathematics IA*	3
Level I Arts course(s) to the value of 6 units	6
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematic A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition the normal requirements of the B.E. Plan.	o take
Second Year (26 units)	
APP MTH 2000 Differential Equations	
and Fourier Series	2 2
APP MTH 2002 Vector Analysis and Complex Analysis APP MTH 2009 Numerical Analysis and Probability	Z
and Statistics	2
MECH ENG 1001 Design Graphics	2
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2018 Design Practice	4
MECH ENG 2021 Thermo-Fluids I	3
Level II Arts course(s) to the value of 8 units	8
Third Year (24 units)	
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2020 Materials and Manufacturing	3
MECH ENG 3025 Space Vehicle Design	2
PHYSICS 2010 Space Science and Astrophysics II	4
Level III Arts course(s) to the value of 12 units	12
Fourth Year (26 units)	
MECH ENG 2011 Mechatronics IM	2
MECH ENG 3016 Aeronautical Engineering I	2
MECH ENG 3017 Engineering and Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3026 Aerospace Materials and Structures	3
MECH ENG 3027 Decign and Communication	2

MECH ENG 3027 Design and Communication

MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3031 Thermo-Fluids II	3
Arts course/s to the value of 6 units	6
Fifth Year (24 units)	
MECH ENG 4034 Aerospace Navigation and Guidance	2
MECH ENG 4036 Aerospace Propulsion I	2
MECH ENG 4038 Engineering Management & Professional Practice	2
either	
MECH ENG 4035 A/B Aerospace Honours Project Level IV $^{\#}$	8
Or	
MECH ENG 4051 A/B Aerospace Design Project Level IV	8
MECH ENG 4040 High-Speed Aerodynamics	2
MECH ENG 4058 Aeronautical Engineering II	2
Engineering Elective courses to the value of at least 6 units	6
# Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.	
Program of study for the direct entry B.E (Aerospace B.Ec. program	)/
To qualify for both the award of the degree of BE (Aerospac and the degree of B.Ec, candidates are required to complet satisfactorily:	
First Year (24 units)	
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing L	2

2

3

CHEM ENG 1002 Engineering Computing I 2 CHEM ENG 1003 Materials I 2 3 ECON 1004 Principles of Microeconomics I 2 ELEC ENG 1008 Electrical Engineering IM MECH ENG 1000 Dynamics 2 MECH ENG 1001 Design Graphics 2 PHYSICS 1003 Physics IHE 3 either MATHS 1011 Mathematics IA 3 and MATHS 1012 Mathematics IB 3 or MATHS 1013 Mathematics IMA\* 3 and MATHS 1011 Mathematics IA\* 3 \* Students who have not taken SACE Stage 2 Specialist

Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Note: the B.Ec. degree requirement that students take ECON 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking CHEM ENG 1002 Engineering Computing I at Level I and APP MTH 2009 Numerical Analysis and Probability and Statistics at Level II.

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#### Second Year (24 units)

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
ECON 1000 Principles of Macroeconomics I	2
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2002 Sitess Analysis and Design MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2011 Thermo-Fluids I	3
Third Year (27 units)	0
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
MECH ENG 2020 Materials and Manufacturing	3
MECH ENG 3026 Aerospace Materials and Structures	3
MECH ENG 3027 Design and Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3031 Thermo-Fluids 2	3
PHYSICS 2010 Space Science and Astrophysics II	4
Fourth Year (26 units)	
COMMGMT 2007 Organisational Behaviour II	4
ECON 2006 Economic and Financial Data Analysis II	4
MECH ENG 3016 Aeronautical Engineering I	2
Plus at least 16 units of Level III Economics courses chose	
from those listed in the Academic Program Rules of the degree of Bachelor of Economics	16
Note: B.Ec. students currently must take an Economic His course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.	tory
Fifth Year (24 units)	
MECH ENG 3017 Engineering and the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3025 Space Vehicle Design	2
MECH ENG 4034 Aerospace Navigation and Guidance	2
MECH ENG 4036 Aerospace Propulsion I	2
MECH ENG 4038 Engineering Management and Professional Practice	2
MECH ENG 4035 A/B Aerospace Honours Project Level IV <sup>#</sup>	8
Or	
MECH ENG 4051 A/B Aerospace Design Project Level IV	8 8

MECH ENG 4040 High-Speed Aerodynamics	2
MECH ENG 4058 Aeronautical Engineering II	2
Elective courses to the value of at least 2 units	2
<sup>#</sup> Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.	
Direct Entry B.E.(Aerospace)/B.Ma. & Comp.Sc.	
Refer to Academic Program Rule 6.4.3 for the requirements o this program. Note: the program of studies will vary depend ing on whether students wish to Major in Mathematics or in Computer Science for the B.Ma. & Comp. Sc.	-
Program of study for the direct entry B.E (Aerospace)/ B.Sc.	
To qualify for both the award of the degree of B.E.(Aerospace) and the degree of B.Sc, candidates are required to complete satisfactorily:	
First Year (26 units)	
C&ENVENG 1001 Statics	2
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
MECH ENG 1000 Dynamics	2
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics II A and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tak the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of MATHS 2004 Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Second Year (24 units)	
	~

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
MECH ENG 1001 Design Graphics	2
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2020 Materials and Manufacturing	3
MECH ENG 2021 Thermo-Fluids I	3

#### Third Year (26 units) MECH ENG 3025 Space Vehicle Design 2 MECH ENG 3026 Aerospace Materials and Structures 3 MECH ENG 3027 Design and Communication 3 MECH ENG 3028 Dynamics and Control 2 3 3 MECH ENG 3031 Thermo-Fluids II PHYSICS 2010 Space Science and Astrophysics II Δ PHYSICS 2100 Physics IIA 4 PHYSICS 2200 Physics IIB 4 Fourth Year (26 units) MECH ENG 2011 Mechatronics IM 2 MECH ENG 3016 Aeronautical Engineering I 2 MECH ENG 3017 Engineering and the Environment 2 MECH ENG 3020 Heat Transfer 2 Level III Physics/Science courses (at least 18 units\*): PHYSICS 3002 Experimental Physics III 3 PHYSICS 3004 Quantum Mechanics IIIA 3 PHYSICS 3006 Advanced Dynamics and Relativity 3 PHYSICS 3009 Statistical Mechanics III 2 and electives chosen from the following: APP MTH 3002 Fluid Mechanics III 3 APP MTH 3006 Industrial Mathematics III 3 APP MTH 3013 Differential Equations III 3 APP MTH 4003 Aerodynamics 2 2 PHYSICS 3000 Computation Physics III PHYSICS 3001 Electromagnetism and Optics 3 PHYSICS 3013 Astrophysics III 2 PHYSICS 3014 Atmospheric & Environmental Physics III 2 PHYSICS 3022 Applied Quantum Mechanics IIIB 2 Fifth Year (24 units) MECH ENG 4034 Aerospace Navigation and Guidance 2 2 MECH ENG 4036 Aerospace Propulsion I MECH ENG 4038 Engineering Management and Professional Practice 2 either MECH ENG 4035 A/B Aerospace Honours Project Level IV# 8 n MECH ENG 4051 A/B Aerospace Design Project Level IV 8 MECH ENG 4040 High-Speed Aerodynamics 2 2 MECH ENG 4058 Aeronautical Eng II Level III Science elective courses to the value of 6 units 6 # Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.

\*Students are required to present 24 Level 3 Science units over Years 4 and 5.

The Science courses above give students a double major in Physics and Theoretical Physics. For other majors in Science consult Clause 5.4 of the Science Academic Program Rules.

#### 6.5.2 Automotive Engineering

Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV.

#### Level I

C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
ELEC ENG 1008 Electrical Engineering IM	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1000 Dynamics	2
MECH ENG 1001 Design Graphics	2
MECH ENG 1005 Engineering Planning, Design and Communication M	3
PHYSICS 1003 Physics IHE	3
Level II	
APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis	
and Complex Analysis	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
MECH ENG 2002 Stress Analysis and Design	3
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics and Control I	3
MECH ENG 2020 Materials and Manufacturing	3
MECH ENG 2021 Thermo-Fluids I	3
Level III	
ENG 3002 Engineering Communication ESL *	2
MECH ENG 3017 Engineering & the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3027 Design and Communication	3
MECH ENG 3028 Dynamics and Control 2	3
MECH ENG 3029 Manufacturing Engineering	3
MECH ENG 3031 Thermo-Fluids II	3
MECH ENG 3033 Automotive Materials	~
& Structures	3
MECH ENG 3034 Advanced Computer Aided Engineering	2

MECH ENG 3035 Automotive Combustion Technology	2
MECH ENG 3036 Automotive Power Train and Vehicle Dynamics	2
* Available only to students whose native language is not English; may be presented in lieu of an elective at Level IV.	
Level IV	
ELEC ENG 4048 Automotive Electrical	N
and Electronic Systems	2 <b>1</b>
MECH ENG 4011 Advanced Automatic Control	2
MECH ENG 4039 Finance for Engineers	2
MECH ENG 4043 Automotive NVH & Aerodynamics	2
MECH ENG 4044 Automotive Safety	2 6
MECH ENG 4045 Advanced Manufacturing and Quality Systems	2
MECH ENG 4047 A/B Automotive Honours Project	-
Level IV #	8
MECH ENG 4048 A/B Automotive Design Project	
Level IV #	8 6
Elective courses to the value of at least 4 units	4
Electives*	
APP MTH 4043 Transform Methods	
and Signal Processing **	2
MECH ENG 4002 Combustion Technology and Emission Control	2
MECH ENG 4003 Fracture Mechanics	2
MECH ENG 4004 Engineering Acoustics	2
MECH ENG 4007 Computational	
Fluid Dynamics (Engineering) **	2
MECH ENG 4013 Airconditioning	2
MECH ENG 4020 Advanced Vibrations	2
MECH ENG 4025 Topics in Welded Structures	2
MECH ENG 4026 Environmental	
and Architectural Acoustics	2
MECH ENG 4027 Robotics M	2
MECH ENG 4028 Mechatronics IIIM	2
MECH ENG 4033 Mechanical Signature Analysis	2
MECH ENG 4042 Fire Engineering	2
MECH ENG 4046 Computation Technique	2
for Engineering Applications	2
MECH ENG 4054 Intro to Biomedical Engineering	2
MECH ENG 4055 Stresses in Plates and Shells	2
MECH ENG 4057 Biomechanical Engineering	2
MECH ENG 4059 Finite Element Analysis of Structures	2
* Not all electives are offered each year. With the approval of the Head of the School of Mechanical Engineering, course	

	offered by other schools within the University may be included. Of the two electives chosen, at least one must b offered by the School of Mechanical Engineering.	е
	** Not offered by the School of Mechanical Engineering.	
	<sup>#</sup> Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.	I
Note	S	
1	Direct Entry B.E. (Automotive)/B.Ma.& Comp.Sc. Refer to Academic Program Rule 6.4.3 for the requirement of this program.	S
	Note: the program of studies will vary depending on wheth students wish to Major in Mathematics or in Computer Science for the B.Ma.& Comp.Sc	ıer
6.5.	3 Chemical Engineering Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II and IV, in one of the programs listed under 6.5.3.1 to 6.5.3.4 below:	
6.5.3	3.1 Chemical Engineering Note: Combined/double degree students must undertake this program.	
	Level I	
	C&ENVENG 1000 Engineering Planning and Design	2
	C&ENVENG 1001 Statics	2
	CHEM 1100 Chemistry IA	3
	CHEM 1200 Chemistry IB	3
	CHEM ENG 1000 Process Systems	2
	CHEM ENG 1002 Engineering Computing I	2
	CHEM ENG 1003 Materials I	2
	CHEM ENG 1005 Process Heat Transfer	2
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	Level II	
	APP MTH 2000 Differential Equations and Fourier Series	2
	APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
	CHEM 2104 Chemistry IIAE	4
	CHEM 2204 Chemistry IIBE	2
	CHEM ENG 2000 Chemical Engineering	2
	Thermodynamics	2
	CHEM ENG 2001 Chemical Process Principles II	3
	CHEM ENG 2003 Introductory Process	
	Fluid Mechanics	3
	CHEM ENG 2006 Plant and Process Engineering	2
	CHEM ENG 3002 Essay and Seminar *	2

STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
* students whose native language is not English may pre ENG 3002 Engineering communication ESL in lieu of Essa and Seminar.	
Level III	
CHEM ENG 3001 Materials III(CH)	2
CHEM ENG 3003 A/B Chemical Engineering	
Projects III	4
CHEM ENG 3005 Separation Processes	2
CHEM ENG 3006 Transport Phenomena	2
CHEM ENG 3010 Introduction	
to Biochemical Engineering	2
CHEM ENG 3014 Process Design	0
and Plant Engineering	2
CHEM ENG 3015 Process Control and Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3
CHEM ENG 3017 Fluid and Particle Mechanics	3
CHEM ENG 4024 Environmental Engineering	2
	2
Level IV	
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4010 Advanced Separation Techniques	2
and Thermal Processes	2 6
CHEM ENG 4014 Plant Design Project CHEM ENG 4018 Industrial Economics	D
and Management	2
CHEM ENG 4025 Chemical Engineering	-
Projects IV	2
CHEM ENG 4026 Chemical Engineering Research	
Project (H)#	2
or	
CHEM ENG 4027 Chemical Engineering Research	
Project (N)#	2
Chemical Engineering Electives *	6
Electives*	
Electives to the value of 6 units to be selected from following list. (With the approval of the Head of the School of Chemical Engineering, courses offered by other schools within the University may be included the selection of electives.)	
APP MTH 4007 Computational Fluid Dynamics	
(Engineering)	2
CHEM ENG 4001 Special Studies	_
in Chemical Engineering	2

CHEM ENG 4002 A/B Chemical Engineering Research Elective II **	4
CHEM ENG 4004 Minerals Processing	2
CHEM ENG 4008 Biochemical Engineering	2
CHEM ENG 4020 A/B Chemical Engineering	-
Research Elective	2
CHEM ENG 4021 Combustion Processes	2
CHEM ENG 4024 Environmental Engineering	2
<ul> <li>* not all courses are offered each year Information on course availability provided at time of enrolment.</li> <li>** Approval is needed from the Head of the School of Chemical Engineering to enrol in this course.</li> </ul>	
# Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project	(N).
6.5.3.2 Chemical Engineering (Process and Product Engineering)	
Level I	
C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
CHEM ENG 1000 Process Systems	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
CHEM ENG 1005 Process Heat Transfer	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Level II	
APP MTH 2000 Differential Equations	0
& Fourier Series	2
APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
CHEM 2104 Chemistry IIAE	4
CHEM 2204 Chemistry IIBE	4
CHEM ENG 2001 Chemical Process Principles II	3
CHEM ENG 2003 Introductory Process	0
Fluid Mechanics	3
CHEM ENG 2006 Plant and Process Engineering	2
CHEM ENG 3002 Essay & Seminar *	2
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
* Students whose native language is not English may pres ENG 3002 Engineering Communication ESL in lieu of Essay and Seminar.	

#### Level III

CHEM ENG 3001 Materials III(CH)	2
CHEM ENG 3003 A/B Chemical Engineering	
Projects III	4
CHEM ENG 3005 Separation Processes	2
CHEM ENG 3006 Transport Phenomena	2
CHEM ENG 3010 Introduction	
to Biochemical Engineering	2
CHEM ENG 3014 Process Design & Plant Engineering	2
CHEM ENG 3015 Process Control	
& Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3
CHEM ENG 3018 Fluid and Particle Mechanics	3
CHEM ENG 4024 Environmental Engineering	2
Level IV (not available in 2006)	
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4010 Advanced Separation Techniques	
and Thermal Processes	2
CHEM ENG 4018 Industrial Economics	
& Management	2
CHEM ENG 4025 Chemical Engineering Projects IV	2
CHEM ENG 4026 Chemical Engineering	
Research Project (H)#	2
or	
CHEM ENG 4027 Chemical Engineering Research Project (N)#	2
CHEM ENG 4030 Product Engineering	
& Development	2
Chemical Engineering Electives*	6
# Students accepted into the honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project	(N).

#### Electives\*

Electives to the value of 6 units to be selected from the following list. (With the approval of the Head of the School of Chemical Engineering, courses offered by other Schools within the Schools of Engineering may be included in the selection of electives.)

CHEM ENG 4002 A/B Chemical Engineering	
Research Elective II *	4
CHEM ENG 4004 Minerals Processing	2
CHEM ENG 4008 Biochemical Engineering	2

	CHEM ENG 4020 A/B Chemical Engineering Research Elective	2
	CHEM ENG 4021 Combustion Processes	2
	* Approval is needed from the Head of the School of Chemical Engineering to enrol in this course.	-
6.5.3.3	Chemical Engineering (Energy and Environment)	
	Level I	
	C&ENVENG 1000 Engineering Planning & Design	2
	CHEM 1100 Chemistry IA	3
	CHEM ENG1000 Process Systems	2
	CHEM ENG1002 Engineering Computing I	2
	CHEM ENG 1003 Materials I	2
	CHEM ENG 1005 Process Heat Transfer	2
	CHEM ENG 1200 Chemistry IB	3
	ENV BIOL1002 Environmental Biology I	3
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	Level II	
	APP MTH 2000 Differential Equations	
	& Fourier Series	2
	APP MTH 2004 Numerical Methods	~
	in Engineering (Chemical)	2
	CHEM 2003 Environmental Chemistry II	4
	CHEM ENG 2000 Chemical Engineering Thermodynamics	2
	CHEM ENG 2001 Chemical Process Principles II 3	2
	CHEM ENG 2003 Introductory Process	
	Fluid Mechanics	3
	CHEM ENG 2006 Plant and Process Engineering	2
	CHEM ENG 2007 Environmental Essay & Seminar *	2
	CHEM ENG 3011 Transport Processes	
	in the Environment	2
	GEOLOGY 2005 Geology for Engineers	2
	* Students whose native language is not English may prese CHEM ENG 30042 Engineering Communication ESL in lieu o Environmental Essay and Seminar.	
	Level III	
	C&ENVENG 2035 Water Engineering II S2	2
	CHEM ENG 3001 Materials III(CH)	2
	CHEM ENG 3003 A/B Chemical Engineering Projects III	4
	CHEM ENG 3005 Separation Processes	2

CHEM ENG 3006 Transport Phenomena

CUENT ENIC 2014 Process Design	
CHEM ENG 3014 Process Design and Plant Engineering	2
CHEM ENG 3015 Process Control	2
and Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3
CHEM ENG 3018 Fluid and Particle Mechanics	3
CHEM ENG 4024 Environmental Engineering	2
	-
<b>Level IV</b> (not available in 2007) CHEM ENG 4028 Advanced Environmental Design	
and Cleaner Production	2
CHEM ENG 4010 Advanced Separation Techniques	-
and Thermal Processes	2
CHEM ENG 4025 # Chemical Engineering Projects IV	2
CHEM ENG 4021 Combustion Processes	2
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4026 Chemical Engineering	
Research Project (H)#	2
or	
CHEM ENG 4027 Chemical Engineering	
Research Project (N)#	2
CHEM ENG 4018 Industrial Economics	n
& Management	2
CHEM ENG 4029 Process Design Project (Environmental)	6
Chemical Engineering Electives*	6
# Students accepted into the honours stream will take	0
Chemical Engineering Research Project (H) and other	
students will take Chemical Engineering Research Project (N	J).
Electives*	
Electives to the value of 6 units to be selected from the following list. (With the approval of the Head of the School of Chemical Engineering, courses offered by other Schools within the Schools of Engineering may be included in the selection of electives.)	
C&ENVENG 3013 Water Engineering	_
& Design IIIA	2
C&ENVENG 3014 Water Engineering	

C&ENVENG 3013 Water Engineering & Design IIIA	2
C&ENVENG 3014 Water Engineering & Design IIIB	2
CHEM ENG 4002 A/B Chemical Engineering Research Elective II **	4
CHEM ENG 4004 Minerals Processing	2
CHEM ENG 4008 Biochemical Engineering	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4020 A/B Chemical Engineering Research Elective	2
** Approval is needed from the Head of the School of	

\*\* Approval is needed from the Head of the School of Chemical Engineering to enrol in this course. 6.5.3.4 Chemical Engineering (Food, Wine and Biomolecular)

#### Level I

BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes and Cells B **	3
BIOLOGY 1202 Biology I: Organisms	3
C&ENVENG 1000 Engineering Planning	
and Design	2
CHEM 1100 Chemistry IA	3
CHEM ENG 1003 Materials I	2
CHEM ENG 1004 Introduction to Bio-processing	3
CHEM ENG 1005 Process Heat Transfer	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
** 0 0.005 0 0.01	

\*\* Students who have not taken SACE Stage 2 Biology will be required to take Biology I: Molecules, Genes and Cells A in lieu of Biology I: Molecules, Genes and Cells B.

#### Level II

APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2004 Numerical Methods	-
in Engineering (Chemical)	2
BIOTECH 2005 Principles of Biotechnology II	4
CHEM ENG 2001 Chemical Process Principles II	3
CHEM ENG 2003 Introductory Process	
Fluid Mechanics	3
CHEM ENG 2006 Plant and Process Engineering	2
CHEM ENG 2008 Essay & Seminar (FWB) *	2
MICRO 2002 Microbiology II (Biotechnology)	4
OENOLOGY 2024WT Introductory Winemaking	4
* Students whose native language is not English may present ENG 3002 Engineering Communication ESL in lieu of	of

#### Level III

Essay and Seminar FWB.

CHEM ENG 3003 A/B Chemical Engineering	
Projects III	4
CHEM ENG 3005 Separation Processes	2
CHEM ENG 3006 Transport Phenomena	2
CHEM ENG 3014 Process Design & Plant Engineering	2
CHEM ENG 3015 Process Control and Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3

CHEM ENG 3018 Fluid and Particle Mechanics FOOD SC 1000RG Introduction to Food Technology	3 3
FOOD SC 2105RG Food Preservation & Packaging A	4
Level IV (not available in 2007)	
CHEM ENG 4010 Advanced Separation Techniques and Thermal Processes	2
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4008 Biochemical Engineering	2
CHEM ENG 4018 Industrial Economics	
& Management	2
CHEM ENG 4024 Environmental Engineering	2
CHEM ENG 4025 Chemical Engineering Projects IV	2
CHEM ENG 4026 Chemical Engineering	2
Research Project (H) $\#$	2
or	
CHEM ENG 4027 Chemical Engineering	
Research Project (N)#	2
CHEM ENG 4031 Process Design Project (FWB)	6
Chemical Engineering Electives*	4
# Students accepted into the honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project (	(N).

#### Electives\*

Electives to the value of 4 units to be taken from the following list. (With the approval of the Head of the School of Chemical Engineering, courses offered by other Schools within the Schools of Engineering may be included in the selection of electives.)

CHEM ENG 4002 A/B Chemical Engineering	
Research Elective II **	4
CHEM ENG 4004 Minerals Processing	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4020 A/B Chemical Engineering	
Research Elective	2
FOOD SC 2002WT Nutrition II	4
FOOD SC 3011RG Food Chemistry	3
FOOD SC 3014RG Food Quality & Regulation	3
** Approval is needed from the Head of the School of Chemical Engineering to enrol in this course.	

#### Law courses\*

LAW	1001	Introduction to Australian Law
LAW	1002	Law of Torts
LAW	1003	Law of Contract

4 4 4

LAW 1004 Law of Crime	4
LAW 1005 Property Law	4
LAW 1007 Advanced Torts	4
LAW 2117 Contract Law II	4
Law electives **	4

\* Available only to students who have been admitted to the LL.B. program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below.

#### Notes

1

#### Law Studies within the B.E.(Chem) program

To qualify for both the award of the degree of B.E.(Chem) and the award of the degree of LL.B., candidates are required to complete satisfactorily the courses listed below:

First Year (24 units)

CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
CHEM ENG 1000 Process Systems	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
CHEM ENG 1005 Process Heat Transfer	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Second Year (26 units)

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
CHEM ENG 2000 Chemical Engineering Thermodynamics	2
CHEM ENG 2001 Chemical Process Principles II	3
CHEM ENG 2003 Introductory Process Fluid Mechanics	3
CHEM ENG 2006 Plant and Process Engineering	2
CHEM ENG 2007 Essay and Seminar (Env.)	2
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (26 units)	
CHEM ENG 3001 Materials III (CH)	2
CHEM ENG 3003 A/B Chemical Engineering Projects III	4

CHEM ENG 3005 Separation Proces	sses 2
CHEM ENG 3014 Process Design a	nd Plant Engineering 2
CHEM ENG 3015 Process Control a	nd Instrumentation 2
CHEM ENG 3017 Kinetics and Read	tor Design 3
CHEM ENG 3018 Fluid and Particle	Mechanics 3
Fourth Year (22 units)	
CHEM ENG 4003 Process Dynamics	s and Control 2
CHEM ENG 4009 Advanced Chemic	cal Engineering 2
CHEM ENG 4010 Advanced Separa and Thermal Processes	tion Techniques 2
CHEM ENG 4014 Plant Design Proje	ect 6
CHEM ENG 4018 Industrial Econom and Management	ics 2
CHEM ENG 4025 Chemical Enginee	ring Projects IV 2
CHEM ENG 4026 Chemical Enginee	ring Research
Project (H)#	2
Or	
CHEM ENG 4027 Chemical Enginee Project (N <sup>#</sup>	ring Research 2
# Students accepted into the Hond Chemical Engineering Research Pro students will take Chemical Engine	ject (H) and other
* Students should consult the Law advice on electives offered.	School at enrolment for
Note: to complete the B.E.(Chem) a in minimum time, candidates are re courses even though it involves an	equired to take all these
Later Years	
In accordance with LL.B. Academic	Program Rules.
Direct entry B.E.(Chem.)/B.Sc. (see also Academic Program Ri	ıle 6.4.2)
To qualify for both the award of the and the award of the degree of B.S to complete satisfactorily the cours	c., candidates are required
First Year (24 units)	0
CHEM 1100 Chemistry IA	3
and	2
CHEM 1200 Chemistry IB either	3
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **	3
or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B **	3
and either	
BIOLOGY 1202 Biology I: Organisms	3
Or	
BIOLOGY 1201 Biology I: Human Pe	rspectives 3

PHYSICS 1100 Physics IA and	3
PHYSICS 1200 Physics IB	3
or	J
GEOLOGY 1100 Earth's Interior I	3
and	
GEOLOGY 1103 Earth systems	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
Engineering courses to the value of 6 units as follows:	
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
CHEM ENG 1005 Process Heat Transfer	2
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tal the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
** Students who have not taken SACE Stage 2 Biology will be required to take Biology I: Molecules, Genes and Cells A lieu of Biology I: Molecules, Genes and Cells B.	in
Second Year (26 units)	
APP MTH 2000 Differential Equations	
and Fourier Series	2
APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
CHEM 2100 Chemistry IIA	4
Or	
another Level II Science course to the value of 4 units	4
CHEM 2200 Chemistry IIB	4
	,
another Level II Science course to the value of 4 units	4
CHEM ENG 2000 Chemical Engineering Thermodynamics **	2
CHEM ENG 2001 Chemical Process Principles II	3
CHEM ENG 2003 Introductory Process Fluid Mechanics	3
CHEM ENG 2006 Plant and Process Engineering	2
CHEM ENG 3002 Essay and Seminar	2
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
** Students enrolled in Chemistry II A/B need not enrol in Chemical Engineering Thermodynamics, but are strongly advised to attend lectures.	

	d Year (24 units)	
	M ENG 3001 Materials III (CH)	2
	M ENG 3003 A/B Chemical Engineering Projects III	4
	M ENG 3005 Separation Processes	2
	M ENG 3006 Transport Phenomena	2
	M ENG 3010 Introduction to Biochemical Engineering	2
	M ENG 3014 Process Design Plant Engineering	2
	M ENG 3015 Process Control and Instrumentation	2
CHE	M ENG 3017 Kinetics and Reactor Design	3
CHE	M ENG 3018 Fluid and Particle Mechanics	3
CHE	M ENG 4024 Environmental Engineering	2
Four	th Year (24 units)	
Leve	el III Science courses to the value of 24 units.	
Fifth	Year (24 units)	
CHE	M ENG 4003 Process Dynamics and Control	2
CHE	M ENG 4009 Advanced Chemical Engineering	2
	M ENG 4010 Advanced Separation Techniques	_
	Thermal Processes	2
	M ENG 4014 Plant Design Project	6
	M ENG 4018 Industrial Economics Management	2
CHE	M ENG 4025 Chemical Engineering Projects IV	2
	M ENG 4026 Chemical Engineering Research ect (H)*	2
or		
	M ENG 4027 Chemical Engineering Research ect (N)*	2
	neering Elective courses to the value of 6. units I list above	6
Che	udents accepted into the Honours stream will take mical Engineering Research Project (H) and other lents will take Chemical Engineering Research Project (	N).
Dire	ect Entry B.E.(Chem.)/B.Ma.& Comp.Sc.	
	er to Academic Program Rule 6.4.3 for the requirement nis program.	S
Arts	s Studies combined with the B.E.(Chem)	
	ualify for the award of the degrees of B.E.(Chem) and , candidates are required to complete satisfactorily:	
(i)	All the courses for the Chemical Engineering program v the exception of the following courses amounting to ei units:	
	Essay and Seminar	2
	Three Electives at Level IV	6
ii)	The Arts requirements set out in Section 6.4.4 of the Academic Program Rules.	se
	s the B.E.(Chem)/B.A. may be completed in five years sime study without any overload.	of

Program of study for the direct entry B.E.(Chem.)/B program	.Ec.
To qualify for both the award of the degree of B.E.(Chem. and the degree of B.Ec., candidates are required to comp satisfactorily courses as indicated below:	
First Year (24 units)	
C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
CHEM ENG 1000 Process Systems	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
CHEM ENG 1005 Process Heat Transfer	2
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
0r	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition the normal requirements of the B.E. plan.	take
Note: The B.Ec. degree requirement that students take EC 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking CHEM ENG 1002 Engineering Computing I at Level I and STATS 2004 Laplace Transform and Probability and Statistical Methods at Level II.	ł
Second Year (24 units)	
APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
CHEM ENG 2000 Chemical Engineering Thermodynamics	2
CHEM ENG 2001 Chemical Process Principles II	3
CHEM ENG 2003 Introductory Process Fluid Mechanics	3
CHEM ENG 2006 Plant and Process Engineering	2
CHEM ENG 3002 Essay and Seminar	2
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (26 units)	
CHEM ENG 3001 Materials III (CH)	2
CHEM ENG 3003 A/B Chemical Engineering	
Projects III	4

CHEM ENG 3005 Separation Processes	2
CHEM ENG 3014 Process Design and Plant Engineering	2
CHEM ENG 3015 Process Control and Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3
CHEM ENG 3018 Fluid and Particle Mechanics	3
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
Fourth Year (24 units)	
COMMGMT 2007 Organisational Behaviour II	4
ECON 2006 Economic and Financial Data Analysis II	4
Plus at least 16 units of Level III Economics courses chose from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	en 16
Note: B.Ec. students currently must take an Economic His course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree. <i>Fifth Year (24 units)</i>	tory
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4010 Advanced Separation Techniques and Thermal Processes	2
CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4018 Industrial Economics and Management	2
CHEM ENG 4025 Chemical Engineering Projects IV	2
CHEM ENG 4027 Chemical Engineering Research Project (N) $^{\#}$	2
0ľ	
CHEM ENG 4026 Chemical Engineering Research Project (H)#	2
Plus at least 6 units of Level IV Chemical Engineering electives (listed above)	g 6
# Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project	(N).
Program of study for the direct entry B.E.(Chem.)/B.Fin. program	
To qualify for both the award of the degree of B.E.(Chem) the degree of B.Fin., candidates are required to complete satisfactorily courses as indicated below:	and
First Year (24 units)	
C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
CHEM ENG 1000 Process Systems	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
CHEM ENG 1005 Process Heat Transfer	2

either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also ta the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Note: the B.Fin. degree requirement that students take ECC 1008 Business Data Analysis I or STATS 1000 Statistical Practice I (3 units) will be considered satisfied by students taking CHEM ENG 1002 Engineering Computing I at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.	N
Second Year (24 units)	
APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
CHEM ENG 2000 Chemical Engineering Thermodynamics	2
CHEM ENG 2001 Chemical Process Principles II	3
CHEM ENG 2003 Introductory Process Fluid Mechanics	3
CHEM ENG 2006 Plant and Process Engineering	2
CHEM ENG 3002 Essay and Seminar	2
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (24 units)	
ACCTING 1002 Accounting for Decision Makers I	3
CHEM ENG 3001 Materials III (CH)	2
CHEM ENG 3003 A/B Chemical Engineering Projects III	4
CHEM ENG 3005 Separation Processes	2
CHEM ENG 3014 Process Design and Plant Engineering	2
CHEM ENG 3015 Process Control and Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3
CHEM ENG 3018 Fluid and Particle Mechanics	3
ECON 1009 International Financial Institutions & Markets I	3
Fourth Year (24 units)	
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4010 Advanced Separation Techniques and Thermal Processes	2

CHEM ENG 4018 Industrial Economics	
and Management	
CHEM ENG 4025 Chemical Engineering Projects IV	
CHEM ENG 4026 Chemical Engineering Research Projects (H) <sup>#</sup>	
CHEM ENG 4027 Chemical Engineering Research Projects (N) <sup>#</sup>	
CORPFIN 2006 Business Finance II	
ECON 2006 Economic and Financial Data Analysis II	
ECON 2012 Financial Economics II	
# Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Proje	
Fifth Year (24 units)	
CHEM ENG 4014 Plant Design Project	
2 units of Level IV Chemical Engineering electives	
Plus at least 16 units of Level III Finance courses chose those listed in Academic Program Rule 4.9.1 of the deg Bachelor of Finance including CORPFIN 3009 Portfolio TI and Management III and either APP MTH 3011 Financia Modelling Techniques III or CORPFIN 3013 Options, Futu and Risk Management III.	ree ot heory Il
Program of study for the direct entry B.E.(Chem.)/B.Sc.(Biotech.) program	
To qualify for both the award of the degree of B.E.(Cher and the degree of B.Sc.(Biotech.), candidates are requir complete satisfactorily courses as indicated below:	
First Year (25 units)	
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **	
Or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B **	
and	
BIOLOGY 1201 Biology I: Human Perspectives	
BIOTECH 1000 Introduction to Biotechnology	
01	
CHEM 1100 Chemistry IA	
CHEM 1100 Chemistry IA and	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems CHEM ENG 1002 Engineering Computing I	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems CHEM ENG 1002 Engineering Computing I either	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems CHEM ENG 1002 Engineering Computing I either MATHS 1011 Mathematics IA	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems CHEM ENG 1002 Engineering Computing I <i>either</i> MATHS 1011 Mathematics IA MATHS 1012 Mathematics IB	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems CHEM ENG 1002 Engineering Computing I <i>either</i> MATHS 1011 Mathematics IA MATHS 1012 Mathematics IB <i>or</i>	
CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB CHEM ENG 1000 Process Systems CHEM ENG 1002 Engineering Computing I <i>either</i> MATHS 1011 Mathematics IA MATHS 1012 Mathematics IB	

Maths will be required to take MATHS 1013 Mathematics

IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of MATHS 2004 Mathematics IIM is in addition to the normal requirements of the B.E. plan.

\*\* Students who have not taken SACE Stage 2 Biology will be required to take BIOLOGY 1101 Biology I: Molecules, Genes

& Cells A in lieu of BIOLOGY 1102 Biology I: Molecules, Genes & Cells B. Second Year (26 units) APP MTH 2004 Numerical Methods 2 in Engineering (Chemical) **BIOCHEM 2100 Biochemistry IIA** 4 BIOTECH 2005 Principles of Biotechnology II 4 2 CHEM ENG 1003 Materials I CHEM ENG 1005 Process Heat Transfer 2 CHEM ENG 2001 Chemical Process Principles II 3 CHEM ENG 2003 Introductory Process Fluid Mechanics 3 CHEM ENG 2006 Plant and Process Engineering 2 MICRO 2002 Microbiology II (Biotech) 4 Third Year (24 units) **BIOCHEM 2205 Biochemistry IIB** 4 CHEM ENG 3001 Materials III (CH) 2 CHEM ENG 3003 A/B Chemical Engineering Projects III Δ CHEM ENG 3005 Separation Processes 2 CHEM ENG 3010 Introduction to Biochemical Engineering 2 CHEM ENG 3014 Process Design 2 and Plant Engineering CHEM ENG 3015 Process Control and Instrumentation 2 CHEM ENG 3017 Kinetics and Reactor Design 3 CHEM ENG 3018 Fluid and Particle Mechanics 3 Fourth Year (24 units) BIOCHEM 3000 Molecular and Structural Biology III 6 BIOCHEM 3001 Cell and Development Biology III 6 BIOTECH 3000 Biotechnology Practice III 6 PHARM 3010 Pharmacology AIII 6 Fifth Year (24 units) CHEM ENG 4003 Process Dynamics and Control 2 CHEM ENG 4008 Biochemical Engineering 2 CHEM ENG 4010 Advanced Separation Techniques 2 and Thermal Processes CHEM ENG 4014 Plant Design Project 6 CHEM ENG 4018 Industrial Economics 2 and Management CHEM ENG 4024 Environmental Engineering 2

CHEM ENG 4025 Chemical Engineering Projects IV

2

CHEM ENG 4026 Chemical Engineering Research Project (H)  $^{\#}$ 

#### or

CHEM ENG 4027 Chemical Engineering Research Project (N)<sup>#</sup>

Level IV Chemical Engineering Elective courses to the value of at least 4 units 4

# Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project (N).

## 8 Candidates transferring after completing a Science degree

A candidate who has completed the academic requirements for the degree of B.Sc. should consult the Head of the School of Chemical Engineering before preparing an application to the Faculty for appropriate status. Normally, acceptable candidates may proceed to the degree of B.E.(Chem.) by completing a further two-year program as specified by the Head of School.

6.5.4 Civil and Environmental Engineering

Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV.

#### Level I

C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental	
Engineering I	2
C&ENVENG 1003 Engineering Modelling	
and Analysis I	2
CHEM 1100 Chemistry IA	3
CHEM ENG 1000 Process Systems	2
ENV BIOL 1002 Environmental Biology 1	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1000 Dynamics	2
Level II	
APP MTH 2010 Differential Equations	
APP MTH 2010 Differential Equations and Statistical Methods (Civil)	3
	3 2
and Statistical Methods (Civil)	-
and Statistical Methods (Civil) C&ENVENG 2006 Geotechnical Engineering II	-
and Statistical Methods (Civil) C&ENVENG 2006 Geotechnical Engineering II C&ENVENG 2014 Engineering Modelling	2
and Statistical Methods (Civil) C&ENVENG 2006 Geotechnical Engineering II C&ENVENG 2014 Engineering Modelling and Analysis II	2
and Statistical Methods (Civil) C&ENVENG 2006 Geotechnical Engineering II C&ENVENG 2014 Engineering Modelling and Analysis II C&ENVENG 2015 Construction and Surveying	2 2 2 2
and Statistical Methods (Civil) C&ENVENG 2006 Geotechnical Engineering II C&ENVENG 2014 Engineering Modelling and Analysis II C&ENVENG 2015 Construction and Surveying C&ENVENG 2026 Environmental Engineering II	2 2 2 2 2
and Statistical Methods (Civil) C&ENVENG 2006 Geotechnical Engineering II C&ENVENG 2014 Engineering Modelling and Analysis II C&ENVENG 2015 Construction and Surveying C&ENVENG 2026 Environmental Engineering II C&ENVENG 2032 Structural Design IIA	2 2 2 2 2 2

ENV BIOL 2005 Ecology E

GEOLOGY 2005 Geology for Engineers

3

2

Note: students undertaking the direct entry B.E.(Civil)/B.Ma.& Comp.Sc. combined program are advised to take the courses APP MTH 2000 Differential Equations and Fourier Series and STATS 2004 Laplace Transforms and Probability and Statistical Methods in lieu of APP MTH 2010 Differential Equations and Statistical Methods (Civil).

#### Level III

2

LEVELIN	
C&ENVENG 3008 Engineering Modelling & Analysis III	2
C&ENVENG 3009 Environmental Engineering and Design III	3
C&ENVENG 3011 Engineering Management and Planning	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
C&ENVENG 3067 Environmental Science and Policy	2
CHEM ENG 3011 Transport Processes	
in the Environment	2
ECON 3018 Environmental Economics E III	3
and courses to the value of at least 3 units from the following: $\label{eq:course}$	
C&ENVENG 3066 Engineering Communication and Language (ECL)	2
ENV BIOL 3004 Freshwater Ecology III	3
ENV BIOL 3008 Conservation and Restoration	3
ENV BIOL 3012WT Integrated Catchment	
Management	3
ENV BIOL 3121 Concepts in Ecology EBIII	3
GEOLOGY 3010 Remote Sensing (S)	3
SOIL&WAT 3004WT Environmental Toxicology & Remediation	3
SOIL&WAT 3007WT GIS for Environmental Management	3
Level II or III courses offered by the School of Mathematical Sciences to the value of 4 units	4
* available only to students whose native language is not English; may be substituted with an elective course at Level	III.
Level IV	
C&ENVENG 4005 A/B Civil & Environmental Research Project $^{\#}$	6
C&ENVENG 4034 Engineering Management IV	3

C&ENVENG 4037 Introduction to Environmental Law	3
	12
The elective courses offered by the School in any one year will depend on student interest and staff availability, and will be chosen from the following:	IΖ
Electives *	
Group II: Geotechnical Engineering C&ENVENG 4079 Deep Foundation Engineering & Design	3
Group III: Water Engineering	
C&ENVENG 4075 Water Resources Optimisation and Modelling	3
C&ENVENG 4098 Water Resources Sustainability and Design	3
C&ENVENG 4073 Water Distribution Systems and Design	3
Group IV: Management Engineering	
C&ENVENG 4085 Traffic Engineering and Design	3
Group V: Environmental Engineering C&ENVENG 4091 Waste Management Analysis & Design	3
C&ENVENG 4092 Wastewater Engineering and Design	3
Alternatively, students may substitute up to 3 units of Level II or III courses offered by the School of Mathematical Sciences*. Students may also, with the approval of the Head of Civil & Environmental Engineerin replace one or more elective courses with appropriate courses offered by other schools within the University	9 g,
* Students may present a maximum of 6 units of elective Level II or III courses offered by the School of Mathematica Sciences. Students undertaking the double program with Maths & Computer Science MUST present 6 units total of Maths courses at Level II or III of their engineering program These units are made up of DEFS, LaPlace and Level III elective Maths courses. This is in addition to the 24 units a Level III required for their Maths Program. # Students who are not selected for Honours will be require to complete two additional final functional program.	t
to complete two additional final year specialisation courses instead of the Research Project.	
Law Courses *	4
Law 1001 Introduction to Australian Law	4
Law 1002 Law of Torts	4
Law 1003 Law of Contract Law 1004 Law of Crime	4
	4 4
Law 1005 Property Law	4

LAW 1007 Advanced Torts	4
LAW 2117 Contract Law II	4
Law electives **	4
* Available only to students who have been admitted to LL.B. program. Students may present these courses too their Bachelor of Engineering in accordance with the sc of study set out in note 1 below.	wards

#### Notes:

#### 1 Law Studies within the B.E.(Civil & Environmental) program

First Year (26 units)	
C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
CHEM 1100 Chemistry IA	3
CHEM ENG 1000 Process Systems	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
ENV BIOL 1002 Environmental Biology I	3
	C&ENVENG 1000 Engineering Planning and Design C&ENVENG 1001 Statics C&ENVENG 1002 Civil & Environmental Engineering I C&ENVENG 1003 Engineering Modelling and Analysis I CHEM 1100 Chemistry IA CHEM ENG 1000 Process Systems MATHS 1010 Mathematics IA MATHS 1012 Mathematics IB or MATHS 1013 Mathematics IMA * MATHS 1011 Mathematics IA

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

#### Second Year (26 units)

APP MTH 2010 Differential Equations	
& Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling & Analysis II	2
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2035 Water Engineering II S2	2
C&ENVENG 2036 Strength of Materials IIE	2
ENV BIOL 2005 Ecology E	3
Third Year (24 units)	
C&ENVENG 3008 Engineering Modelling and Analysis III	2
C&ENVENG 3009 Environmental Engineering and Design III	3
C&ENVENG 3011 Engineering Management and Planning	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2

	C&ENVENG 3014 Water Engineering and Design IIIB	2	MATHS 1011 Mathematics IA	3
	CHEM ENG 3011 Transport Processes		MATHS 1012 Mathematics IB	3
	and the Environment	2	0r	
	* Students should consult the Law School at enrolment for advice on courses offered.	or	MATHS 1013 Mathematics IMA *	3
	Fourth Year (25 units)		MATHS 1011 Mathematics IA*	3
	C&ENVENG 4005 A/B Civil & Environmental Research Project #	6	# Choice of courses may be restricted by timetabling. Students should consult the Head of School or nominee a enrolment.	t
	C&ENVENG 4034 Civil Engineering Management IV	3	* Students who have not taken SACE Stage 2 Specialist	
	Plus 12 units of Engineering Elective courses (see above)	12	Maths will be required to take MATHS 1013 Mathematics	;
	# Students who are not selected for Honours will be required to complete two additional final year specialisation course instead of the Research Project.		IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also t the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition	
	Note: to complete the B.E.(Civil & Environmental) and LL. degree programs in minimum time, candidates are require	ed	the normal requirements of the B.E. plan.	
	to take all these courses even though it involves an overlo Later Years	oad.	** Students who have not taken SACE Stage 2 Biology w be required to take Biology I: Molecules, Genes and Cells lieu of Biology I: Molecules, Genes and Cells B.	
	In accordance with the Academic Program Rules for the I	L.B	Second Year (25 units)	
	- please refer to the relevant section in this calendar.		APP MTH 2000 Differential Equations	
2	Direct entry B.E.(Civil & Environmental)/B.Sc.		and Fourier Series	2
	(see also Academic Program Rule 6.4.2). To qualify for the award of the degree of B.E.(Civil &		APP MTH 2002 Vector Analysis & Complex Analysis*	2
	Environmental) and the degree of B.Sc., candidates are		C&ENVENG 2006 Geotechnical Engineering II	2
	required to complete satisfactorily:		C&ENVENG 2014 Engineering Modelling & Analysis II	2
	First Year (26 units)		C&ENVENG 2015 Construction & Surveying	2
	C&ENVENG 1000 Engineering Planning and Design	2	C&ENVENG 2026 Environmental Engineering II	2
	C&ENVENG 1001 Statics	2	C&ENVENG 2033 Water Engineering II S1	2
	C&ENVENG 1002 Civil & Environmental Engineering I	2	C&ENVENG 2035 Water Engineering II S2	2
	C&ENVENG 1003 Engineering Modelling and Analysis I	2	C&ENVENG 2036 Strength of Materials IIE	2
	CHEM 1100 Chemistry IA	3	ENV BIOL 1002 Environmental Biology I	3
	CHEM 1200 Chemistry IB	3	GEOLOGY 2005 Geology for Engineers	2
	<i>either <sup>#</sup></i> BIOLOGY 1101 Biology I:		STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
	Molecules, Genes and Cells A **	3	Third Year (25 units)	
	or BIOLOGY 1102 Biology I:		C&ENVENG 3009 Environmental Engineering and Design III	3
	Molecules, Genes and Cells B ** and	3	C&ENVENG 3011 Engineering Management and Planning	2
	BIOLOGY 1202 Biology I: Organisms	3	C&ENVENG 3012 Geotechnical Engineering Design III	3
	Or	Ŭ	C&ENVENG 3013 Water Engineering and Design IIIA	2
	GEOLOGY 1100 Earth's Interior I	3	C&ENVENG 3014 Water Engineering and Design IIIB	2
	and		C&ENVENG 3067 Environmental Science and Policy	2
	GEOLOGY 1103 Earth Systems	3	ECON 3018 Environmental Economics E III	2
	or		Level II Science courses	8
	PHYSICS 1100 Physics IA	3	Fourth Year (24 units)	
	and	Ĩ	Level III Science courses	24
	PHYSICS 1200 Physics IB	3		
	either	Ĩ		
	0.0.0			

#### Fifth Year (24 units)

C&ENVENG 4005 A/B Civil & Environmental Research Project $^{\#}$	6	
C&ENVENG 4034 Engineering Management IV	3	
C&ENVENG 4037 Introduction to Environmental Law	3	
12 units of Engineering Elective courses (see above)	12	
# Students who are not selected for Honours will be re-	quired	

urs will be required to complete two additional final year specialisation courses instead of the Research Project.

3 Direct Entry B.E.(Civil & Environmental)/B.Ma.& Comp.Sc.

> Refer to Academic Program Rule 6.4.3 for the requirements of this program.

#### 4 Arts studies combined with the B.E.(Civil & Environmental))

(see also section 6.4.4 of these Rules)

To qualify for the award of the degrees of B.E. (Civil & Environmental) and B.A., candidates are required to complete satisfactorily courses listed below:

To satisfy the requirements of the Arts component, students must undertake 32 units of Arts courses, including an approved major sequence, comprising 6 units at Level 1, 8 units at level II, 12 units at Level III, plus another 6 units at any Level.

#### **Engineering Component**

First Year (24 units)

C&ENVENG 1000 Engineering Planning and Design	2
Coenvervo 1000 engineering Fianning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering 1	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
CHEM 1100 Chemistry IA	3
CHEM ENG 1000 Process Systems	2
ENV BIOL 1002 Environmental Biology I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
0ľ	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
MECH ENG 1000 Dynamics	2

5

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of MATHS 2004 Mathematics IIM is in addition to the normal requirements of the B.E. plan.

#### Second Year (24 units)

APP MTH 2010 Differential Equations	
& Statistical Methods (Civil)	
C&ENVENG 2006 Geotechnical Engineering II	

C&ENVENG 2014 Engineering Modelling and Analysis I	I 2
C&ENVENG 2015 Construction and Surveying	2
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2035 Water Engineering II S2	2
C&ENVENG 2036 Strength of Materials IIE	2
ENV BIOL 2005 Ecology E	3
GEOLOGY 2005 Geology for Engineers	2
Third Year (16 units)	
C&ENVENG 3008 Engineering Modelling and Analysis III	2
C&ENVENG 3009 Environmental Engineering and Design III	3
C&ENVENG 3011 Engineering Management and Planning	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
CHEM ENG 3011 Transport Processes in the Environment	2
Fourth Year (24 units)	
C&ENVENG 4005 A/B Civil & Environmental Research Project $^{\#}$	6
C&ENVENG 4034 Engineering Management IV	3
C&ENVENG 4037 Introduction to Environmental Law	3
Engineering Elective courses to the value of at least 12 units	12
# Students who are not selected for Honours will be r to complete two additional final year specialisation con instead of the Research Project.	
Program of study for the direct entry B.E.(Civil & Environmental)/B.Ec. program	
To qualify for both the award of the degree of B.E.(Civi Environmental) and the degree of B.Ec, candidates are required to complete satisfactorily courses listed below	!
First Year (26 units)	
C&ENVENG 1000 Engineering Planning & Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
CHEM 1100 Chemistry IA	3
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3

ENV BIOL 1002 Environmental Biology I

MATHS 1011 Mathematics IA

MATHS 1012 Mathematics IB

either

or

3

2

3

3

MATHS 1013 Mathematics IMA	*
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MATHS 1011 Mathematics IA\*

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

3 3

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Note: the B.Ec. degree requirement that students take ECON 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking C&ENVENG ENG 1003 Engineering Modelling & Analysis I at Level I and APP MTH 2010 Differential Equations & Statistical Methods (Civil).

### Second Year (24 units)

APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling & Analysis II	2
C&ENVENG 2015 Construction & Surveying	2
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2035 Water Engineering II S2	2
C&ENVENG 2036 Strength of Materials IIIE	2
ENV BIOL 2005 Ecology E	3
GEOLOGY 2005 Geology for Engineers	2
Third Year (25 units)	
C&ENVENG 3008 Engineering Modelling & Analysis III	2
C&ENVENG 3009 Environmental Engineering and Design III	2
C&ENVENG 3012 Geotechnical Engineering Design III	2
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
CHEM ENG 3011 Transport Processes	2
in the Environment	2
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
and courses to the value of at least 3 units from the following:	
ENV BIOL 3004 Freshwater Ecology III	3
ENV BIOL 3008 Conservation and Restoration	3
ENV BIOL 3121 Concepts in Ecology EBIII	3
GEOLOGY 3010 Remote Sensing (S)	3
SOIL&WAT 3004WT Environmental Toxicology and Remediation	3
SOIL&WAT 3007WT GIS for Environmental Management	3
Level II or III courses offered by the School	
of Mathematical Sciences	4

Fourth Year (24 units)	
COMMGMT 2007 Organisational Behaviour II	4
ECON 2006 Economic and Financial Data Analysis II	4
Plus at least 16 units of Level III Economics courses ch from those listed in Academic Program Rule 4.7.1 of th degree of Bachelor of Economics	
Note: B.Ec. students currently must take one Economic History course to qualify for the B.Ec. degree. Please re the Academic Program Rules of the B.Ec. degree.	
Fifth Year (24 units)	
C&ENVENG 4005 A/B Civil & Environmental Research Project #	6
C&ENVENG 4034 Engineering Management IV	3
C&ENVENG 4037 Introduction to Environmental Law	3
Plus at least 12 units of Level IV Engineering Elective courses listed above	12
# Students who are not selected for Honours will be re to complete two additional final year specialisation cou instead of the Research Project.	
Program of study for the direct entry B.E.(Civil & Environmental)/B.Fin. program	
To qualify for both the award of the degree of B.E.(Civil Environmental) and the degree of B.Fin, candidates are required to complete satisfactorily courses listed below	
First Year (26 units)	
C&ENVENG 1000 Engineering Planning & Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
CHEM 1100 Chemistry IA	3
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
ENV BIOL 1002 Environmental Biology I	3
either	5
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IA	3
	3
MATHS 1013 Mathematics IMA *	3
	3
MATHS 1011 Mathematics IA*	0
* Students who have not taken SACE Stage 2 Special: Maths will be required to take MATHS 1013 Mathemat IMA and MATHS 1011 Mathematics IA in lieu of MATH 1011/1012 Mathematics I A/B. Such students must als the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition the normal requirements of the B.E. plan.	tics IS so take
Note: the B.Fin. degree requirement that students take 1008 Business Data Analysis I or STATS 1000 Statistica	

1008 Business Data Analysis I or STATS 1000 Statistical Practice I (3 units) will be considered satisfied by students taking C&ENVENG ENG 1003 Engineering Modelling & Analysis I at Level I and APP MTH 2010 Differential Equations & Statistical Methods (Civil)at Level II.

Second Year (26 units)	
ACCTING 1002 Accounting for Decision Makers I	3
APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling & Analysis II	2
C&ENVENG 2015 Construction & Surveying	2
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2035 Water Engineering II S2	2
C&ENVENG 2036 Strength of Materials IIE	2
ENV BIOL 2005 Ecology E	3
ECON 1009 International Financial Institutions & Markets I	3
Third Year (24 units)	-
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 3009 Environmental Engineering	2
and Design III	3
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
CORPFIN 2006 Business Finance II	4
ECON 2006 Economic & Financial Data Analysis II	4
ECON 2012 Financial Economics II	4
Fourth Year (23 units)	
C&ENVENG 3008 Engineering Modelling and Analysis III	2
CHEM ENG 3011 Transport Process in the Environment	2
and courses to the value of at least 3 units from the following:	
GEOLOGY 3010 Remote Sensing (S)	3
ENV BIOL 3004 Freshwater Ecology III	3
ENV BIOL 3008 Conservation and Restoration	3
ENV BIOL 3012WT Integrated Catchment Management	3
ENV BIOL 3121 Concepts in Ecology EBIII	3
C&ENVENG 3066 Engineering Communication & Language (ECL)	3
SOIL&WAT 3004WT Environmental Toxicology and Remediation	3
SOIL&WAT 3007WT GIS for Environmental Management	3
or Level II or III courses offered by Mathematical Sciences	3
Plus at least 16 units of Level III Finance courses chosen fr	
those listed in Academic Program Rule 4.9.1 of the degree Bachelor of Finance including:	
CORPFIN 3009 Portfolio Theory and Management III	4
and either	
APP MTH 3011 Financial Modelling Techniques III	4
Or	
CORPFIN 3013 Options, Futures & Risk Management III	4

C&ENVENG 4005 A/B Civil & Environmental Research Proiect # 6 C&ENVENG 4034 Engineering Management IV 3 C&ENVENG 4037 Introduction to Environmental Law 3 Plus at least 12 units of Level IV Engineering Elective courses listed above 12 # Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project. 6.5.5 Civil and Structural Engineering Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV. Level I **C&ENVENG 1000 Engineering Planning** 2 and Design **C&ENVENG 1001 Statics** 2 C&ENVENG 1002 Civil and Environmental Engineering I 2 C&ENVENG 1003 Engineering Modelling 2 and Analysis I 2 CHEM ENG 1003 Materials I 2 MECH ENG 1000 Dynamics MATHS 1011 Mathematics IA 3 3 MATHS 1012 Mathematics IB and courses to the value of 6 units from the following: 3 CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB 3 or PHYSICS 1100 Physics IA 3 and PHYSICS 1200 Physics IB 3 or two of: CHEM 1100 Chemistry IA 3 ENV BIOL 1002 Environmental Biology I 3 PHYSICS 1003 Physics IHE 3 Level II APP MTH 2010 Differential Equations & Statistical Methods (Civil) 3 C&ENVENG 2006 Geotechnical Engineering II 2 C&ENVENG 2014 Engineering Modelling 2 and Analysis II C&ENVENG 2015 Construction and Surveying 2

C&ENVENG 2025 Strength of Materials IIA

3

Fifth Year (24 units)

C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2034 Structural Design IIB	2
C&ENVENG 2035 Water Engineering II S2	2
GEOLOGY 2005 Geology for Engineers	2

Note: students undertaking the direct entry B.E.(Civil & Struct)/ B.Ma. & Comp. Sc. combined program are advised to take the courses APP MTH 2000 Differential Equations and Fourier Series and STATS 2004 Laplace Transforms and Probability and Statistical Methods in lieu of APP MTH 2010 Differential Equations and Statistical Methods (Civil).

# Level III

C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3003 Environmental Engineering III	2
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel)	3
C&ENVENG 3008 Engineering Modelling and Analysis III	2
C&ENVENG 3011 Engineering Management & Planning	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering & Design IIIB	2
either	
ENG 3002 Engineering Communication ESL*	2
or	
CHEM ENG 3011 Transport Processes in the Environment	2
or	
Level II courses offered by the School of Mathematical Sciences to the value of 2 units	ا 2
* Available only to students whose native language is not English; may be presented in lieu of 2 units of elective courses at Level III.	
Students undertaking the double program with Maths & Computer Science MUST present 6 units total of Maths courses at Level II or III of their engineering program. These units are made up of DEFS, LaPlace and Level III elective Maths courses. This is in addition to the 24 units at Level III required for their Maths Program.	
Level IV	
CGENIVENIC 4002 A/B Civil & Structural Engineering	

C&ENVENG 4003 A/B Civil & Structural Engineering	
Research Project #	6
C&ENVENG 4034 Engineering Management IV	3
Elective courses to the value of 15 units	15

The elective courses offered by the School in any one year will depend on staff availability and will be chosen from the following:

Group I: Structural Engineering	
C&ENVENG 4068 Computer Methods of Structural Analysis and Design	3
C&ENVENG 4099 Structural Response to Blast Loading	3
C&ENVENG 4069 Advanced Reinforced Concrete	3
Group II: Geotechnical Engineering C&ENVENG 4079 Deep Foundation Engineering & Design	3
Group III: Water Engineering	Ū
C&ENVENG 4098 Water Resources Sustainability and Design	3
C&ENVENG 4075 Water Resources Optimisation and Design	3
C&ENVENG 4073 Water Distribution Systems and Design	3
Group IV: Management Engineering	
C&ENVENG 4085 Traffic Engineering and Design	3
Group V: Environmental Engineering C&ENVENG 4091 Waste Management Analysis	
& Design	3
C&ENVENG 4092 Wastewater Engineering & Design	3
Alternatively students may substitute up to 3 units of Level II or III courses offered by the School of Mathematics	

<sup>#</sup> Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project.

Students must take a total of five electives, according to course availability, and should take at least two courses from the one group. The remaining courses to make up 15 units may be chosen from any group. Alternatively, students may take up to 3 units of Level II or III courses offered by the School of Mathematical Sciences. In special circumstances other combinations of elective courses may be acceptable but must be approved by the Head of the School of Civil and Environmental Engineering

Students may also, with the approval of the Head of School, replace one or more elective courses with appropriate courses offered by other schools within the University of Adelaide.

# Law courses\*

LAW 1001 Introduction to Australian Law	4
LAW 1002 Law of Torts	4
LAW 1003 Law of Contract	4
LAW 1004 Law of Crime	4

LAW 1005 Property Law	4
LAW 1007 Advanced Torts	4
LAW 2117 Contract Law II	4
Law electives **	4
*	

\*available only to students who have been admitted to the LL.B. program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below.

# Notes:

1	Law Studies within the B.E.(Civil & Structural) program	m
	To qualify for the award of the degree of B.E.(Civil $\vartheta$ Structural) and the degree of LL.B, candidates are required t complete satisfactorily courses below:	0
	First Year (26 units)	
	C&ENVENG 1000 Engineering Planning and Design	2
	C&ENVENG 1001 Statics	2
	C&ENVENG 1002 Civil & Environmental Engineering I	2
	C&ENVENG 1003 Engineering Modelling and Analysis I	2
	CHEM 1100 Chemistry IA	3
	either	
	ENV BIOL 1002 Environmental Biology I	3
	or	
	PHYSICS 1003 Physics IHE	3
	either	
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	or	
	MATHS 1013 Mathematics IMA *	3
	MATHS 1011 Mathematics IA*	3
	MECH ENG 1000 Dynamics	2
	* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tak the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	e
	Second Year (26 units)	
	APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
	C&ENVENG 2006 Geotechnical Engineering II	2
	C&ENVENG 2014 Engineering Modelling and Analysis II	2
	C&ENVENG 2025 Strength of Materials IIA	3
		2

In accordance with the Academic Program Rules for the LL. Please refer to the relevant section in this Calendar.	.В.
Direct entry B.E.(Civil & Structural)/B.Sc. (see also Academic Program Rule 6.4.2).	
To qualify for both the award of the degree of B.E. (Civil & Structural) and the degree of B.Sc., candidates are required to complete satisfactorily courses as indicated below:	ł
First Year (26 units)	
C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
and either #	
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A $^{\ast\ast}$	3
Or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B $^{\ast\ast}$	3
and	
BIOLOGY 1202 Biology I: Organisms	3
or	
GEOLOGY 1100 Earth's Interior I	3
and	
GEOLOGY 1103 Earth Systems	3

C&ENVENG 3005 Structural Design III (Concrete)

C&ENVENG 3013 Water Engineering and Design IIIA

C&ENVENG 3014 Water Engineering and Design IIIB

C&ENVENG 4034 Civil Engineering Management IV

Plus 12 units of Engineering Elective courses(see above)

Note: to complete the B.E.(Civil & Structural) and LL.B. degree programs in minimum time, candidates are required to take all these courses even though it involves an overload.

\* Students should consult the Law School at enrolment for

# Students who are not selected for Honours will be required to complete two additional final year elective courses instead

C&ENVENG 4003 A/B Civil & Structural Engineering Research

C&ENVENG 3007 Structural Design III (Steel) C&ENVENG 3012 Geotechnical Engineering Design III

Fourth Year (25 units)

advice on electives offered.

of the Research Project.

Later Years

2

2

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2

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3

Project #

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C&ENVENG 2032 Structural Design IIA

C&ENVENG 2034 Structural Design IIB

Third Year (24 units)

C&ENVENG 2033 Water Engineering II S1

C&ENVENG 2035 Water Engineering II S2

C&ENVENG 3001 Structural Mechanics IIIA

Or			Level IV elective courses to the value of at least 15 units	
PHYSICS 1100 Physics IA	3		(see above)	15
and			# Students who are not selected for Honours will be require	
PHYSICS 1200 Physics IB	3		to complete two additional final year specialisation courses instead of the Research Project.	
# choice of courses may be restricted by timetabling - students should consult the school at enrolment.		3	Direct Entry B.E.(Civil & Structural)/ B.Ma. & Comp. S	c.
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics	:		Refer to Academic Program Rule 6.4.3 for the requirements of this program.	
IMA and MATHS 1011 Mathematics IA in lieu of MATHS		4	Arts studies combined with the B.E.(Civil & Structura	I))
1011/1012 Mathematics I A/B. Such students must also the Level II course MATHS 2004 Mathematics IIM. The	take		(see also section 6.4.4 of these Rules)	
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.			To qualify for the award of the degrees of B.E.(Civil & Structural) and B.A., candidates are required to complete courses listed below:	
** Students who have not taken SACE Stage 2 Biology w be required to take BIOLOGY 1101 Biology I: Molecules, Genes and Cells A in lieu of BIOLOGY 1102 Biology I: Molecules, Genes and Cells B.	rill		To satisfy the requirements of the Arts component, students must undertake 32 units of Arts courses, including an approved major sequence, comprising 6 units at Level 1, 8	
Second Year (25 units)			units at level II, 12 units at Level III, plus another 6 units at any Level.	
APP MTH 2000 Differential Equations & Fourier Series	2		Engineering Component	
APP MTH 2002 Vector Analysis and Complex Analysis	2		First Year (20 units)	
C&ENVENG 2006 Geotechnical Engineering II	2		C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 2014 Engineering Modelling and Analysis II	2		C&ENVENG 1001 Statics	2
C&ENVENG 2015 Construction and Surveying	2		C&ENVENG 1002 Civil and Environmental Engineering I	2
C&ENVENG 2025 Strength of Materials IIA $^{\#}$	3		C&ENVENG 1003 Engineering Modelling and Analysis I	2
C&ENVENG 2026 Environmental Engineering II	2		either	
C&ENVENG 2032 Structural Design IIA	2		MATHS 1011 Mathematics IA	3
C&ENVENG 2033 Water Engineering II S1	2		MATHS 1012 Mathematics IB	3
C&ENVENG 2034 Structural Design IIB	2		or	
C&ENVENG 2035 Water Engineering II S2	2		MATHS 1013 Mathematics IMA *	3
STATS 2004 Laplace Transforms and Probability			MATHS 1011 Mathematics IA*	3
and Statistical Methods	2		Courses to the value of 6 units from the following:	
#Students may avoid a 1 unit overload in semester 1 by taking C&ENVENG 2036 Strength of Materials IIE (2 units)			CHEM 1100 Chemistry IA	3
instead of C&ENVENG 2025 Strength of Materials IIA, but			and	0
latter is strongly preferred by the School.			CHEM 1200 Chemistry IB	3
Third Year (24 units)			or	0
C&ENVENG 3001 Structural Mechanics IIIA	3		PHYSICS 1100 Physics IA	3
C&ENVENG 3005 Structural Design III (Concrete)	3		and	0
C&ENVENG 3007 Structural Design III (Steel)	3		PHYSICS 1200 Physics IB	3
C&ENVENG 3012 Geotechnical Engineering Design III	3		or two of:	0
C&ENVENG 3013 Water Engineering and Design IIIA	2		CHEM 1100 Chemistry IA	3
C&ENVENG 3014 Water Engineering and Design IIIB	2			3
Level II Science courses	8		ENV BIOL 1002 Environmental Biology I PHYSICS 1003 Physics IHE	з З
Fourth Year (24 units)				5
Level III Science courses	24		* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics	
Fifth Year (24 units)			IMA and MATHS 1011 Mathematics IA in lieu of MATHS	
C&ENVENG 4003 A/B Civil & Structural Engineering Resea	rch		1011/1012 Mathematics I A/B. Such students must also tal the Level II course MATHS 2004 Mathematics IIM. The	ке
Project #	6		satisfactory completion of Mathematics IIM is in addition to	,
C&ENVENG 4034 Engineering Management IV	3		the normal requirements of the B.E. plan.	

# Second Year (24 units)

Second Tear (24 drins)	
APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling and Analysis II	2
C&ENVENG 2015 Construction and Surveying	2
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2034 Structural Design IIB	2
C&ENVENG 2035 Water Engineering II S2	2
GEOLOGY 2005 Geology for Engineers	2
Third Year (20 units)	
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3003 Environmental Engineering III	2
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel)	3
C&ENVENG 3011 Engineering Management & Planning	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
Fourth Year (24 units)	
C&ENVENG 4003 A/B Civil & Structural Engineering	
Research Project #	6
C&ENVENG 4034 Engineering Management IV	3
Civil Engineering elective courses to the value of at least 15 units (see above)	15
# Students who are not selected for Honours will be ret to complete two additional final year elective courses in of the Research Project.	
Program of study for the direct entry	
B.E.(Civil & Structural)/B.Ec. program	
To qualify for both the award of the degree of B.E. (Civil 8 Structural) and the degree of B.E., candidates are requi	

Structural) and the degree of B.E., candidates are required to complete satisfactorily courses listed below:

# First Year (25 units)

5

C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil and Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
MECH ENG 1000 Dynamics	2
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	

MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
plus either	
CHEM 1100 Chemistry IA	3
Or	
PHYSICS 1003 Physics IHE	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tal the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Note: the B.Ec. degree requirement that students take ECOI 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking C&ENVENG 1003 Engineering Modelling & Analysis I at Level I and APP MTH 2010 Differential Equations & Statistical Methods (Civil).	N
Second Year (24 units)	
APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling and Analysis II	2
C&ENVENG 2015 Construction and Surveying	2
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2034 Structural Design IIB	2
C&ENVENG 2035 Water Engineering II S2	2
GEOLOGY 2005 Geology for Engineers	2
Third Year (26 units)	
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel)	3
C&ENVENG 3008 Engineering Modelling	
and Analysis III	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
Fourth Year (24 units)	
COMMGMT 2007 Organisational Behaviour II	4
ECON 2006 Economic & Financial Data Analysis II	4
Plus at least 16 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the	

From those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics 16

Note: B.Ec. students currently must take one Economic History course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.

### Fifth Year (24 units)

C&ENVENG 4003 A/B Civil & Structural Engineering Research Project  $^{\#}$  6

C&ENVENG 4034 Engineering Management IV

3

15

15 units of Level IV Engineering elective courses (see above)

# Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Research Project.

6 Program of study for the direct entry B.E.(Civil & Structural)/B.Fin. program

> To qualify for both the award of the degree of B.E.(Civil & Structural) and the degree of B.Fin, candidates are required to complete satisfactorily courses listed below

# First Year (25 units)

C&ENVENG 1000 Engineering Planning and Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil and Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
MECH ENG 1000 Dynamics	2
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
plus either	
CHEM 1100 Chemistry IA	3
Or	
PHYSICS 1003 Physics IHE	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Note: the B.Fin. degree requirement that students take ECON 1008 Business Data Analysis I or STATS 1000 Statistical Practice I (3 units) will be considered satisfied by students taking C&ENVENG 1003 Engineering Modelling & Analysis I at Level I and APP MTH 2010 Differential Equations & Statistical Methods (Civil) at Level II.

 Second Year (26 units)
 3

 ACCTING 1002 Accounting for Decision Makers I
 3

 APP MTH 2010 Differential Equations
 3

 & Statistical Methods (Civil)
 3

C&ENVENG 2006 Geotechnical Engineering II	2	
C&ENVENG 2014 Engineering Modelling and Analysis II	2	
C&ENVENG 2015 Construction and Surveying	2	
C&ENVENG 2025 Strength of Materials IIA	3	
C&ENVENG 2032 Structural Design IIA	2	
C&ENVENG 2033 Water Engineering II S1	2	
C&ENVENG 2034 Structural Design IIB	2	
C&ENVENG 2035 Water Engineering II S2	2	
ECON 1009 International Financial Institutions and Markets I	3	
Third Year (23 units)		
C&ENVENG 2026 Environmental Engineering II	2	
C&ENVENG 3001 Structural Mechanics IIIA	3	
C&ENVENG 3005 Structural Design III (Concrete)	3	
C&ENVENG 3007 Structural Design III (Steel)	3	
CORPFIN 2006 Business Finance II	4	
ECON 2006 Economic and Financial Data Analysis II	4	
ECON 2012 Financial Economics II	4	
Fourth Year (25 units)		
C&ENVENG 3008 Engineering Modelling and Analysis III	2	
C&ENVENG 3012 Geotechnical Engineering Design III	3	
C&ENVENG 3013 Water Engineering and Design IIIA	2	
C&ENVENG 3014 Water Engineering and Design IIIB	2	
Plus at least 16 units of Level III Finance courses chosen fr those listed in Academic Program Rule 4.9.1 of the degree Bachelor of Finance including:		
CORPFIN 3009 Portfolio Theory and Management III	4	
and either		
APP MTH 3011 Financial Modelling Techniques III	4	
Or		
CORPFIN 3013 Options, Futures and Risk Management III	4	
Fifth Year (24 units)		
C&ENVENG 4003 A/B Civil & Structural Engineering Research Project #	6	
C&ENVENG 4034 Engineering Management IV	3	
Plus 15 units of Level IV Engineering Elective courses listed above	15	
<sup>#</sup> Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Research Project.		
Program of study for the direct entry B.E.(Civil & Structural)/ B.E.(Civil & Environmental) program		

To qualify for the combined award of B.E.(Civil & Structural) and B.E.(Civil & Environmental), candidates are required to complete satisfactorily courses listed below.

7

First Vary (24 units)	
First Year (24 units) C&ENVENG 1000 Engineering Planning and Design	2
CaENVENG 1000 Engineering Haining and Design	2
C&ENVENG 1002 Civil and Environmental Engineering I	2
C&ENVENG 1002 Engineering Modelling & Analysis I	2
CHEM 1100 Chemistry IA	3
CHEM ENG 1000 Process Systems	2
ENV BIOL 1002 Environmental Biology I	3
MECH ENG 1000 Dynamics	2
either	-
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
0ľ	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also ta the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Second Year (24 units)	
APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling and Analysis II	2
C&ENVENG 2015 Construction and Surveying	2
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2034 Structural Design IIB	2
C&ENVENG 2035 Water Engineering II S2	2
GEOLOGY 2005 Geology for Engineers	2
Third Year (25 units)	
C&ENVENG 3001 Structural Mechanics IIIA	3
C&ENVENG 3005 Structural Design III (Concrete)	3
C&ENVENG 3007 Structural Design III (Steel)	3
C&ENVENG 3008 Engineering Modelling and Analysis III	2
C&ENVENG 3009 Environmental Engineering and Design III	3
C&ENVENG 3011 Engineering Management and Planning	2
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2

	CHEM ENG 3011 Transport Processes in the Environment	2
	Fourth Year (23 units)	-
	C&ENVENG 3067 Environmental Science and Policy	2
	C&ENVENG 4003A/B Civil& Structural Engineering Research Project	6
	C&ENVENG 4034 Engineering Management IV	3
	ECON 3018 Environmental Economics EIII	3
	ENV BIOL 2005 Ecology E	3
	Elective courses (see above)	3
	Courses to the value of at least 3 units chosen from:	
	C&ENVENG 3066 Engineering Communication and Language (ECL)	3
	ENV BIOL 3004 Freshwater Ecology III	3
	ENV BIOL 3008 Conservation and Restoration	3
	ENV BIOL 3012WT Integrated Catchment Management	3
	ENV BIOL 3121 Concepts in Ecology EBIII	3
	GEOLOGY 3010 Remote Sensing (S)	3
	SOIL&WAT 3004WT Environmental Toxicology and Remediation	3
	SOIL&WAT 3007WT GIS for Environmental Management	3
	Level II Mathematics courses	4
	Fifth Year (24 units)	
	C&ENVENG 4005 A/B Civil & Environmental Research Project $^{\#}$	6
	C&ENVENG 4037 Introduction to Environmental Law	3
	Plus 15 units of Level IV Engineering Elective courses*	15
	* At least 2 of the elective courses must be in the areas of structural and/or geotechnical engineering and at least 2 in the area of water and/or environmental engineering	
	# The Civil Engineering Research Project must be in the arr of structural and/or geotechnical engineering while the Environmental Research Project must be in the area of wat and/or environmental engineering.	
6.5.6	Computer Systems Engineering	
	Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:	
	Level I	
	COMP SCI 1008 Computer Science IA	3
	COMP SCI 1009 Computer Science IB	3
	ELEC ENG 1006 Electrical Engineering I	3
	ELEC ENG 1007 Engineering Planning, Design & Communication	3
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	PHYSICS 1100 Physics IA	3
	PHYSICS 1200 Physics IB	3

# Level II

Level II	
APP MTH 2000 Differential Equations	_
and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2000 Computer Systems	2
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Level III	
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3015 Communications, Signals	
& Systems	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
ELEC ENG 3020 Embedded Computer Systems	3
ELEC ENG 3022 Real Time Systems IV	3
ENG 3002 Engineering Communication ESL*	2
*Available only to students whose native language is not English. May be presented in lieu of a 2 unit elective at Level IV.	
Level IV	
COMP SCI 3001 Computer Networks and Applications	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4037 Digital Microelectronics	2
ELEC ENG 4036 A/B Design Project #	6
Or	
ELEC ENG 4039 A/B Honours Project #	6
ELEC ENG 4038 Financial Management	
for Engineers	2
ELEC ENG 4040 Management and Professional Practic for Engineers	ce 2
STATS 4001 Reliability and Quality Control	2
Elective courses to the value of 5 units selected from the following list	5
5	

# Electives\*

APP MTH 3016 Telecommunications Systems	
Modelling III**	3
APP MTH 4012 Communication Network Design	2
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 4033 Advanced Telecommunications	2
ELEC ENG 4041 Optical Communication Engineering	2
ELEC ENG 4042 Power Electronics	
and Drive Systems	2
ELEC ENG 4043 Power Quality	
and Condition Monitoring	2
ELEC ENG 4044 RF Engineering IV	2
ELEC ENG 4045 Signal Processing IV	2
ELEC ENG 4046 Telecommunications IV	2
ELEC ENG 4048 Automotive Electrical	~
and Electronic Systems	2
ELEC ENG 4049 Analog Microelectronic Systems	2
ELEC ENG 4050 Systems Engineering	2
ELEC ENG 4051 Introduction	
to Electronic Defence Systems	2
PURE MTH 3018 Coding and Cryptology III	3
$^{\#}$ Students accepted into the Honours stream will take Honours Project and other students will take Design Project	
* Not all courses are offered each year.	
** may not be presented with APP MTH 3015 Stochastic Modelling for Telecommunications III.	
Law courses*	
LAW 1001 Introduction to Australian Law	4
LAW 1002 Law of Torts	4

LAW 1001 Introduction to Australian Law	4
LAW 1002 Law of Torts	4
LAW 1003 Law of Contract	4
LAW 1004 Law of Crime	4
LAW 1005 Property Law	4
LAW 2117 Contract Law II	4
LAW 1007 Advanced Torts	4
Law electives**	4

\* Available only to students who have been admitted to the LL.B. program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below.

# Notes

# 1 Law Studies within the B.E.(Computer Systems) program

To qualify for the award of the degree of B.E.(Computer Systems) and the degree of LL.B., candidates are required to complete satisfactorily courses below.

First Year (25 units)	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
0ľ	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan

#### Second Year (27 units)

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 1007 Engineering Planning, Design & Communication	3
ELEC ENG 2007 Signals and Systems	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (23 units)	
COMP SCI 2000 Computer Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
ELEC ENG 3015 Communications Signals and Systems	3
Fourth Year (27 units)	
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
ELEC ENG 3020 Embedded Computer Systems	3
ELEC ENG 3022 Real Time Systems IV	3
Law Courses to the value of 6 units *	6
Fifth Year (25 units)	
COMP SCI 3001 Computer Networks & Applications	3
ELEC ENG 4035 Communications IV	2

 ELEC ENG 4036 A/B Design Project#
 6

 or
 6

 ELEC ENG 4039 A/B Honours Project#
 6

 Law courses to the value of 14 units\*
 14

#Students accepted into the Honours stream will take Honours Project and other students will take Design Project.

\* Students should consult the Law School at enrolment for advice on course selection.

Note: to complete the B.E.(Computer Systems) and LL.B. degree programs in minimum time, candidates are required to take all these courses even though it involves an overload.

# Later Years

In accordance with the Academic Program Rules for the LL.B. Please refer to the relevant section in this Calendar.

### 2 Direct Entry B.E.(Computer Systems)/ B.Ma. & Comp. Sc.

Refer to Academic Program Rule 6.4.3 for the requirements of this program.

# 3 B.E./B.Ma. & Comp. Sc. - Later Year entry:

- (a) A student who has completed Level III of the Computer Systems Engineering program, and who wishes concurrently to qualify for the degrees of B.E. and B.Ma. & Comp.Sc., may undertake one year of full-time study before proceeding to further studies within the Schools of Engineering. A student who wishes to do this is required to submit an application for admission to the Mathematical Sciences degree program through the South Australian Tertiary Admissions Centre. Students are also advised to consult the Dean or nominee to plan their program of studies.
- (b) Level III and Level IV courses previously counted towards a degree of Bachelor of Mathematical and Computer Sciences may not be counted towards the degree of B.E. in Computer Systems Engineering. This may affect the course choice for the B.Ma. & Comp. Sc. degree.

# 4 Arts studies combined with the B.E.(Computer Systems)

(see also section 6.4.4 of these Rules)

To qualify for the award of the degrees of B.E.(Computer Systems) and B.A., candidates are required to complete satisfactorily the courses listed below:

# First Year (24 units)

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
ELEC ENG 1007 Engineering Planning, Design & Communication	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3

MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also ta the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Second Year (24 units)	
Level I Arts course(s) to the value of 6 units	6
APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2000 Computer Systems	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (23 units)	
Level II Arts courses	8
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications, Signals and Systems	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
Fourth Year (23 units)	
Level III Arts Courses	12
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
ELEC ENG 4040 Management and Professional Practice for Engineers	2
Fifth Year (25 units)	
Arts Courses	6
COMP SCI 3001 Computer Networks and Applications	3
ELEC ENG 3016 Control III	3
ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4036 A/B Design Project #	6
or "	
ELEC ENG 4039 A/B Honours Project #	6
ELEC ENG 4037 Digital Microelectronics	2
${}^{\#}$ Students accepted into the Honours stream will take	

Honours Project and other student will take Design Project Level IV.

# Program of study for the direct entry B.E.(Computer Systems)/B.Ec. program

5

To qualify for both the award of the degree of B.E.(Computer Systems) and the degree of B.Ec., candidates are required to complete satisfactorily courses listed below :: First Year (24 units) 3 COMP SCI 1008 Computer Science IA 3 COMP SCI 1009 Computer Science IB ECON 1004 Principles of Microeconomics I 3 ELEC ENG 1006 Electrical Engineering I 3 either MATHS 1011 Mathematics IA 3 MATHS 1012 Mathematics IB 3 or MATHS 1013 Mathematics IMA \* 3 MATHS 1011 Mathematics IA\* 3 PHYSICS 1100 Physics IA 3 PHYSICS 1200 Physics IB 3 \* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. Note: The B.Ec. degree requirement that students take ECON 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking COMP SCI 1008/9 Computer Science I A/B at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II. Second Year (25 units) APP MTH 2000 Differential Equations 2 and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis 2 COMP SCI 2004 Data Structures and Algorithms 3 ECON 1000 Principles of Macroeconomics I 3 ECON 2006 Economic & Financial Data Analysis II 4 ELEC ENG 2007 Signals and Systems 3 ELEC ENG 2008 Electronics II 3 ELEC ENG 2010 A/B Practical Electronic Design II 3 STATS 2004 Laplace Transforms and Probability 2 and Statistical Methods Third Year (26 units) 3 COMP SCI 2000 Computer Systems ECON 2009 Consumers, Firms and Markets II Δ ECON 2011 Macroeconomic Theory and Policy II 4 3 ELEC ENG 2009 Engineering Electromagnetics

ELEC ENG 3015 Communications, Signals	0
and Systems	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
Fourth Year (24 units)	
COMMGMT 2007 Organisational Behaviour II	4
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
ELEC ENG 3022 Real Time Systems IV	3
Plus at least 8 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	8
Note: B.Ec. students currently must take an Economic Histo course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.	ory
Fifth Year (23 units)	
COMP SCI 3001 Computer Networks and Applications	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4036 A/B Design Project #	6
or	
ELEC ENG 4039 A/B Honours Project#	6
ELEC ENG 4037 Digital Microelectronics	2
STATS 4001 Reliability and Quality Control	2
Plus at least 8 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics (students must have a total of 16 units of Level III Economics courses.)	8
$^{\#}$ Students accepted into the Honours stream will take Honours Project and other student will take Design Project.	
Program of study for the direct entry B.E.(Computer Systems)/B.Fin. program	
To qualify for both the award of the degree of B.E.(Compute Systems) and the degree of B.Fin., candidates are required complete satisfactorily courses listed below:	
First Year (24 units)	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3

PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also ta the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Note: The B.Fin. degree requirement that students take EC 1008 Business Data Analysis I or STATS 1000 Statistical Practice I (3 units) will be considered satisfied by students taking COMP SCI 1008/9 Computer Science I A/B at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.	ON
Second Year (24 units)	
APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ECON 1000 Principles of Macroeconomics I	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
ECON 1009 International Financial Institutions and Markets I	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (26 units)	
ACCTING 1002 Accounting for Decision Makers I	3
COMP SCI 2000 Computer Systems	3
CORPFIN 2006 Business Finance II	4
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications, Signals and Systems	3
ELEC ENG 3017 Digital Electronics	
ELEC ENG 3020 Embedded Computer Systems	3
STATS 2002 Introduction to Mathematical Statistics II	2
STATS 2003 Statistical Practice II	2
Fourth Year (24 units)	
COMP SCI 3006 Software Engineering and Project	3
ECON 2012 Financial Economics II	4
ELEC ENG 3016 Control III	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
Plus at least 8 units of Level III Finance courses * chosen from those listed in Academic Program Rule 4.9.1 of the degree of Bachelor of Finance	8

# Fifth Year (24 units)

6.5.

	COMP SCI 3001 Computer Networks and Applications	3
	ELEC ENG 3022 Real Time Systems IV	3
	ELEC ENG 4035 Communications IV	2
	ELEC ENG 4036 A/B Design Project#	6
	or	
	ELEC ENG 4039 A/B Honours Project#	6
	ELEC ENG 4037 Digital Microelectronics	2
	Plus at least 8 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree of Bachelor of Finance including:	
	CORPFIN 3009 Portfolio Theory and Management III	4
	and either	
	APP MTH 3011 Financial Modelling Techniques II	4
	or	
	CORPFIN 3013 Options, Futures and Risk Management III	4
	# Students accepted into the Honours stream will take Honours Project and other student will take Design Project.	
	* Students must have a total of 16 units of Level III Finance courses	
7	Electrical and Electronic Engineering	
	Candidates are required to complete satisfactorily	
	courses to the value of 24 units at each of Levels I, II, III and IV:	
	Level I	
	COMP SCI 1008 Computer Science IA	3
	COMP SCI 1009 Computer Science IB	3
	ELEC ENG 1006 Electrical Engineering I	3
	ELEC ENG 1007 Engineering Planning, Design	
	and Communication	3
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	PHYSICS 1100 Physics IA	3
	PHYSICS 1200 Physics IB	3
	Level II	
	APP MTH 2000 Differential Equations	
	& Fourier Series	2
	APP MTH 2002 Vector Analysis	_
	and Complex Analysis	2
	COMP SCI 2000 Computer Systems	3
	COMP SCI 2004 Data Structures and Algorithms	3
	ELEC ENG 2007 Signals and Systems	3
	ELEC ENG 2008 Electronics II	3
	ELEC ENG 2009 Engineering Electromagnetics	3
	ELEC ENG 2010 A/B Practical Electronic Design II	3

STATS 2004 Laplace Transforms and Probability and Statistical Methods 2 Level III ELEC ENG 3015 Communications, Signals 3 & Systems 3 ELEC ENG 3016 Control III 3 ELEC ENG 3017 Digital Electronics 3 ELEC ENG 3018 RF Engineering III ELEC ENG 3019 A/B Practical Electrical 3 and Electronic Design III ELEC ENG 3020 Embedded Computer Systems 3 3 ELEC ENG 3021 Electric Energy Systems ELEC ENG 3024 Project Management 3 for Electrical Engineering ENG 3002 Engineering Communication ESL\* 2 \* Available only to students whose native language is not English. May be presented in lieu of an elective at Level IV. Level IV ELEC ENG 4036 A/B Design Project# 6 or ELEC ENG 4039 A/B Honours Project# 6 ELEC ENG 4037 Digital Microelectronics 2 ELEC ENG 4038 Financial Management 2 for Engineers ELEC ENG 4040 Management & Professional Practice for Engineers 2 ELEC ENG 4042 Power Electronics 2 & Drive Systems 2 ELEC ENG 4044 RF Engineering IV 2 ELEC ENG 4046 Telecommunications IV STATS 4001 Reliability & Quality Control 2 Engineering elective courses to the value of at least 4 units 4 **Engineering electives\*** APP MTH 3016 Telecommunications Systems Modelling III \*\* 3 APP MTH 4012 Communication Network Design 2 COMP SCI 3001 Computer Networks & Applications 3 3 COMP SCI 3004 Operating Systems COMP SCI 3005 Computer Architecture 3 3 ELEC ENG 3022 Real Time Systems IV 2 ELEC ENG 4033 Advanced Telecommunications ELEC ENG 4035 Communications IV 2

ELEC ENG 4041 Optical Communication Engineering	2
ELEC ENG 4043 Power Quality	2
& Condition Monitoring	2
ELEC ENG 4045 Signal Processing IV	2
ELEC ENG 4048 Automotive Electrical and Electronic Systems	2
ELEC ENG 4049 Analog Microelectronic Systems	2
ELEC ENG 4050 Systems Engineering	2
ELEC ENG 4051 Introduction	2
to Electronic Defence Systems	2
PURE MTH 3018 Coding & Cryptology III	3
# Students accepted into the Honours stream will take Honours Project and other students will take Design Project.	
*Not all courses are offered each year.	
**May not be presented with APP MTH 3015 Stochastic Modelling for Telecommunications III.	
Law courses**	
LAW 1001 Introduction to Australian Law	4
LAW 1002 Law of Torts	4
LAW 1003 Law of Contract	4
LAW 1004 Law of Crime	4
LAW 1005 Property Law	4
LAW 1007 Advanced Torts	4
LAW 2117 Contract Law II	4
Law electives - it is strongly recommended that Contract Law II and Advanced Torts should be taken as Law electives.	;
** available only to students who have been admitted to the LL.B. program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below.	6
Law Studies within the B.E.(Electrical & Electronic) program	
To qualify for the award of the degree of B.E. (Electrical & Electronic) and the degree of LL.B., candidates are required to complete satisfactorily courses below:	
First Year (25 units)	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3

the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	0
Second Year (23 units)	
APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 1007 Engineering Planning Design and Communication	3
ELEC ENG 2007 Signals and Systems	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (27 units)	
COMP SCI 2000 Computer Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
ELEC ENG 3015 Communications Signals and Systems	3
Law electives *	4
Fourth Year (27 units)	
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical and Electronic Design III	3
ELEC ENG 3020 Embedded Computer Systems	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3024 Project Management for Electrical Engineering	3
Law courses* to the value of 6 units	6
Fifth Year (26 units)	
ELEC ENG 4036 A/B Design Project # or	6
ELEC ENG 4039 A/B Honours Project <sup>#</sup>	6
ELEC ENG 4042 Power Electronics & Drive Systems	2
ELEC ENG 4044 RF Engineering IV either	2
ELEC ENG 4037 Digital Microelectronics	2
MECH ENG 4046 Telecommunications	2
Law courses* to the value of 14 units	14
# Students accepted into the Honours stream will take Honours Project and other students will take Design Projec	

PHYSICS 1100 Physics IA

PHYSICS 1200 Physics IB

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The

3

3

3

3

MATHS 1013 Mathematics IMA \*

MATHS 1011 Mathematics IA\*

Notes:

or

\* Students should consult the Law School at enrolment for advice on course selection.

Note: to complete the B.E. (Electrical & Electronic) and LL.B. degree programs in minimum time, candidates are required to take all these courses even though it involves an overload.

# Later Years

In accordance with the Academic Program Rules for the LL.B.

# 2 Program of study for the direct entry B.E.(Electrical & Electronic)/B.Sc.(Physics)

To qualify for the combined award of B.E.(Electrical  $\vartheta$  Electronic) and B.Sc.(Physics) candidates are required to complete satisfactorily courses as indicated below:

# First Year (24 units)

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
ELEC ENG 1007 Engineering Planning, Design & Communication	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
0r	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

### Second Year (23 units)

APP MTH 2000 Differential Equations	
and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
PHYSICS 2100 Physics IIA	4
PHYSICS 2200 Physics IIB	4
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (25 units)	
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications Signals and Systems	3

ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
ELEC ENG 3024 Project Management	
for Electrical Engineering	3
PHYSICS 2001 Classical Mechanics II	2
Plus at least one of:	
PHYSICS 2002, Classical Fields & Mathematical Models	2
or	
PHYSICS 2009 Photonics II	2
Fourth Year (24 units)	
ELEC ENG 3016 Control III	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 4038 Financial Management for Engineers	2
ELEC ENG 4040 Management & Professional Practice for Engineers	2
STATS 4001 Reliability & Quality Control	2
plus at least 6 units of Physics selected from:	
PHYSICS 3002 Experimental Physics III	3
PHYSICS 3006 Advanced Dynamics and Relativity III	3
PHYSICS 3009 Statistical Mechanics III	2
Fifth Year (25 units)	
ELEC ENG 4036 A/B Design Project #	6
or	
ELEC ENG 4039 A/B Honours Project #	6
ELEC ENG 4037 Digital Microelectronics	2
ELEC ENG 4042 Power Electronics & Drive Systems	2
ELEC ENG 4044 RF Engineering IV	2
ELEC ENG 4046 Telecommunications IV	2
PHYSICS 3004 Quantum Mechanics IIIA	2
Engineering elective course to the value of 2 units listed above	2
plus at least 6 units of courses selected from:	
PHYSICS 3014 Atmospheric & Environmental Physics III	3
PHYSICS 3020 Photonics III	3
PHYSICS 3022 Quantum Mechanics IIIB	2
and an appropriate course offered by Applied Mathematics and specified under Academic Program Rule 4.2.3.1 of the degree of Bachelor of Mathematical and Computer Sciences	6.
$^{\#}$ Students accepted into the Honours stream will take Honours Project and other students will take Design Project	
Direct Entry B.E.(Electrical & Electronic) /B.Ma.& Comp.Sc.	
Refer to Academic Program Rule 6.4.2 for the requirements	

Refer to Academic Program Rule 6.4.3 for the requirements of this program.

# 4 B.E./B.Ma. & Comp. Sc.

#### Later Year entry:

A student who has completed Level III of the Electrical and Electronic program, and who wishes concurrently to qualify for the degrees of B.E. and B.Ma. & Comp. Sc., may undertake one year of full-time study before proceeding to further studies within the Schools of Engineering. A student who wishes to do this is required to submit an application for admission to the Mathematical Sciences degree program through the South Australian Tertiary Admissions Centre.

# 5 Arts studies combined with the B.E.(Electrical & Electronic)

### (see also section 6.4.4 of these Rules)

To qualify for the combined award of B.E. (Electrical & Electronic) and B.A., candidates are required to complete satisfactorily courses listed below:

#### First Year (24 units)

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
ELEC ENG 1007 Engineering Planning, Design & Communication	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

### Second Year (24 units)

Level I Arts course(s) to the value of 6 units	6
APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2000 Computer Systems	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (23 units)	
Level II Arts course(s) to the value of 8 units	8
COMP SCI 2004 Data Structures and Algorithms	3

ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications Signals and Systems	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
Fourth Year (24 units)	
Level III Arts course(s) to the value of 12 units	12
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical and Electronic Design III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3024 Project Management for Electrical Engineering	3
Fifth Year (25 units)	
Arts course/s to the value of 6 units	6
ELEC ENG 3016 Control III	3
ELEC ENG 4036 A/B Design Project #	6
Or	
ELEC ENG 4039 A/B Honours Project#	6
ELEC ENG 4037 Digital Microelectronics	2
ELEC ENG 4040 Management & Professional Practice for Engineers	2
ELEC ENG 4042 Power Electronics & Drive Systems	2
ELEC ENG 4044 RF Engineering IV	2
ELEC ENG 4046 Telecommunications IV	2

<sup>#</sup> Students accepted into the Honours stream will take Honours Project and other students will take Design Project.

### Program of study for the direct entry B.E. (Electrical & Electronic)/B.Ec. program

6

To qualify for both the award of the degree of B.E. (Electrical & Electronic) and the degree of B.Ec. candidates are required to complete satisfactorily courses listed below:

First Year (24 units)

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Note: the B.Ec. degree requirement that students take ECON 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking COMP SCI 1008/1009 Computer Science I A/B at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.

### Second Year (25 units)

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ECON 1000 Principles of Macroeconomics I	3
ECON 2006 Economic and Financial Data Analysis II	4
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (26 units)	
COMP SCI 2000 Computer Systems	3
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications Signals and Systems	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
Fourth Year (24 units)	
COMMGMT 2007 Organisational Behaviour II	4
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical and Electronic Design III	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3024 Project Management for Electrical Engineering	3
Plus at least 8 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	8
Note: B.Ec. students currently must take an Economic Hist course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.	ory
Fifth Year (24 units)	
ELEC ENG 4036 A/B Design Project #	6
0r	
ELEC ENG 4039 A/B Honours Project #	6
ELEC ENG 4037 Digital Microelectronics	2
ELEC ENG 4042 Power Electronics & Drive Systems	2

ELEC ENG 4044 RF Engineering IV	2
ELEC ENG 4046 Telecommunications IV	2
STATS 4001 Reliability and Quality Control	2
Plus at least 8 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	8

# Students accepted into the Honours stream will take Honours Project and other students will take Design Project

# Program of study for the direct entry B.E.(Electrical & Electronic)/B.Fin. program

To qualify for both the award of the degree of B.E.(Electrical & Electronic) and the degree of B.Fin., candidates are required to complete satisfactorily courses listed below:

First Year (24 units)

7

COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Note: the B.Fin. degree requirement that students take ECON 1008 Business Data Analysis I or STATS 1000 Statistical Practice I (3 units) will be considered satisfied by students taking COMP SCI 1008/1009 Computer Science IA/B at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.

Second Year (24 units)

APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ECON 1000 Principles of Macroeconomics I	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
ECON 1009 International Financial Institutions and Markets I	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2

#### Third Year (26 units) ACCTING 1002 Accounting for Decision Makers I 3 COMP SCI 2000 Computer Systems 3 CORPFIN 2006 Business Finance II 4 **ELEC ENG 2009 Engineering Electromagnetics** 3 ELEC ENG 3015 Communications, Signals and Systems 3 ELEC ENG 3017 Digital Electronics З ELEC ENG 3020 Embedded Computer Systems 3 2 STATS 2002 Introduction to Mathematical Statistics II STATS 2003 Statistical Practice II 2 Fourth Year (27 units) ECON 2012 Financial Economics II 4 ELEC ENG 3016 Control III 3 ELEC ENG 3018 RF Engineering III 3 ELEC ENG 3019 A/B Practical Electrical and Electronic Design III 3 3 ELEC ENG 3021 Electric Energy Systems ELEC ENG 3024 Project Management for Electrical Engineering 3 Plus at least 8 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree of Bachelor of Finance 8 Fifth Year (22 units) ELEC ENG 4036A/B Design Project # 6 or ELEC ENG 4039A/B Honours Project # 6 ELEC ENG 4037 Digital Microelectronics 2 ELEC ENG 4046 Telecommunications IV 2 2 ELEC ENG 4042 Power Electronics & Drive Systems 2 ELEC ENG 4044 RF Engineering IV Plus at least 8 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree of Bachelor of Finance, including: CORPFIN 3009 Portfolio Theory and Management III 4 and either APP MTH 3011 Financial Modelling Techniques III 4 or CORPFIN 3013 Options, Futures and Risk Management III 4

# Students accepted into the Honours stream will take Honours Project and other students will take Design Project.

# 6.5.8 Mechanical Engineering

Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:

# Level I

C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
ELEC ENG 1008 Electrical Engineering IM	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MECH ENG 1000 Dynamics	2
MECH ENG 1001 Design Graphics	2
MECH ENG 1005 Engineering Planning, Design & Communication M	3
PHYSICS 1003 Physics IHE	3
Level II	
APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics & Control 1	3
MECH ENG 2020 Materials & Manufacturing	3
MECH ENG 2021 Thermo-Fluids I 3	
Level III	
APP MTH 3009 Engineering Mathematics III	2
ELEC ENG 3023 Electric Energy Systems M	2
ENG 3002 Engineering Communication ESL*	2

ENG 3002 Engineering Communication ESL 7 2 MECH ENG 3016 Aeronautical Engineering I MECH ENG 3017 Engineering and the Environment 2 2 MECH ENG 3020 Heat Transfer MECH ENG 3027 Design & Communication 3 MECH ENG 3028 Dynamics & Control II 3 MECH ENG 3029 Manufacturing Engineering 2 MECH ENG 3030 Structural Design & Solid Mechanics 3 MECH ENG 3031 Thermo-Fluids II 3

\* available only to students whose native language is not English; may be presented in lieu of an elective at Level IV

# Level IV

MECH ENG 4007 A/B Mechanical Honours Project Level IV $^{\#}$	8
Or	
MECH ENG 4041 A/B Mechanical Design Project Level IV $^{\#}$	8
MECH ENG 4038 Engineering Management & Professional Practice	2
Electives to the value of at least 14 units selected from the list below	14

# Electives\*

With the approval of the Head of the School of Mechanical Engineering, courses offered by other schools within the University may be included in the selection of electives.

Of the seven electives selected, not less than five must be those offered by the School of Mechanical Engineering.

APP MTH 4003 Aerodynamics**	2
APP MTH 4004 System Modelling & Simulation**	2
APP MTH 4007 Computational	
Fluid Dynamics (Engineering)**	2
APP MTH 4043 Transform Methods	
and Signal Processing**	2
MECH ENG 4002 Combustion Technology	•
and Emission Control	2
MECH ENG 4003 Fracture Mechanics	2
MECH ENG 4004 Engineering Acoustics	2
MECH ENG 4011 Advanced Automatic Control	2
MECH ENG 4013 Airconditioning	2
MECH ENG 4020 Advanced Vibrations	2
MECH ENG 4023 Advanced Topics	
in Fluid Mechanics	2
MECH ENG 4024 Materials Selection and	
Failure Analysis	2
MECH ENG 4025 Topics in Welded Structures 2	<u>)</u>
MECH ENG 4026 Environmental	
and Architectural Acoustics	2
MECH ENG 4027 Robotics M	2
MECH ENG 4028 Mechatronics IIIM	2
MECH ENG 4033 Mechanical Signature Analysis	2
MECH ENG 4039 Finance for Engineers	2
MECH ENG 4042 Fire Engineering	2
MECH ENG 4045 Advanced Manufacturing	
and Quality Systems	2

MECH ENG 4046 Computation Technique<br/>for Engineering Applications2MECH ENG 4054 Intro to Biomedical Engineering2MECH ENG 4055 Stresses in Plates and Shells2MECH ENG 4057 Biomechanical Engineering2MECH ENG 4059 Finite Element Analysis<br/>of Structures2

# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students will take Mechanical Design Project Level IV

\* Not all courses are offered each year. Information as to which courses are to be offered in a given year will be available at the time of enrolment.

\*\* not offered by School of Mechanical Engineering.

# Law courses\*

LAW 1001 Introduction to Australian Law	
LAW 1002 Law of Torts	4
LAW 1003 Law of Contract	4
LAW 1004 Law of Crime	4
LAW 1005 Property Law	4

Law electives - it is strongly recommended that students undertake Law of Contract II and Advanced Torts as electives.

\* available only to students who have been admitted to the LL.B. program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below.

# Notes:

# 1. Law Studies within the B.E.(Mech.) program

To qualify for the award of the degree of B.E.(Mech.) and the degree of LL.B., candidates are required to complete satisfactorily courses below:

First Year (25 units)

C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
ELEC ENG 1008 Electrical Engineering IM	2
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
MECH ENG 1000 Dynamics	2
MECH ENG 1001 Design Graphics	2
PHYSICS 1003 Physics IHE	3
* Studente urbe heve net telen SACE Stage 2 Specialist	

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

# Second Year (26 units)

Second Year (26 Units)	
APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis & Probability	
& Statistics	2
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2021 Thermo-Fluids I	3
Law courses	8
Third Year (24 units)	
ELEC ENG 3023 Electric Energy Systems M	2
Law electives*	8
MECH ENG 2019 Dynamics & Control 1	3
MECH ENG 2020 Materials & Manufacturing	3
MECH ENG 3029 Manufacturing Engineering	2
MECH ENG 3030 Structural Design & Solid Mechanics	3
MECH ENG 3031 Thermo-Fluids 2	3
$\ensuremath{^*}$ Students should consult the Law School at enrolment for advice on electives offered	
Fourth Year (26 units)	
Law Elective	4
MECH ENG 3016 Aeronautical Engineering I	2
MECH ENG 3017 Engineering and the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3028 Dynamics & Control II	3
MECH ENG 4007A /B Mechanical Honours Project	
Level IV #	8
OF	
MECH ENG 4041 A/B Mechanical Design Project Level IV <sup>#</sup>	8
Mechanical Engineering Electives* to the value of 4 units	4
* Chosen from the list above excluding MECH ENG 4011 Advanced Automatic Control.	
# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students will take Mechanical Design Project Level IV	I
Note: to complete the B.E.(Mechanical) and LL.B. degree programs in minimum time, candidates are required to take all these courses even though it involves an overload.	

Later Years

In accordance with the Academic Program Rules for the LL.B.

2

# Direct entry B.E.(Mechanical)/B.Sc.

(see also Academic Program Rule 6.4.2).

To qualify for the award of the degrees of B.E.(Mech.) and B.Sc. candidates are required to complete satisfactorily courses as indicated below:

First Year (26 units)

riist iedi (20 ullits)	
Science courses to the value of 18 units as follows	
CHEM 1100 Chemistry IA	3
and	
CHEM 1200 Chemistry IB	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
0ľ	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
and	
PHYSICS 1200 Physics IB	3
Engineering courses to the value of 8 units as follows	
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
MECH ENG 1000 Dynamics	2
Second Year (24 units)	
APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis & Probability & Statistics	2
	2
MECH ENG 1001 Design Graphics MECH ENG 2002 Stress Analysis and Design	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics and Control 1	4
MECH ENG 2020 Materials and Manufacturing	3
MECH ENG 2021 Thermo-Fluids I	3
Third Year (24 units)	Ū
MECH ENG 2011 Mechatronics IM	2
MECH ENG 3017 Engineering and the Environment	2
MECH ENG 3027 Design & Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3030 Structural Design & Solid Mechanics	3
MECH ENG 3031 Thermo-Fluids II	3
PHYSICS 2100 Physics IIA	4
PHYSICS 2200 Physics IIB	4

Fourth Year (24 units)	
Level III Science courses to the value of 24 units	24
Fifth Year (24 units)	
ELEC ENG 3023 Electric Energy Systems M	2
MECH ENG 3016 Aeronautical Engineering I	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 4007 A/B Mechanical Honours Project Level IV <sup>#</sup>	8
or	
MECH ENG 4041 A/B Mechanical Design Project Level IV <sup>#</sup>	8
MECH ENG 4038 Engineering Management & Professional Practice	2
Mechanical Engineering Electives* from the list above to the value of 8 units	8
# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students take Mechanical Design Project Level IV	will
* Of the four electives chosen, at least three must be fro the School of Mechanical Engineering.	m
Direct Entry B.E.(Mech)/B.Ma. & Comp. Sc.	
Refer to Academic Program Rule 6.4.3 for the requireme of this program. Note: the program of studies will vary depending on whether students wish to Major in Mathematics or in Computer Science for the B.Ma. & Comp	
Arts studies combined with the B.E.(Mech) (see also section 6.4.4 of these Rules)	
To qualify for the award of the degrees of B.E.(Mech) an B.A., candidates are required to complete satisfactorily courses as indicated below:	d
First Year (25 units)	
Level I Arts course(s) to the value of 6 units	6
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing 1	2
CHEM ENG 1003 Materials I	2
ELEC ENG 1008 Electrical Engineering IM either	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	0
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
MECH ENG 1000 Dynamics	2
PHYSICS 1003 Physics IHE	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematic IAA and MATHS 1011 Mathematics IA in lieu of MATHS	s

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Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Second Year (26 units) Level II Arts course/s to the value of 8 units 8 APP MTH 2000 Differential Equations & Fourier Series 2 APP MTH 2002 Vector Analysis & Complex Analysis 2 APP MTH 2009 Numerical Analysis & Probability & Statistics 2 MECH ENG 1001 Design Graphics 2 MECH ENG 2002 Stress Analysis & Design 3 MECH ENG 2018 Design Practice 4 MECH ENG 2021 Thermo-Fluids I 3 Third Year (26 units) Level III Arts course(s) to the value of 12 units 12 MECH ENG 2011 Mechatronics IM 2 MECH ENG 2019 Dynamics & Control 1 3 3 MECH ENG 2020 Materials & Manufacturing MECH ENG 3027 Design & Communication 3 MECH ENG 3031 Thermo-Fluids 2 3 Fourth Year (24 units) Arts course/s to the value of 6 units 6 APP MTH 3009 Engineering Mathematics III 2 2 ELEC ENG 3023 Electrical Energy Systems M 2 MECH ENG 3016 Aeronautical Engineering I MECH ENG 3017 Engineering and the Environment 2 MECH ENG 3020 Heat Transfer 2 MECH ENG 3028 Dynamics and Control 2 3 2 MECH ENG 3029 Manufacturing Engineering MECH ENG 3030 Structural Design & Solid Mechanics 3 Fifth Year (24 units) MECH ENG 4007 A/B Mechanical Honours Project Level IV # 8 ٥r MECH ENG 4041 A/B Mechanical Design Project Level IV # 8 MECH ENG 4038 Engineering Management & Professional Practice 2 Mechanical Engineering Elective\* courses to the value of at least 14 units from the list above 14 # Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students will take Mechanical Design Project Level IV \*Of the seven electives selected, not less than five must be those offered by the School of Mechanical Engineering. Program of study for the direct entry B.E.(Mechanical)/B.Ec. program

To qualify for both the award of the degree of B.E. (Mechanical) and the degree of B.E.c., candidates are required to complete satisfactorily courses as indicated below:

First Year (24 units)			
C&ENVENG 1001 Statics	2		
CHEM ENG 1002 Engineering Computing I	2		
CHEM ENG 1003 Materials I	2		
ECON 1004 Principles of Microeconomics I	3		
ELEC ENG 1008 Electrical Engineering IM	2		
either			
MATHS 1011 Mathematics IA	3		
MATHS 1012 Mathematics IB	3		
0ľ			
MATHS 1013 Mathematics IMA *	3		
MATHS 1011 Mathematics IA*	3		
MECH ENG 1000 Dynamics	2		
MECH ENG 1001 Design Graphics	2		
PHYSICS 1003 Physics IHE	3		

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Note: the B.Ec. degree requirement that students take ECON 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking CHEM ENG 1002 Engineering Computing I at Level I and APP MTH 2009 Numerical Analysis and Probability and Statistics at Level II.

Second Year (24 units)

APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis & Probability	
& Statistics	2
ECON 1000 Principles of Macroeconomics I	3
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics & Control 1	3
MECH ENG 2021 Thermo-Fluids I	3
Third Year (25 units)	
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
ELEC ENG 3023 Electric Energy Systems M	2
MECH ENG 2020 Materials and Manufacturing	3
MECH ENG 3027 Design & Communication	3
MECH ENG 3028 Dynamics and Control 2	3
MECH ENG 3030 Structural Design & Solid Mechanics	3
MECH ENG 3031 Thermo-Fluids 2	3

COMMGMT 2007 Organisational Behaviour II	4
ECON 2006 Economic and Financial Data Analysis II	4
MECH ENG 3029 Manufacturing Engineering	2
Plus at least 16 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	16
Note: B.Ec. students currently must take one Economic History course to qualify for the B.Ec. degree. Please refer the Academic Program Rules of the B.Ec. degree.	to
Fifth Year (22 units)	
MECH ENG 3016 Aeronautical Engineering I	2
MECH ENG 3017 Engineering and the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 4007 A/B Mechanical Honours Project Level IV $^{\#}$	8
or	
MECH ENG 4041 A/B Mechanical Design Project Level IV $^{\#}$	8
MECH ENG 4038 Engineering Management and Professional Practice	2
Plus at least 6 units of Mechanical Engineering elective* courses from the list above (may not present MECH ENG 4039 Finance for Engineers)	6
* Of the four electives selected, not less than three must b from the School of Mechanical Engineering.	e
# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students wi take Mechanical Design Project Level IV	ill
Program of study for the direct entry B.E.(Mechanical)/B.Fin. program	
To qualify for both the award of the degree of B.E. (Mechanical) and the degree of B.Fin., candidates are required to complete satisfactorily courses listed below:	
First Year (24 units)	
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing I	2
CHEM ENG 1003 Materials I	2
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1008 Electrical Engineering 1IM	2
either	
MATHS 1011 Mathematics IA	3

MATHS 1012 Mathematics IB

MATHS 1013 Mathematics IMA \*

MECH ENG 1001 Design Graphics PHYSICS 1003 Physics IHE

MATHS 1011 Mathematics IA\*

MECH ENG 1000 Dynamics

or

3

3

3

2

2

3

Fourth Year (26 units)

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Note: the B.Fin. degree requirement that students take ECON 1008 Business Data Analysis I or STATS 1000 Statistical Practice I (3 units) will be considered satisfied by students taking CHEM ENG 1002 Engineering Computing I at Level I and APP MTH 2009 Numerical Analysis and Probability and Statistics at Level II.

### Second Year (24 units)

Management III

APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis & Probability & Statistics	2
ECON 1000 Principles of Macroeconomics I	3
ECON 1009 International Finance Institutions and Markets I	3
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics & Control 1	3
MECH ENG 2020 Materials and Manufacturing	3
Third Year (26 units)	
ACCTING 1002 Accounting for Decision Makers	3
CORPFIN 2006 Business Finance II	4
ECON 2012 Financial Economics II	4
ELEC ENG 3023 Electric Energy Systems M	2
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 3028 Dynamics and Control 2	3
STATS 2002 Introduction to Mathematical Statistics II	2
STATS 2003 Statistical Practice II	2
Fourth Year (25 units)	
CORPFIN 3009 Portfolio Theory and Management III	4
MECH ENG 3016 Aeronautical Engineering I	2
MECH ENG 3027 Design & Communication	3
MECH ENG 3029 Manufacturing Engineering	2
MECH ENG 3030 Structural Design & Solid Mechanics	3
MECH ENG 3031 Thermo-Fluids II	3
Plus at least 8 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree Bachelor of Finance including:	
APP MTH 3011 Financial Modelling Techniques III	4
0r	
CORPFIN 3013 Options, Futures and Risk	٨

# Fifth Year (24 units)

6.5.9

	MECH ENG 3017 Engineering and the Environment	2
	MECH ENG 3020 Heat Transfer	2
	MECH ENG 4007 A/B Mechanical Honours Project Level IV $^{\#}$	8
	or	
	MECH ENG 4041 A/B Mechanical Design Project Level IV #	8
	MECH ENG 4038 Engineering Management for Professional Practice	2
	plus Mechanical Engineering elective courses to the value of at least 6 units (may not present MECH ENG 4039 Finance for Engineers)*	6
	Plus at least 4 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree of Bachelor of Finance	
	# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students will take Mechanical Design Project Level IV	
	* Of the four electives selected, not less than three must be from the School of Mechanical Engineering.	9
)	Mechatronic Engineering	
	Candidates are required to complete satisfactorily	
	courses to the value of 24 units at each of Levels I, II, III and IV:	
	Level I	
	C&ENVENG 1001 Statics	2
	CHEM ENG 1002 Engineering Computing I	2
	CHEM ENG 1003 Materials I	2
	ELEC ENG 1008 Electrical Engineering IM	2
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	MECH ENG 1000 Dynamics	2
	MECH ENG 1001 Design Graphics	2
	MECH ENG 1005 Engineering Planning, Design	
	and Communication M	3
	PHYSICS 1003 Physics IHE	3
	Level II	
	APP MTH 2000 Differential Equations	_
	& Fourier Series	2
	APP MTH 2002 Vector Analysis & Complex Analysis	2
	APP MTH 2009 Numerical Analysis & Probability	~
	and Statistics	2
	MECH ENG 2002 Stress Analysis & Design	3
	MECH ENG 2011 Mechatronics IM	2
	MECH ENG 2015 Electronics IIM	3

MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics & Control I	3
MECH ENG 2021 Thermo-Fluids I	3
Level III	
APP MTH 3009 Engineering Mathematics III	2
ELEC ENG 3020 Embedded Computer Systems	3
ELEC ENG 4042 Power Electronics	_
& Drive Systems	2
ENG 3002 Engineering Communication ESL*	2
MECH ENG 3014 Mechatronics II	2
MECH ENG 3017 Engineering & the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3027 Design & Communication	3
MECH ENG 3028 Dynamics & Control II	3
MECH ENG 3029 Manufacturing Engineering	2
MECH ENG 3032 Micro-Controller Programming	3
* Available only to students whose native language is not English; may be presented in lieu of an elective at Level IV	
Level IV	
MECH ENG 4019 A/B Mechatronics Honours Project Level IV $^{\#}$	8
or	
MECH ENG 4050 A/B Mechatronics Design Project Level IV $^{\#}$	8
MECH ENG 4011 Advanced Automatic Control	2
MECH ENG 4027 Robotics M	2
MECH ENG 4028 Mechatronics IIIM	2
MECH ENG 4033 Mechanical Signature Analysis*	2
MECH ENG 4038 Engineering Management	
and Professional Practice	2
Engineering Electives to the value of 6 units	6
* Students who have already passed MECH ENG 3002 Mechanical Signature Analysis should substitute an additior elective course offered by Mechanical Engineering	nal
Electives*	
Elective courses to the value of at least 6 units from	
the following, with the proviso that at least two electives must be selected from courses offered by th School of Mechanical Engineering:	е
APP MTH 4007 Computational Fluid	
Dynamics (Engineering)**	2
APP MTH 4043 Transform Methods and Signal Processing**	2
	2
MECH ENG 4004 Engineering Acoustics MECH ENG 4020 Advanced Vibrations	2
IVILUTI LING 4020 AUVAILUED VIDIATIONS	Z

	MECH ENG 4023 Advanced Topics in Fluid Mechanics	2
	MECH ENG 4024 Materials Selection and	
	Failure Analysis	2
	MECH ENG 4025 Topics in Welded Structures	2
	MECH ENG 4026 Environmental	•
	and Architectural Acoustics	2
	MECH ENG 4039 Finance for Engineers	2
	MECH ENG 4042 Fire Engineering	2
	MECH ENG 4045 Advanced Manufacturing and Quality Systems	2
	MECH ENG 4046 Computation Technique for Engineering Applications	2
	MECH ENG 4053 Advanced Digital Control	2
	* not all courses are offered each year.	
	** courses not offered by School of Mechanical Engineering	
	<sup>#</sup> Students accepted into the Honours stream will take Mechatronics Honours Project Level IV and other students will take Mechatronics Design Project Level IV	
Notes:		
1	Direct Entry B.E. (Mechatronic)/B.Ma. & Comp. Sc.	
	Refer to Academic Program Rule 6.4.3 for the requirements of this program. Note: the program of studies will vary depending on whether students wish to major in Mathematics or in Computer Science for the B.Ma. & Comp.Sc.	
2	Arts studies combined with the B.E.(Mechatronic)	
	(see also section 6.4.4 of these Rules)	
	To qualify for the award of the degrees of B.E.(Mechatronic) and B.A. candidates are required to complete satisfactorily courses as indicated below:	
	First Year (25 units)	
	Level I Art course(s) to the value of 6 units	6
	C&ENVENG 1001 Statics	2
	CHEM ENG 1002 Engineering Computing I	2
	CHEM ENG 1003 Materials I	2
	ELEC ENG 1008 Electrical Engineering IM	2
	either	
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	0ľ	
	MATHS 1013 Mathematics IMA *	3
	MATHS 1011 Mathematics IA*	3
	MECH ENG 1000 Dynamics	2
	PHYSICS 1003 Physics IHE	3
	* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS	

IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The

satisfactory completion of Mathematics IIM is in addition t the normal requirements of the B.E. plan	0
Second Year (26 units)	
Level II Art course(s) to the value of 8 units	8
APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis & Probability & Statistics	2
MECH ENG 1001 Design Graphics	2
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2018 Design Practice	4
MECH ENG 2021 Thermo-Fluids I	3
Third Year (25 units)	
Level III Art course/s to the value of 12 units	12
ELEC ENG 4042 Power Electronics & Drive Systems	2
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2015 Electronics IIM	3
MECH ENG 2019 Dynamics & Control I	3
MECH ENG 3032 Micro-Controller Programming	3
Fourth Year (25 units)	
Art course/s to the value of 6 units	6
APP MTH 3009 Engineering Mathematics III	2
ELEC ENG 3020 Embedded Computer Systems	3
MECH ENG 3014 Mechatronics II	2
MECH ENG 3017 Engineering and the Environment	2
MECH ENG 3020 Heat Transfer	2
MECH ENG 3027 Design & Communication	3
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 3029 Manufacturing Engineering	2
Fifth Year (24 units)	
MECH ENG 4011 Advanced Automatic Control	2
MECH ENG 4019A/B Mechatronics Honours Project	
Level IV #	8
Or	
MECH ENG 4050A/B Mechatronics Design Project Level IV #	8
MECH ENG 4027 Robotics M	2
MECH ENG 4028 Mechatronics IIIM	2
MECH ENG 4033 Mechanical Signature Analysis	2
MECH ENG 4038 Engineering Management & Professional Practice	2
Engineering Elective* courses to the value of at least 6 units from the list above	6
<sup>#</sup> Students accepted into the Honours stream will take Mechatronics Honours Project Level IV and other students will take Mechatronics Design Project Level IV	
* Of the three elective courses chosen, at least two must offered by the School of Mechanical Engineering.	be

Program of study for the direct entry B.E.(Mechatronic)/B.Ec. program

First Year (24 units)	
C&ENVENG 1001 Statics	2
CHEM ENG 1002 Engineering Computing	2
CHEM ENG 1003 Materials I	2
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1008 Electrical Engineering IM	2
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
MECH ENG 1000 Dynamics	2
MECH ENG 1001 Design Graphics	2
PHYSICS 1003 Physics IHE	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also ta the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. Note: the B.Ec. degree requirement that students take	
Note: the B.Ee. degree requirement that students take	

Note: the B.Ec. degree requirement that students take ECON1008 Business Data Analysis I (3 units) will be considered satisfied by students taking CHEM ENG 1002 Engineering Computing I at Level I and APP MTH 2009 Numerical Analysis and Probability and Statistics at Level II.

# Second Year (24 units)

APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2002 Vector Analysis & Complex Analysis	2
APP MTH 2009 Numerical Analysis & Probability	
& Statistics	2
ECON 1000 Principles of Macroeconomics I	3
MECH ENG 2002 Stress Analysis & Design	3
MECH ENG 2011 Mechatronics IM	2
MECH ENG 2015 Electronics IIM	3
MECH ENG 2018 Design Practice	4
MECH ENG 2019 Dynamics & Control I	3
Third Year (26 units)	
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
ELEC ENG 3020 Embedded Computer Systems	3
ELEC ENG 4042 Power Electronics & Drive Systems	2
MECH ENG 2021 Thermo-Fluids I	3
MECH ENG 3014 Mechatronics II	2
MECH ENG 3017 Engineering and the Environment	2

	MECH ENG 3027 Design and Communication	3
	MECH ENG 3032 Micro-Controller Programming	3
	Fourth Year (26 units)	
	COMMGMT 2007 Organisational Behaviour II	4
	ECON 2006 Economic and Financial Data Analysis II	4
	MECH ENG 3029 Manufacturing Engineering	2
	Plus at least 16 units of Level III Economics courses choser from those listed in Academic Program Rule 4.7.1 of the	1
	degree of Bachelor of Economics	16
	Note: B.Ec. students currently must take one Economic History course to qualify for the B.Ec. degree. Please refer t the Academic Program Rules of the B.Ec. degree.	0
	Fifth Year (25 units)	
	MECH ENG 3020 Heat Transfer	2
	MECH ENG 3028 Dynamics & Control 2	3
	MECH ENG 4011 Advanced Automatic Control	2
	MECH ENG 4019 A/B Mechatronics Honours Project Level IV #	8
	or	-
	MECH ENG 4050 A/B Mechatronics Design Project Level IV $^{\#}$	8
	MECH ENG 4027 Robotics M	2
	MECH ENG 4028 Mechatronics IIIM	2
	MECH ENG 4033 Mechanical Signature Analysis	2
	MECH ENG 4038 Engineering Management for professional Practice	2
	Engineering elective courses to value of at least2 units*	2
	*may not present MECH ENG 4039 Finance for Engineers.	
	<sup>#</sup> Students accepted into the Honours stream will take Mechatronics Honours Project Level IV and other students will take Mechatronics Design Project Level IV.	
6.5.10	Mining Engineering	
	Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I, II, III and IV:	
	Level I	
	C&ENVENG 1000 Engineering Planning and Design	2
	C&ENVENG 1001 Statics	2
	C&ENVENG 1003 Engineering Modelling	
	୫ Analysis I	2
	C&ENVENG 1006 Introduction to Mining Engineering	2
	C&ENVENG 1007 Geology for Mining Engineering	3
	CHEM ENG 1003 Materials I	2
	CHEM 1100 Chemistry IA	3
	MATHS 1011 Mathematics IA	3

	MATHS 1012 Mathematics IB	3
	MECHENG 1000 Dynamics	2
	Level II (not available in 2007)	
	APP MTH 2010 Differential Equations	
	and Statistical Methods (Civil)	3
	C&ENVENG 2006 Geotechnical Engineering II	2
	C&ENVENG 2014 Engineering Modelling	•
	& Analysis II	2
	C&ENVENG 2015 Construction & Surveying	2
	C&ENVENG 2025 Strength of Materials IIA	3
	C&ENVENG 2026 Environmental Engineering	2
	C&ENVENG 2032 Structural Design IIA	2
	C&ENVENG 2035 Water Engineering IIS1	2
	C&ENVENG 2034 Structural Design IIB	2
	Plus Geology course/s to value of 4 units	4
	Level III (not available in 2007)	
	Mining courses to the value of 18 units	18
	Electives to the value of 6 units chosen from the list provided below.	
	Level IV (not available in 2007)	
	Mining courses to the value of 18 units	18
	Electives to the value of 6 units chosen from the list	
	provided below.	
	Electives	
	Surface Mining Systems	3
	Underground Mining Systems	3
	Mine Ventilation II	3
	Advanced Mine Geotechnical Engineering	3
	Minerals Processing I	3
	Minerals Processing II	3
	Mine Equipment Optimisation	3
	Socio-Environmental Aspects of Mining	3
Notes:		
1	Program of study for the direct entry B.E.(Mining)/B.Ma. & Comp. Sc.	
	First Year (24 units)	
	C&ENVENG 1000 Engineering Planning and Design	2
	C&ENVENG 1001 Statics	2
	C&ENVENG 1003 Engineering Modelling and Analysis I	2
	C&ENVENG 1006 Introduction to Mining Engineering C&ENVENG 1007 Geology for Mining Engineers	2
	CHEM 1007 Geology for Mining Engineers CHEM 1100 Chemistry IA	3 3
	CHEM FIG 1003 Materials I	3 2
	MATHS 1011 Mathematics IA	2

MATHS 1012 Mathematics IB	3
MECH ENG 1000 Dynamics	2
Second Year (25 units) (not available for entry in 2007)	
APP MTH2000 Differential Equations & Fourier Series	2
APP MTH 2004 Laplace Transforms and Probability and Statistical Methods	2
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2014 Engineering Modelling & Analysis II	2
C&ENVENG 2015 Construction & Surveying	2
C&ENVENG 2025 Strength of Materials IIA	3
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2034 Structural Design IIB	2
Further Geology courses	4
Third Year (24 units) (not available for entry in 2007)	
Mathematical course electives	6
Contact Faculty for information on Mining courses.	18
Fourth Year (24 units) (not available for entry in 2007)	
Mathematical course electives at Level 3	21
Contact Faculty for information on Mining courses.	3
Fifth Year (24 units) (not available for entry in 2007)	
Electives to value of 6 units	6
Contact Faculty for information on Mining courses	18
Program of study for the direct entry B.E.(Mining)/B.Sc. program	
First Year (24 units)	
C&ENVENG 1001 Statics	2
C&ENVENG 1006 Introduction to Mining Engineering	2
GEOLOGY 1100 Earth's Interior I	3
GEOLOGY 1103 Earth Systems	3
C&ENVENG 1003 Engineering Modelling and Analysis I	2
MATHS 1011 Mathematics IA *	
MATHS 1013 Mathematics IMA *	3
MATHS 1012 Mathematics IB * or	3
MATHS 1011 Mathematics IA *	3
PHYSICS 1100 Physics 1A	3
PHYSICS 1200 Physics IB	3
Second Year (24 units) (not available for entry in 2007)	
APP MTH 2010 Differential Equations	
& Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2015 Construction & Surveying	2
C&ENVENG 2025 Strength of Materials IIA	3

C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2034 Structural Design IIB	2
GEOLOGY 2008 Landscape Processes & Envs II	4
Further Geology courses	2
Third Year (24 units) (not available for entry in 2007)	
GEOLOGY 2006 Igneous and Metamorphic Geology II	4
GEOLOGY 2007 Sedimentary and Structural Geology II	4
Further Mining courses	18
Fourth Year (24 units) (not available for entry in 2007)	
GEOLOGY 3008 Theoretical Geophysics III	3
GEOLOGY 3010 Remote Sensing (S)	3
GEOLOGY 3013 Tectonics III	3
GEOLOGY 3014 Surficial Geology III	3
GEOLOGY 3016 Igneous and Metamorphic Geology III	3
GEOLOGY 3017 Petroleum Exploration III	3
GEOLOGY 3018 Mineral Exploration III	3
GEOLOGY 3019 Field Geoscience Program III	3
Fifth Year (24 units) (not available for entry in 2007)	
Contact Faculty for information on Mining courses.	
6.5.11 Petroleum Engineering Candidates are required to complete satisfactorily courses to the value of at least 24 units at each of I, II, III and IV:	Levels
Level I	
C&ENVENG 1001 Statics	2
CHEM 1100 Chemistry IA	3
CHEM ENG 1000 Process Systems	2
CHEM ENG 1002 Engineering Computing I	2
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
PETROENG 1000 Introduction	
to the Petroleum Industry	2
PETROENG 1001 Introduction to Rock	
& Fluid Properties	2
PETROENG 1003 Introduction	
to Petroleum Geosciences	2
PHYSICS 1100 Physics IA	3
Level II	
APP MTH 2000 Differential Equations	
& Fourier Series	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
C&ENVENG 2001 Stress Analysis (C)	2

ELEC ENG 1006 Electrical Engineering I	3
MECH ENG 2021 Thermo-fluids I	3
PETROENG 2001 Reservoir Thermodynamics	
and Fluid Properties	3
PETROENG 2005 Sedimentology and Stratigraphy	3
PETROENG 2009 Formation Evaluation, Petrophysics	~
1	3
PETROENG 2010 Drilling Engineering	3
Level III	_
5 5	2
	3
	3
PETROENG 3005 Reservoir Characterisation	3
5	3
PETROENG 3007 Well Testing III and Pressure Transient Analysis III	3
PETROENG 3019 Structural Geology	
07	3
PETROENG 3020 Production Engineering	
and Optimisation	3
0 0	3
PETROENG 3023 Well Completion III	3
* Available only to students whose native language is not English - may be presented in lieu of 2 units, seek School advice.	
Level IV - Reservoir Option*	
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4003 Development Geology IV	2
PETROENG 4004A/B Petroleum Engineering	
Honours Project	6
or	
PETROENG 4020A/B Petroleum Engineering Design	_
-1	6
PETROENG 4007 Oil and Gas Resources & Reserves	2
PETROENG 4009 Integrated Reservoir	
	3
PETROENG 4022 Integrated Field Development Planning	
and Economics Project IV	3
PETROENG 4024 Decision-Making	_
,	2
PETROENG 4025 Gas Fields Optimisation IV	3
PETROENG 4028 Project Management	
*Well & Facilities options not offered in 2007.	2

# Notes:

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	Program of study for the direct entry B.E.(Petroleum)/B.E.(Chemical)	
	To qualify for the combined award of B.E.(Petroleum) and B.E.(Chemical), candidates are required to complete satisfactorily the courses as indicated below:	
	First Year (24 units)	
	CHEM 1100 Chemistry IA	3
	CHEM 1200 Chemistry IB	3
	C&ENVENG 1000 Engineering Planning and Design	2
	CHEM ENG 1000 Process Systems	2
	CHEM ENG 1002 Engineering Computing 1	2
	CHEM ENG 1003 Materials I	2
	either	
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB	3
	Or	
	MATHS 1013 Mathematics IMA *	3
	MATHS 1011 Mathematics IA*	3
	PETROENG 1001 Introduction to Rock & Fluid Properties	2
	PETROENG 1003 Introduction to Petroleum Geosciences	2
	* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tak the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E.	
	Second Year (25 units)	
	APP MTH 2000 Differential Equations and Fourier Series	2
	APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
	in Englisoring (onormoul)	-
	CHEM ENG 1005 Process Heat Transfer	2
	CHEM ENG 1005 Process Heat Transfer CHEM ENG 2000 Chemical Engineering	2
	CHEM ENG 1005 Process Heat Transfer CHEM ENG 2000 Chemical Engineering Thermodynamics	2 2
	CHEM ENG 2000 Chemical Engineering	
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process	2
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics	2 3 3
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering	2 3 3 2
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering PETROENG 2005 Sedimentology & Stratigraphy	2 3 3
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering	2 3 3 2
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering PETROENG 2005 Sedimentology & Stratigraphy PETROENG 2009 Formation Evaluation, Petrophysics	2 3 3 2 3
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering PETROENG 2005 Sedimentology & Stratigraphy PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties	2 3 3 2 3 3
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering PETROENG 2005 Sedimentology & Stratigraphy PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties PETROENG 2010 Drilling Engineering	2 3 3 2 3 3
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering PETROENG 2005 Sedimentology & Stratigraphy PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties PETROENG 2010 Drilling Engineering <i>Third Year (25 units)</i>	2 3 2 3 3 3 3
	CHEM ENG 2000 Chemical Engineering Thermodynamics CHEM ENG 2001 Chemical Process Principles II CHEM ENG 2003 Introductory Process Fluid Mechanics CHEM ENG 2006 Plant and Process Engineering PETROENG 2005 Sedimentology & Stratigraphy PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties PETROENG 2010 Drilling Engineering <i>Third Year (25 units)</i> CHEM ENG 3003 A/B Chemical Engineering Projects III	2 3 2 3 3 3 3 4

CHEM ENG 3015 Process Control and Instrumentation	2
CHEM ENG 3017 Kinetics and Reactor Design	3
PETROENG 3002 Economic Evaluations III	3
PETROENG 3005 Reservoir Characterisation & Modelling III	3
PETROENG 3019 Structural Geology and Seismic Methods	3
PETROENG 3020 Production Optimisation and Project	3
PETROENG 3021 Petroleum Exploration & Management	3
Fourth Year (24 units)	
CHEM ENG 4003 Process Dynamics and Control	2
CHEM ENG 4009 Advanced Chemical Engineering	2
CHEM ENG 4010 Advanced Separation Techniques & Thermal Processes	2
CHEM ENG 4014 Plant Design Project	6
CHEM ENG 4018 Industrial Economics and Management	2
CHEM ENG 4025 Chemical Engineering Projects IV	2
CHEM ENG 4026 Chemical Engineering Research Project (H)#	2
or	
CHEM ENG 4027 Chemical Engineering Research Project (N)#	2
Chemical Engineering Elective courses to the value of at least 6 units *	6
<sup>#</sup> Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project	(N).
* See Chemical Engineering electives above	
Fifth Year (24 units)	
Reservoir Option	
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4004A/B Petroleum Engineering Honours Project	6
or PETROENG 4020A/B Petroleum Engineering Design	
Project	6
PETROENG 4022 Integrated Field Development Planning and Economic Project IV	3
Plus PETROENG electives to the value of 12 units	12
Program of study for the direct entry B.E.(Petroleum)/B.E.(Civil & Environmental)	
To qualify for the combined award of B.E.(Petroleum) and B.E.(Civil & Environmental), candidates are required to complete satisfactorily the courses as indicated below:	
First Year (24 units)	
C&ENVENG 1000 Engineering Planning & Design	2
C&ENVENG 1001 Statics	2
C&ENVENG 1002 Civil & Environmental Engineering I	2
C&ENVENG 1003 Engineering Modelling and Analysis I	2

CHEM 1100 Chemistry IA	3
ENV BIOL 1002 Environmental Biology I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PETROENG 1001 Introduction to Rock & Fluid Properties	2
PETROENG 1003 Introduction to Petroleum Geosciences	2
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tak the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Second Year (24 units)	
APP MTH 2010 Differential Equations & Statistical Methods (Civil)	3
C&ENVENG 2006 Geotechnical Engineering II	2
C&ENVENG 2026 Environmental Engineering II	2
C&ENVENG 2032 Structural Design IIA	2
C&ENVENG 2033 Water Engineering II S1	2
C&ENVENG 2035 Water Engineering II S2	2
C&ENVENG 2036 Strength of Materials IIE	2
PETROENG 2001 Reservoir Thermodynamics and Fluid Properties	3
PETROENG 2005 Sedimentology and Stratigraphy	3
PETROENG 2008 Reservoir Engineering II	3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties	3
Third Year (26 units)	
C&ENVENG 2014 Engineering Modelling & Analysis II	2
C&ENVENG 3009 Environmental Engineering and Design III	3
C&ENVENG 3012 Geotechnical Engineering Design III	3
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 3014 Water Engineering and Design IIIB	2
CHEM ENG 3011 Transport Process in the Environment	2
PETROENG 3001 Reservoir Simulation III	3
PETROENG 3002 Economic Evaluation III	3
PETROENG 3019 Structural Geology and Seismic Methods	3
PETROENG 3020 Production Optimisation and Project	3

# Fourth Year (24 units)

Fourth Year (24 units)	
C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 4005A/B Civil & Environmental Research Project $^{\#}$	6
C&ENVENG 4034 Civil Engineering Management IV	3
Electives to the value of 12 units from the following	aroups:
Group II: Geotechnical Engineering	
C&ENVENG 4081 Expansive Soils and Footing Design	3
Group III: Water Engineering	
C&ENVENG 4077 Coastal Engineering and Design	3
C&ENVENG 4097 Analysis of Rivers	
and Sediment Transport	3
Group IV: Management Engineering	
C&ENVENG 4085 Traffic Engineering and Design	3
Group V: Environmental Engineering	
C&ENVENG 4087 Environmental Processes,	
Modelling and Design	3
C&ENVENG 4091 Waste Management Analysis	0
& Design	3
C&ENVENG 4092 Wastewater Engineering and Desig Alternatively, students may substitute up to 3 u	
Level II or III courses offered by the School of Mathematical Sciences*.	1115 01
Students may also, with the approval of the Hea Civil and Environmental Engineering, replace one more elective courses with appropriate courses by other schools within the University.	e or
# Students who are not selected for Honours will be to complete two additional final year specialisation or instead of the Research Project.	
Fifth Year (24 units) - Reservoir*	
Reservoir Engineering	
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4003 Development Geology IV	2
PETROENG 4004A/B Petroleum Engineering Honours Project	8
Or	
PETROENG 4020A/B Petroleum Engineering Design Project	8
PETROENG 4009 Integrated Reservoir Management I	V 3
PETROENG 4022 Integrated Field Development Plann and Economic Project IV	ing 3
PETROENG 4024 Decision-Making and Uncertainty IV	2
PETROENG 4025 Gas Fields Optimisation IV	3
* Well and Facilities options not offered in 2007	
Program of study for the direct entry B.E.(Petroleum)/B.E.(Civil & Structural)	
2.2.(. 0.0.000	

To qualify for the combined award of B.E.(Petroleum) and B.E.(Civil & Structural), candidates are required to complete satisfactorily the courses as indicated below:

First Year (23 units) C&ENVENG 1000 Engineering Planning & Design 2 2 **C&ENVENG 1001 Statics** C&ENVENG 1002 Civil & Environmental Engineering I 2 C&ENVENG 1003 Engineering Modelling and Analysis I 2 CHEM ENG 1003 Materials I 3 MATHS 1011 Mathematics IA 3 MATHS 1012 Mathematics IB 3 or MATHS 1013 Mathematics IMA \* 3 MATHS 1011 Mathematics IA\* 3 PETROENG 1000 Introduction to the Petroleum Industry 2 PETROENG 1001 Introduction to Rock & Fluid Properties 2 PHYSICS 1100 Physics IA 3 \* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. Second Year (25 units) APP MTH 2010 Differential Equations & Statistical Methods (Civil) 3 C&ENVENG 2006 Geotechnical Engineering II 2 2 C&ENVENG 2025 Strength of Materials II A 2 C&ENVENG 2032 Structural Design IIA C&ENVENG 2033 Water Engineering II S1 2 C&ENVENG 2034 Structural Design IIB 2 2 C&ENVENG 2035 Water Engineering II S2 PETROENG 2005 Sedimentology and Stratigraphy 3 PETROENG 2008 Reservoir Engineering II 3 PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties 3 Third Year (26 units) C&ENVENG 3001 Structural Mechanics IIIA 3 C&ENVENG 3005 Structural Design III (Concrete) 3 3 C&ENVENG 3007 Structural Design III (Steel) C&ENVENG 3012 Geotechnical Engineering Design III 3 C&ENVENG 3014 Water Engineering and Design IIIB 2 PETROENG 3002 Economic Evaluation III 3

PETROENG 3018 Drilling Engineering and Well Completion III 3 PETROENG 3019 Structural Geology & Seismic Methods 3 PETROENG 3020 Production Optimisation and Project 3

# Fourth Year (24 units)

Fourth Year (24 units)	
C&ENVENG 3013 Water Engineering and Design IIIA	2
C&ENVENG 4003 A/B Civil & Structural Engineering Research Project $^{\#}$	6
C&ENVENG 4034 Civil Engineering Management IV	3
Electives to the value of 12 units from the following groups At least 2 courses must be taken from one group.	:
Group I: Structural Engineering	
C&ENVENG 4070 Structural Dynamics due to Wind and Earthquakes	3
C&ENVENG 4094 High-Rise and Long-Span Steel Structure	3
C&ENVENG 4096 Retrofitting of Concrete Structures	3
Group II: Geotechnical Engineering	
C&ENVENG 4081 Expansive Soils and Footing Design	3
Group III: Water Engineering	
C&ENVENG 4077 Coastal Engineering and Design	3
C&ENVENG 4097 Analysis of Rivers	
and Sediment Transport	3
Group IV: Management Engineering	
C&ENVENG 4085 Traffic Engineering and Design	3
Group V: Environmental Engineering	_
C&ENVENG 4037 Introduction to Environmental Law	3
C&ENVENG 4087 Environmental Modelling, Management and Design	3
C&ENVENG 4091 Waste Management Analysis & Design	3
C&ENVENG 4092 Wastewater Engineering and Design	3
Alternatively, students may substitute up to 3 units of Level II or III courses offered by the School of Mathematical Sciences.	F
Students may also, with the approval of the Head of Civil and Environmental Engineering, replace one or more elective courses with appropriate courses offere by other schools within the University.	ed
<sup>#</sup> Students who are not selected for Honours will be require to complete two additional final year specialisation courses instead of the Research Project.	
Fifth Year (24 units) - Reservoir*	
Reservoir Engineering	
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4003 Development Geology IV	2
PETROENG 4004A/B Petroleum Engineering Honours Project	8
or	
PETROENG 4020A/B Petroleum Engineering	0
Design Project	8
PETROENG 4009 Integrated Reservoir Management	3

PETROENG 4022 Integrated Field Development Planning and Economic Project IV	3
PETROENG 4024 Decision-Making and Uncertainty IV	2
PETROENG 4025 Gas Fields Optimisation IV	3
* Well and Facilities options not offered in 2007.	
Program of study for the direct entry B.E.(Petroleum)/B.Sc.(Geology & Geophysics)	
To qualify for the combined award of B.E.(Petroleum) and B.Sc.(Geology & Geophysics), candidates are required to complete satisfactorily the courses as indicated below:	
First Year (25 units)	
C&ENVENG 1001 Statics	2
CHEM ENG 1000 Process Systems	2
CHEM ENG 1002 Engineering Computing I	2
GEOLOGY 1100 Earth's Interior I	3
GEOLOGY 1103 Earth Systems either	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PETROENG 1000 Introduction to the Petroleum Industry	2
PETROENG 1001 Introduction to Rock & Fluid Properties	2
PHYSICS 1100 Physics IA	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tal the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Second Year (25 units)	
APP MTH 2000 Differential Equations & Fourier Series	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
C&ENVENG 2001 Stress Analysis (C)	2
ELEC ENG 1006 Electrical Engineering 1	3
GEOLOGY 2008Surficial Geology II	4
MECH ENG 2021 Thermo-fluids I	3
PETROENG 2001 Reservoir Thermodynamics and Fluid Properties	3
PETROENG 2008 Reservoir Engineering.	3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties	3

#### Third Year (26 units) GEOLOGY 2006 Igneous and Metamorphic Geology II 4 **GEOLOGY 2007 Sedimentology** and Structural Geology II 4 PETROENG 3001 Reservoir Simulation III 3 PETROENG 3002 Economic Evaluation III 3 PETROENG 3018 Drilling Engineering and Well Completion III 3 PETROENG 3019 Structural Geology & Seismic Methods 3 PETROENG 3020 Production Optimisation 3 and Projects PETROENG 3021 Petroleum Exploration and Management 3 Fourth Year (24 units) **GEOLOGY 3008 Theoretical Geophysics III** 3 GEOLOGY 3010 Remote Sensing (S) 3 **GEOLOGY 3013 Tectonics III** 3 GEOLOGY 3014 Surficial Geology III 3 GEOLOGY 3016 Igneous and Metamorphic Geology III 3 **GEOLOGY 3017 Petroleum Exploration III** 3 **GEOLOGY 3018 Mineral Exploration III** 3 **GEOLOGY 3019 Field Geoscience Program III** 3 Fifth Year (24 units) - Reservoir \* PETROENG 4002 Enhanced Oil Recovery 3 PETROENG 4003 Development Geology IV 2 PETROENG 4004A/B Petroleum Engineering Honours Project 8 or PETROENG 4020A/B Petroleum Engineering Design Project 8 PETROENG 4009 Integrated Reservoir Management IV 3 PETROENG 4022 Integrated Field Development Planning 3 and Economic Project IV PETROENG 4024 Decision-Making and Uncertainty IV 2 PETROENG 4025 Gas Fields Optimisation IV 3 \* Well and Facilities options not offered in 2006 Program of study for the direct entry B.E.(Petroleum)/B.E.(Mechanical) To qualify for the combined award of B.E.(Petroleum) and B.E.(Mechanical), candidates are required to complete satisfactorily the courses as indicated below: First Year (25 units) **C&ENVENG 1001 Statics** 2 2 CHEM ENG 1002 Engineering Computing 1 CHEM ENG 1003 Materials I 2

#### MATHS 1011 Mathematics IA 3 MATHS 1012 Mathematics IB 3 nr 3 MATHS 1013 Mathematics IMA \* MATHS 1011 Mathematics IA\* 3 MECH ENG 1000 Dynamics 2 MECH ENG 1001 Design Graphics 2 PETROENG 1001 Introduction to Rock and Fluid Properties 2 PETROENG 1003 Introduction 2 to Petroleum Geosciences PHYSICS 1100 Physics IA 3 \* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. Second Year (26 units) APP MTH 2000 Differential Equations 2 and Fourier Series APP MTH 2009 Numerical Analysis and Probability and Statistics 2 MECH ENG 2002 Stress Analysis and Design 3 MECH ENG 2018 Design Practice 4 MECH ENG 2019 Dynamics & Control I 3 MECH ENG 2021 Thermo-Fluids 1 3 PETROENG 2005 Sedimentology and Stratigraphy 3 PETROENG 2008 Reservoir Engineering 3 PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties 3 Third Year (25 units) ELEC ENG 3023 Electric Energy Systems M 2 MECH ENG 3017 Engineering and the Environment 2 MECH ENG 3027 Design and Communication 3 MECH ENG 3030 Structural Design & Solid Mechanics 3 MECH ENG 3031 Thermo-Fluids II 3 PETROENG 3001 Reservoir Simulation III 3 PETROENG 3002 Economic Evaluation 3 PETROENG 3018 Drilling Engineering 3 and Well Completion III PETROENG 3019 Structural Geology and Seismic 3 Methods

either

ELEC ENG 1008 Electrical Engineering 1M

2

5

Fourth Year (26 units)	
MECH ENG 2020 Materials & Manufacturing	3
MECH ENG 3020 Heat Transfer	2
MECH ENG 3028 Dynamics and Control II	3
MECH ENG 4007 A/B Mechanical Project Level IV # or	8
MECH ENG 4041 A/B Design Project Level IV #	8
Mechanical Engineering Elective courses to the value of at least 10 units	10
# Students accepted into the Honours stream will take Mechanical Project Level 4 and other students will take Design Project Level IV.	
Fifth Year (24 units) - Reservoir*	
PETROENG 4002 Enhanced Oil Recovery	3
PETROENG 4003 Development Geology IV	2
PETROENG 4004A/B Petroleum Engineering Honours Project	8
PETROENG 4020A/B Petroleum Engineering Design Project	8
PETROENG 4009 Integrated Reservoir Management IV	3
PETROENG 4022 Integrated Field Development Planning and Economic Project IV	3
PETROENG 4024 Decision-Making and Uncertainty	2
PETROENG 4025 Gas Fields Optimisation IV	3
* Well and Facilities options not offered in 2007.	
Program of study for the direct entry B.E.(Petroleum)/B.Sc.(Physics)	
To qualify for the combined award of B.E. (Petroleum) and B.Sc. (Physics) candidates are required to complete satisfactorily the courses as indicated below:	
First Year (24 units)	
C&ENVENG 1001 Statics	2
GEOLOGY 1100 Earth's Interior I	3
GEOLOGY 1103 Earth Systems	3
either	
MATHS 1011 Mathematics IA*	3
MATHS 1012 Mathematics IB*	3
01	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PETROENG 1001 Introduction to Rock and Fluid Properties	2
PETROENG 1003 Introduction	0
to Petroleum Geosciences	2
PHYSICS 1100 Physics IA	3 3
PHYSICS 1200 Physics IB	J

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013/1014 Mathematics IM A/IMB in lieu of MATHS 1011/1012 Mathematics I A/IB. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirement of the B.E. plan. Second Year (25 units) APP MTH 2000 Differential Equations & Fourier Series 2 2 APP MTH 2002 Vector Analysis and Complex Analysis APP MTH 2009 Numerical Analysis and Probability 2 and Statistics 3 ELEC ENG 1006 Electrical Engineering 1 PETROENG 2005 Sedimentology & Stratigraphy 3 PETROENG 2008 Reservoir Engineering II 3 PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties 3 PHYSICS 2100 Physics IIA 4 PHYSICS 2200 Physics IIB 4 Third Year (25 units) PETROENG 3001 Reservoir Simulation III 3 PETROENG 3002 Economic Evaluation III 3 PETROENG 3005 Reservoir Characterisation & Modelling III 3 PETROENG 3007 Well Testing & Pressure Transient Analysis III 3 PETROENG 3018 Drilling Engineering III and Well Completion III 3 PETROENG 3019 Structural Geology & Seismic Methods 3 PETROENG 3020 Production Optimisation & Project 3 PHYSICS 2001 Classical Mechanics II 2 PHYSICS 2002 Classical Fields and Mathematical Methods II 2 Fourth Year (24 units) PHYSICS 3000 Computational Physics III 2 PHYSICS 3001 Electromagnetism and Optics III 3 3 PHYSICS 3002 Experimental Physics III PHYSICS 3003 Mathematical Physics III 2 PHYSICS 3004 Quantum Mechanics III 3 PHYSICS 3006 Advanced Dynamics and Relativity 3 PHYSICS 3009 Statistical Mechanics III 2 PHYSICS 3022 Quantum Mechanics IIIB 2 PHYSICS Electives Level III\* 4 Fifth Year (24 units) - Reservoir\* PETROENG 4002 Enhanced Oil Recovery 3 PETROENG 4003 Development Geology 2 PETROENG 4004A/B Petroleum Engineering Honours Project 8

	PETROENG 4020A/B Petroleum Engineering		Level II (not
	Design Project	8	APP MTH 200
	PETROENG 4009 Integrated Reservoir Management IV	3	with Differenti
	PETROENG 4022 Integrated Field Development Planning and Economic Project IV	3	BIOCHEM 210
	PETROENG 4024 Decision-Making and Uncertainty IV	2	BIOTECH 2005
	PETROENG 4025 Gas Fields Optimisation IV	3	CHEM2104 Ch
	* Well and Facilities options not offered in 2007.		CHEM 2204 C
651	2 Pharmaceutical Engineering		CHEM ENG 10
0.3.12	Candidates are required to complete satisfactorily		CHEM ENG 20
	courses to the value of 24 units at each of Levels I, II,		Thermodynam
	III and IV:		CHEM ENG 20 Fluid Mechani
	Level I		Pharmaceutica
	BIOLOGY 1101 Biology 1:		
	Molecules, Genes & Cells A	3	Level III (not
	or		CHEM 3214 N
	BIOLOGY 1102 Biology 1: Molecules, Genes & Cells B <sup>#</sup>	2	CHEM ENG 30
		3 2	CHEM ENG 30
	C&ENVENG 1000 Engineering Planning & Design		CHEM 4008 E
	CHEM 1100 Chemistry IA	3	PHARM 2002
	or		Plus Pharmace to the value of
	CHEM 1101 Foundations of Chemistry IA*	3	
	CHEM 1200 Chemistry IB	3	Level IV (not
	or		CHEM ENG 30
	CHEM 1201 Foundations of Chemistry IB	3	and Instrumen
	CHEM ENG 1000 Process Systems	2	CHEM ENG 40
	CHEM ENG 1003 Materials	2	CHEM ENG 40 and Managem
	CHEM ENG 1006 Introduction		PHARM 3009
	to Pharmaceutical Engineering	3	Plus Pharmace
	MATHS 1011 Mathematics IA**	3	to the value of
	and		6.5.13 Software Ei
	MATHS 1012 Mathematics IB*	3	
	or		COMP SCI 100
	MATHS 1013 Mathematics IMA*	3	COMP SCI100
	and		ELEC ENG 100
	MATHS 1011 Mathematics IA**	3	ELEC ENG 100
	*Students with a SACE Chemistry subject achievement sco	re	& Communicat
	of less than 13 will be required to take CHEM 1101 and CHEM 1201 in lieu of CHEM 1100 and CHEM 1200.		MATHS 1011
	# Students with a SACE Biology subject achievement score	Э	MATHS 1012
	of less than 13 will be required to take BIOLOGY 1101		Elective course

\*\* Students entering without SACE Stage 2 Mathematics will be required to take MATHS1013 and MATHS1011 in lieu of MATHS1011/1012. They will also be required to take MATHS2004: Mathematics IIM in summer semester in addition to the normal requirements of the BE plan.

Level II (not available in 2007)	
APP MTH 2003: Modelling	
with Differential Equations	2
BIOCHEM 2105 Biochemistry II (Biotechnology) A	4
BIOTECH 2005 Principles of Biotechnology 2	4
CHEM2104 Chemistry 2 AE	4
CHEM 2204 Chemistry IIBE	2
CHEM ENG 1005 Process heat transfer	2
CHEM ENG 2000: Chemical Engineering Thermodynamics	2
CHEM ENG 2003 Introductory Process	
Fluid Mechanics	2
Pharmaceutical Engineering course	2
Level III (not available in 2007)	
CHEM 3214 Medicinal and Biological Chemistry 3	3
CHEM ENG 3017 Kinetics and Reactor Design	3
CHEM ENG 3018 Fluid and Particle Mechanics	3
CHEM 4008 Environmental Engineering	2
PHARM 2002 Drugs, Chemicals and Health	4
Plus Pharmaceutical Engineering courses	
to the value of 9 units	9
Level IV (not available in 2007)	
CHEM ENG 3015 Process Control	
and Instrumentation	2
CHEM ENG 4008 Biochemical engineering	3
CHEM ENG 4018 Industrial Economics	
and Management	2
PHARM 3009 Fundamentals of Drug Development	3
Plus Pharmaceutical Engineering courses to the value of 14 units	14
	14
Software Engineering	
Level I	
COMP SCI 1008 Computer Science IA	3
COMP SCI1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
ELEC ENG 1007 Engineering, Planning Design	~
& Communication	3
MATHS 1011 Mathematics IA	3

Elective courses to the value of 6 units chosen from below:

3

Mathematics IB

BIOLOGY 1101 Biology 1: Molecules, Genes & Cells A*	3
or BIOLOGY 1102 Biology 1: Molecules, Genes & Cells B*	3
and BIOLOGY 1201 Biology 1: Human Perspectives	3
or BIOLOGY 1202 Biology 1: Organisms	3
or CHEM 1100 Chemistry 1A	3
and CHEM 1200 Chemistry 1B	3
or CHEM 1001A Foundations of Chemistry 1A	3
and CHEM 1001B Foundations of Chemistry 1B	3
or PHYSICS 1100 Physics IA	3
and PHYSICS 1200 Physics IB	3
or PSYCHOL 1000 Psychology 1A	3
and PSYCHOL 1001 Psychology 1B	3
or Level 1 Engineering courses (except CHEM ENG 1002 Engineering Computing 1 and C&ENVENG 1003 Engineering Modelling and Analysis1) or other course as approved by the Dean of the Faculty * Students who have not completed SACE Stage 2 Biology with a subject achievement score of 13 or above will be required to take Biology 1: Molecules, Genes and Cells A in	s 6
lieu of Biology I: Molecules, Genes and Cells B.	
Level II APP MTH 2000 Differential Equations & Fourier Series	2
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms	3
COMP SCI 2005 Systems Programming in	0
C and C + + COMP SCI 2006 Introduction	3
to Software Engineering	3
ELEC ENG 3020 Embedded Computer Systems	3
PURE MTH 2000 Discrete Mathematics II	2
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2

One Level II elective to be chosen chosen from:	
COMP SCI 2002 Database & Information Systems	3
COMP SCI 2003 Numerical Methods	3
ELEC ENG 2007 Signals and Systems	3
Level III *	
COMP SCI 3001 Computer Networks and	
Applications	3
COMP SCI 3002 Programming Techniques	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
COMP SCI 3013 Event Driven Computing	3
COMP SCI 3015 A/B Software Engineering	
Group Project 1	6
ELEC ENG 3017 Digital Electronics	3
Level IV *	
Either	
COMP SCI 4001 A/B Software Engineering	_
Group Project 2	8
or COMP SCI 4002 A/B Software Engineering	
Honours Project <sup>#</sup>	8
COMP SCI 4023 Software Process Improvement	3
COMP SCI 4054 High Integrity Software Engineering	3
Electives to be chosen from:	
COMP SCI 3007 Artificial Intelligence	3
COMP SCI 3009 Advanced Programming Paradigms	3
COMP SCI 3012 Distributed Systems	3
COMP SCI 3014 Computer Graphics	3
COMP SCI 4000 Software Architecture	3
COMP SCI 4022 Computer Vision	3
COMP SCI 4041 Language Translators	3
COMP SCI 4044 Computer Systems Security	3
COMP SCI 4077 Systems Modelling & Simulation	3
ELEC ENG 3022 Real Time Systems IV	3
PURE MTH 3010 Logic III	3
PURE MTH 3018 Coding and Cryptology III	3
$^{\#}$ Students accepted into the Honours stream will take	
Software Engineering Honours Project and other students v take Software Engineering Project 2	vill
*Level III and IV not available in 2007.	
(not forming part of the Academic Program Rules).	

A graduate who qualifies for the Bachelor of Engineering (Software Engineering) will be considered to have qualified for a major in Computer Science.

Notes

6.5.14 Telecommunications Engineering	
Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels I,	II,
III and IV:	
Level I	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
ELEC ENG 1007 Engineering Planning, Design and Communication	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB 3	
Level II	
APP MTH 2000 Differential Equations	
& Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2000 Computer Systems	3
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Level III	
APP MTH 3016 Telecommunications Systems	
Modelling III	3
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3015 Communications, Signals & Systems	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical and Electronic Design III	3
ELEC ENG 3020 Embedded Computer Systems	3
ENG 3002 Engineering Communication ESL*	2
* Available only to students whose native language is not English; may be presented in lieu of an elective at Level IV	

# Level IV

COMP SCI 3001 Computer Networks	
& Applications	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4036 A/B Design Project <sup>#</sup> or	6
ELEC ENG 4039 A/B Honours Project <sup>#</sup>	6
ELEC ENG 4038 Financial Management for Engineers	2
ELEC ENG 4040 Management & Professional Practice for Engineers	2
ELEC ENG 4045 Signal Processing IV	2
ELEC ENG 4046 Telecommunications IV	2
STATS 4001 Reliability & Quality Control	2
Elective courses to the value of at least 3 units	3
Electives*	
APP MTH 4012 Communication Network Design	2
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
ELEC ENG 3021 Electric Energy Systems	3
ELEC ENG 3022 Real Time Systems IV	3
ELEC ENG 4033 Advanced Telecommunications	2
ELEC ENG 4037 Digital Microelectronics	2
ELEC ENG 4041 Optical Communication Engineering	2
ELEC ENG 4042 Power Electronics & Drive Systems	2
ELEC ENG 4043 Power Quality & Condition Monitoring	2
ELEC ENG 4044 RF Engineering IV	2
ELEC ENG 4044 An Engineering W ELEC ENG 4048 Automotive Electrical	2
and Electronic Systems	2
ELEC ENG 4049 Analog Microelectronic systems	3
ELEC ENG 4050 Systems Engineering 2	
ELEC ENG 4051 Introduction	
to Electronic Defence Systems	2
PURE MTH 3018 Coding and Cryptology III	3
# Studente econted into the Heneure streem will take	

<sup>#</sup> Students accepted into the Honours stream will take Honours Project and other students will take Design Project Level I.

\* Not all courses offered are offered each year.

### Law courses\*\*

LAW 1001 Introduction to Australian Law	4
LAW 1002 Law of Torts	4
LAW 1003 Law of Contract	4
LAW 1004 Law of Crime	4
LAW 1005 Property Law	4

Law electives - it is strongly recommended that students take Law of contract II and Advanced Torts as electives.

\*\* Available only to students who have been admitted to the LL.B. program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below.

### Notes:

### 1 Law Studies within the B.E.(Telecomm.) program

To qualify for the combined award of B.E.(Telecomm.) and LL.B, candidates are required to complete satisfactorily courses below:

### First Year (25 units)

OMP SCI 1008 Computer Science IA	3
OMP SCI 1009 Computer Science IB	3
EC ENG 1006 Electrical Engineering I ther	3
ATHS 1011 Mathematics IA	3
ATHS 1012 Mathematics IB	3
ATHS 1013 Mathematics IMA *	3
ATHS 1011 Mathematics IA*	3
HYSICS 1100 Physics IA	3
HYSICS 1200 Physics IB	3

\* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.

### Second Year (23 units)

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ELEC ENG 1007 Engineering Planning, Design & Communication	3
ELEC ENG 2007 Signals and Systems	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2

### Third Year (27 units)

COMP SCI 2000 Computer Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
ELEC ENG 3015 Communications, Signals and Systems	3
LAW 1004 Law of Crime	4
LAW 1005 Property Law	4
Law electives *	4
Fourth Year (27 units)	
APP MTH 3016 Telecommunications Systems Modelling III	3
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
ELEC ENG 3020 Embedded Computer Systems	3
Law Courses*	6
Fifth Year (26 units)	
ELEC ENG 4036A/B Design Project #	6
0r	
ELEC ENG 4039A/B Honours Project #	6
ELEC ENG 4046 Telecommunications IV	2
Engineering elective courses to the value of at least 4 units	4
Law courses* to the value of 14 units	14
$^{\#}$ Students accepted into the Honours stream will take	

\*\* Students accepted into the Honours stream will take Honours Project and other students will take Design Project.

\* Students should consult the Law School at enrolment for advice on course selection.

Note: to complete the B.E.(Telecomm.) and LL.B. degree programs in minimum time, candidates are required to take all these courses even though it involves an overload.

#### Later Years

In accordance with the Academic Program Rules for the LL.B.

### 2 Direct Entry B.E. (Telecomm.)/B.Ma. & Comp. Sc.

Refer to Academic Program Rule 6.4.3 for the requirements of this program.

### 3 Arts Studies combined with the B.E.(Telecomm.)

(see also section 6.4.4 of these Rules)

To qualify for the combined award of B.E. (Telecomm.) and B.A., candidates are required to complete satisfactorily courses listed below:

First Year (24 units)	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ELEC ENG 1006 Electrical Engineering I	3
ELEC ENG 1007 Engineering Planning, Design	
and Communication	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also to here the students of the the st	ake
the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition t the normal requirements of the B.E. plan.	0
satisfactory completion of Mathematics IIM is in addition t	0
satisfactory completion of Mathematics IIM is in addition t the normal requirements of the B.E. plan.	:0 6
satisfactory completion of Mathematics IIM is in addition t the normal requirements of the B.E. plan. Second Year (24 units)	
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series	6 2
satisfactory completion of Mathematics IIM is in addition t the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis	6 2 2
satisfactory completion of Mathematics IIM is in addition t the normal requirements of the B.E. plan. Second Year (24 units) Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems	6 2
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems	6 2 3 3
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II	6 2 3 3 3
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems	6 2 3 3
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II	6 2 3 3 3
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II ELEC ENG 2010 A/B Practical Electronic Design II STATS 2004 Laplace Transforms and Probability	6 2 3 3 3 3 3
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. Second Year (24 units) Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II ELEC ENG 2010 A/B Practical Electronic Design II STATS 2004 Laplace Transforms and Probability and Statistical Methods	6 2 3 3 3 3 3
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II ELEC ENG 2010 A/B Practical Electronic Design II STATS 2004 Laplace Transforms and Probability and Statistical Methods <i>Third Year (23 units)</i>	6 2 3 3 3 3 3 2
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II ELEC ENG 2010 A/B Practical Electronic Design II STATS 2004 Laplace Transforms and Probability and Statistical Methods <i>Third Year (23 units)</i> Level II Arts course(s)	6 2 3 3 3 3 2 8
satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan. <i>Second Year (24 units)</i> Level I Arts course(s) to the value of 6 units APP MTH 2000 Differential Equations and Fourier Series APP MTH 2002 Vector Analysis and Complex Analysis COMP SCI 2000 Computer Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2007 Signals and Systems ELEC ENG 2008 Electronics II ELEC ENG 2010 A/B Practical Electronic Design II STATS 2004 Laplace Transforms and Probability and Statistical Methods <i>Third Year (23 units)</i> Level II Arts course(s) COMP SCI 2004 Data Structures and Algorithms	6 2 3 3 3 3 3 2 8 3

4

3

12

3 3

3

3

Fifth Year (26 units)	
Arts Courses	6
COMP SCI 3001 Computer Networks & Applications	3
ELEC ENG 3016 Control III	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4036 A/B Design Project #	6
0ľ	
ELEC ENG 4039 A/B Honours Project #	6
ELEC ENG 4040 Management & Professional Practice for Engineers	2
ELEC ENG 4045 Signal Processing IV	2
ELEC ENG 4046 Telecommunications IV	2
# Students accepted into the Honours stream will take Honours Project and other students will take Design Project.	
Program of study for the direct entry B.E.(Telecomm.)/B.Ec. program	
To qualify for the combined award of B.E.(Telecomm.) and B.Ec., candidates are required to complete satisfactorily courses listed below:	
First Year (24 units)	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also tak the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to the normal requirements of the B.E. plan.	
Note: the B.Ec. degree requirement that students take ECOI 1008 Business Data Analysis I (3 units) will be considered satisfied by students taking COMP SCI 1008/1009 Compute Science I A/B at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.	r
Second Year (25 units)	
APP MTH 2000 Differential Equations	2

and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	3
ECON 1000 Principles of Macroeconomics I	3

ELEC ENG 3020 Embedded Computer Systems

APP MTH 3016 Telecommunications Systems

ELEC ENG 3018 RF Engineering III

ELEC ENG 3019 A/B Practical Electrical

COMP SCI 3006 Software Engineering and Project

Fourth Year (24 units) Level III Arts Courses

& Electronic Design III

Modelling III

ECON 2006 Economic & Financial Data Analysis II	4
ELEC ENG 2007 Signals and Systems	3
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
STATS 2004 Laplace Transforms and Probability	
and Statistical Methods	2
Third Year (26 units)	
COMP SCI 2000 Computer Systems	3
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications Signals and Systems	3
ELEC ENG 3016 Control III	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
Fourth Year (24 units)	
APP MTH 3016 Telecommunications Systems	
Modelling III	3
COMMGMT 2007 Organisational Behaviour II	4
COMP SCI 3006 Software Engineering and Project	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
Plus at least 8 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	8
Note: B.Ec. students currently must take an Economic Histo course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.	ry
Fifth Year (25 units)	
COMP SCI 3001 Computer Networks & Applications	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4036 A/B Design Project #	6
or	
ELEC ENG 4039 A/B Honours Project#	6
ELEC ENG 4045 Signal Processing IV	2
ELEC ENG 4046 Telecommunications IV	2
STATS 4001 Reliability and Quality Control	2
Plus at least 8 units of Level III Economics courses chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics	8
# Students accepted into the Honours stream will take Honours Project and other students will take Design Project.	
Program of study for the direct entry B.E.(Telecomm.)/B.Fin. program	
To qualify for the combined award of B.E.(Telecomm.) and	

To qualify for the combined award of B.E.(Telecomm.) and B.Fin., candidates are required to complete satisfactorily courses listed below:

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First Year (24 units)	
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
ECON 1004 Principles of Microeconomics I	3
ELEC ENG 1006 Electrical Engineering I	3
either	
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
Or	
MATHS 1013 Mathematics IMA *	3
MATHS 1011 Mathematics IA*	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
* Students who have not taken SACE Stage 2 Specialist Maths will be required to take MATHS 1013 Mathematics IMA and MATHS 1011 Mathematics IA in lieu of MATHS 1011/1012 Mathematics I A/B. Such students must also take the Level II course MATHS 2004 Mathematics IIM. The satisfactory completion of Mathematics IIM is in addition to	

Note: The B.Fin. degree requirement that students take ECON 1008 Business Data Analysis I or STATS1000 Statistical Practice I (3 units) will be considered satisfied by students taking COMP SCI 1008/1009 Computer Science I A/B at Level I and STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.

the normal requirements of the B.E. plan.

Second Year (24 units)

APP MTH 2000 Differential Equations and Fourier Series	2
APP MTH 2002 Vector Analysis and Complex Analysis	2
COMP SCI 2004 Data Structures and Algorithms	2
ECON 1000 Principles of Macroeconomics I	3
ELEC ENG 2007 Signals and Systems	3
6	-
ELEC ENG 2008 Electronics II	3
ELEC ENG 2010 A/B Practical Electronic Design II	3
ECON 1009 International Financial Institutions and Markets I	3
STATS 2004 Laplace Transforms and Probability and Statistical Methods	2
Third Year (26 units)	
ACCTING 1002 Accounting for Decision Makers I	3
COMP SCI 2000 Computer Systems	3
CORPFIN 2006 Business Finance II	4
ELEC ENG 2009 Engineering Electromagnetics	3
ELEC ENG 3015 Communications, Signals and Systems	3
ELEC ENG 3017 Digital Electronics	3
ELEC ENG 3020 Embedded Computer Systems	3
STATS 2002 Introduction to Mathematical Statistics II	2
STATS 2003 Statistical Practice II	2

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### Fourth Year (27 units)

routh four [27 units]	
APP MTH 3016 Telecommunications Systems Modelling III	3
COMP SCI 3006 Software Engineering and Project	3
ECON 2012 Financial Economics II	4
ELEC ENG 3016 Control III	3
ELEC ENG 3018 RF Engineering III	3
ELEC ENG 3019 A/B Practical Electrical & Electronic Design III	3
Plus at least 8 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree Bachelor of Finance.	
Fifth Year (23 units)	
COMP SCI 3001 Computer Networks and Applications	3
ELEC ENG 4035 Communications IV	2
ELEC ENG 4036 A/B Design Project #	6
Or	
ELEC ENG 4039 A/B Honours Project#	6
ELEC ENG 4045 Signal Processing IV	2
ELEC ENG 4046 Telecommunications IV	2
Plus at least 8 units of Level III Finance courses chosen from those listed in Academic Program Rule 4.9.1 of the degree Bachelor of Finance including:	
CORPFIN 3009 Portfolio Theory and Management III	4
and either	
APP MTH 3011 Financial Modelling Techniques II	4
Oľ	
CORPFIN 3013 Options, Futures and Risk Management III	4
# Students accepted into the Honours stream will take Honours Project and other students will take Design Project	
Unacceptable combinations of courses	
No candidate will be permitted to count towards an award any course, together with any other course,	

award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 6.7 Graduation

6.6

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Bachelor of Engineering in Aerospace Engineering Bachelor of Engineering in Automotive Engineering Bachelor of Engineering in Mechanical Engineering Bachelor of Engineering in Mechatronic Engineering – Graduate Attributes

The objectives of the undergraduate programs in Aerospace, Automotive, Mechanical and Mechatronic Engineering are to support the mission of the University of Adelaide to provide an inclusive curriculum that allows all students to learn and progress unhindered through the program, and to produce graduates who:

- Have advanced and internationally recognised skills, understanding and knowledge (scientific knowledge, problem solving skills, IT skills, analytical skills, in-depth technical competence, communication skills and flexibility) necessary for a successful career in Aerospace, Mechanical or Mechatronic Engineering.
- Have the ability to locate, analyse evaluate and synthesise information from a wide variety of sources in a planned and timely manner.
- Can contribute as effective members of multi-disciplinary and multi-cultural teams with the capacity to be a leader or manager as well as an effective team member with skills of a high order in interpersonal understanding, teamwork and communication.
- Have a commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life and are able, by self directed study, to remain up to date with developments in their profession.
- Have an ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems and are able to guide developments in the profession.
- Understand the context in which they work (economics, finance, teamwork, competition) while remaining committed to the highest standard of professional endeavour, not losing sight of the need for technical excellence and environmental responsibility.
- · Can communicate with government and the community on engineering issues.
- Are educated in a broad sense, are socially, environmentally, ethically and professionally responsible, understand the need for and the principles of sustainable development, are well informed and have an ability to take a leadership role their place as leaders in the community.
- · Are familiar with current best practice in aerospace, mechanical or mechatronic engineering.
- Are capable of synthesising fundamental engineering science and engineering practice in the creation of engineering systems and have the ability to utilise a systems approach to design and operational performance.

Included in the above attributes are those required by Engineers Australia who accredit our programs. These have been specified by Engineers Australia and require that graduates have:

- · Ability to apply knowledge of basic science and engineering fundamentals.
- · Ability to communicate effectively, not only with engineers but also with the community at large.
- · In-depth technical competence in at least one engineering discipline.
- · Ability to undertake problem identification, formulation and solution

### BE (Aerospace, Automotive, Mechanical, Mechatronic): Graduate Attributes - cont'd.

- · Ability to utilise a systems approach to design and operational performance.
- Ability to function effectively as an individual and in multidisciplinary and multicultural teams, with the capacity to be a leader or manager as well as an effective team member.
- Understanding of the social, cultural, global, and environmental responsibilities of the professional engineer, and the need for sustainable development.
- Understanding of the principles of sustainable development.
- Understanding of professional and ethical responsibilities and commitment to them.
- Expectations of the need to undertake lifelong learning, and the capacity to do so.

## Bachelor of Engineering in Chemical Engineering – Graduate Attributes

- · The ability to apply knowledge of basic science and engineering fundamentals.
- · Ability to communicate effectively, not only with engineers but also with the community at large.
- · In-depth technical competence in at least one engineering discipline.
- · Ability to utilise a systems approach to design and operational performance.
- Ability to function effectively as an individual and in multi-disciplinary and multicultural teams; with the capacity to be a leader or manager as well as an effective team manager.
- Understanding the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development.
- Understanding of professional and ethical responsibilities and commitment to them; and expectation of the need to
  undertake lifelong learning, and capacity to do so.
- Ability to focus on the integration of process safety considerations with environmental concerns, waste minimisation, and control system specifications.
- Confidence to tackle real-world problems and issues central to engineering and to work as individuals and cooperatively in multidisciplinary and multicultural teams.
- · Enthusiasm and interest for undertaking life-long learning and the continual updating of their engineering skills.

# Bachelor of Engineering in Civil & Environmental Engineering – Graduate Attributes

### Technical Knowledge and Application of Knowledge Skills

- · Competence in engineering fundamentals.
- · Competence in Environmental Engineering plus at least one other of the following areas of Civil Engineering:

Water engineering or

Geotechnical engineering.

- · Competence in using computers and information technology effectively.
- · Ability to apply an integrative or systems approach to solving engineering problems.
- · Ability to prepare and interpret engineering sketches and drawings.
- · Awareness of uncertainty and recognising limitations of engineering approaches and systems.
- · Awareness for the need for sustainable systems and principles of sustainable design.
- · Awareness of the assessment and the management of risk.

### **Thinking Skills**

- · Competence in problem identification, formulation and solution.
- · Competence in critical and independent thinking.
- · Competence in creative and innovative thinking.
- · Ability to effectively synthesise information and ideas.
- · Ability to conduct investigations and research into Civil and Environmental Engineering problems.

### **Technical Professional Skills**

- · Familiarity with project management skills.
- · Awareness of business and financial management.
- · Awareness of human resources management issues.
- · Awareness of legal issues in relation to Civil and Environmental Engineering.

### **Personal Skills and Attitudes**

- · Competence to adapt to a changing society (lifelong learning skills).
- · Ability to act in a professional manner.
- Ability to communicate effectively with others in the engineering profession and the community written, oral and listening skills.
- Ability to take on a leadership role.
- · Ability to work effectively as a member of a team.
- · Ability to manage effectively the allocation of time in performing tasks.
- · Ability to work comfortably with other disciplines.
- · Awareness of engineering ethics.
- Awareness of the social, cultural, political, international and environmental context of professional engineering practice.

# Bachelor of Engineering in Civil & Structural Engineering – Graduate Attributes

### Technical Knowledge and Application of Knowledge Skills

- · Competence in engineering fundamentals.
- · Competence in Structural Engineering plus at least one other of the following areas of Civil Engineering:

Water engineering or

Geotechnical engineering.

- · Competence in using computers and information technology effectively.
- · Ability to apply an integrative or systems approach to solving engineering problems.
- · Ability to prepare and interpret engineering sketches and drawings.
- · Awareness of uncertainty and recognising limitations of engineering approaches and systems.
- · Awareness for the need for sustainable systems and principles of sustainable design.
- · Awareness of the assessment and the management of risk.

### **Thinking Skills**

- Competence in problem identification, formulation and solution.
- · Competence in critical and independent thinking.
- · Competence in creative and innovative thinking.
- · Ability to effectively synthesise information and ideas.
- · Ability to conduct investigations and research into Civil and Structural Engineering problems.

### **Technical Professional Skills**

- · Familiarity with project management skills.
- · Awareness of business and financial management.
- · Awareness of human resources management issues.
- Awareness of legal issues in relation to Civil and Structural Engineering.

### Personal Skills and Attitudes

- · Competence to adapt to a changing society (lifelong learning skills).
- · Ability to act in a professional manner.
- Ability to communicate effectively with others in the engineering profession and the community written, oral and listening skills.
- Ability to take on a leadership role.
- Ability to work effectively as a member of a team.
- · Ability to manage effectively the allocation of time in performing tasks.
- · Ability to work comfortably with other disciplines.
- · Awareness of engineering ethics.
- · Awareness of the social, cultural, political, international and environmental context of professional engineering practice.

Bachelor of Engineering in Computer Systems Engineering Bachelor of Engineering in Electrical & Electronic Engineering Bachelor of Engineering in Software Engineering Bachelor of Engineering in Telecommunications Engineering – Graduate Attributes

- An advanced level of knowledge and understanding of the theory and practice of Electrical and Electronic, Computer Systems or Telecommunications Engineering and the fundamentals of science and mathematics that underpin these disciplines.
- · A commitment to maintain an advanced level of knowledge throughout a lifetime of engineering practice and the skills to do so.
- The ability to apply knowledge in a systematic and creative fashion to the solution of practical problems.
- A commitment to the ethical practice of engineering and the ability to practice in a responsible manner that is sensitive to social, cultural, global, legal, professional and environmental issues.
- · Interpersonal and communication skills for effective interaction with colleagues and the wider community.
- An ability to work effectively both independently and cooperatively as a leader, manager or team member with multidisciplinary or multi-cultural teams.
- · An ability to identify, formalise, model and analyse problems.
- · The capacity to design, optimise, implement, test and evaluate solutions.
- An ability to plan, manage and implement solutions that balance considerations of economy, quality, timeliness and reliability
  as well as social, legal and environmental issues.
- Personal attributes including: perseverance in the face of difficulties; initiative in identifying problems or opportunities; resourcefulness in seeking solutions; and a capacity for critical thought.
- Skills in the use of advanced technology, including an ability to build software to study and solve a range of problems.
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.
- · An ability to utilise a systems approach to design and operational performance.
- · Understanding of the principles of sustainable design and development.

These programs also foster the graduate attributes of the University of Adelaide and the Institution of Engineers Australia. These should be read in conjunction with the list above.

## Bachelor of Engineering in Petroleum Engineering – Graduate Attributes

### Educational Goals

- Be practical, employable and qualified petroleum engineers that can successfully pursue careers in the oil and gas
  production and services industries or other similar pursuits.
- Understand the fundamental principles of science and engineering behind the technology of petroleum engineering, in
  order to keep their education from becoming outdated and to give them the capability of self-instruction.
- Serve society by encouraging the ideals of ethical behaviour, professionalism, and environmentally responsible use of natural resources.

Graduates of the program should demonstrate:

- The ability to apply the knowledge of mathematics, chemistry, physics, geology, economics, computing, and engineering to solve petroleum engineering problems.
- The ability to formulate and solve petroleum engineering problems using modern techniques, tools and experimental procedures.
- The ability to apply the knowledge of modern valuation and decision-making methods to optimise the use of corporate and personal resources.
- The ability to design processes or systems to solve petroleum engineering problems.
- · The ability to communicate effectively in written and oral form.
- The ability to work in teams and interact with colleagues and the public in an ethical, professional and safe manner.
- · An appreciation of and an ability to continue to engage in lifelong learning.

### Academic Program Rules

### 1 General

- 1.1 There shall be a degree of Bachelor of Mathematical Sciences.
- 1.2 There shall be an Honours degree of Bachelor of Mathematical Sciences. A candidate may obtain either a degree of Bachelor of Mathematical Sciences or an Honours degree of Bachelor of Mathematical Sciences or both.

### 2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the equivalent part-time study.

### 3 Assessment and examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.
- 3.4 A candidate who fails a course for the Bachelor degree or obtains a conceded pass result and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 3.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or

for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

### 4 Qualification requirements

- 4.1 General: the degree of Bachelor of Mathematical Sciences
- 4.1.2 To qualify for the Bachelor degree a candidate shall, subject to the conditions and modifications specified under 3.3 above, pass courses from 4.2 below to the value of at least 72 units which satisfy the following requirements:

A candidate shall pass Level I courses to the value of at least 18 units including:	,
APP MTH 1000 Scientific Computing I	3
MATHS 1008 Mathematics	
or Information Technology I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
STATS 1000Statistical Practice I	3
candidate shall pass Level II courses to the value of at least 21 units including:	
APP MTH 2000 Differential Equations and Fourier Series	2
	2
PURE MTH 2002 Algebra II	2
PURE MTH 2003 Real Analysis II	2
PURE MTH 2005 Multivariable Calculus II	2
STATS 2002 Introduction o Mathematical Statistics II	
STATS 2011 Statistical Modelling II	2
A candidate shall pass Level III courses to the value of at least 24 units including:	
	of at least 18 units including: APP MTH 1000 Scientific Computing I MATHS 1008 Mathematics or Information Technology I MATHS 1011 Mathematics IA MATHS 1012 Mathematics IB STATS 1000Statistical Practice I candidate shall pass Level II courses to the value of at least 21 units including: APP MTH 2000 Differential Equations and Fourier Series APP MTH 2008 Operations Research II PURE MTH 2003 Real Analysis II PURE MTH 2003 Real Analysis II PURE MTH 2005 Multivariable Calculus II STATS 2002 Introduction o Mathematical Statistics II STATS 2011 Statistical Modelling II A candidate shall pass Level III courses to the

- at least 18 units of study chosen from Applied Mathematics, and/or Pure Mathematics, and/or Statistics
- (ii) Communication Skills III.

Other courses may also be chosen from 4.2.3.3, 4.2.3.4, 4.2.3.5, 4.2.3.6 below.

- 4.1.3 A candidate may present for the degree courses with the result of Conceded Pass within the following limits: courses with an aggregate units value of not more than 6, provided that no course thus presented has a units value of more than 3.
- 4.1.4 A graduate who wishes to qualify for the degree of Bachelor of Mathematical Sciences and to count towards that degree courses which have already been presented for another degree may do so providing such a candidate presents a range of courses which fulfils the requirements of 4.1.2 above, and undertakes Level II and III courses to the value of at least 24 units from 4.2.2 and 4.2.3 below which have not been presented for any other degree. Of these 24 units, 20 must comprise Level III courses and at most 4 may comprise Level II courses .
- 4.1.5 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for the degree.
- 4.1.6 Except with permission of the Faculty, students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Mathematical Sciences will be required as a minimum to complete Level III courses from 4.2.3 with an aggregate units value of 24.
- 4.1.7 With special permission of the Faculty a student who has completed most of the courses for the degree of Bachelor of Mathematical Sciences at the University of Adelaide including Level III courses with an aggregate units value of 12 may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- 4.1.8 To complete a major in a Mathematical Sciences discipline, a candidate shall satisfy the criteria specified below and present passes (not Conceded Passes) in the required courses.

### **Applied Mathematics**

Level III courses offered in Applied Mathematics to the value of at least 10 units.

### Mathematical Sciences

Candidates who do not otherwise qualify for a major in Applied Mathematics, Pure Mathematics or Statistics and who have successfully completed Level III courses offered in the School of Mathematical Sciences to the value of at least 12 units will qualify for the award of a major in Mathematical Sciences.

### Pure Mathematics

Level III courses offered in Pure Mathematics to the value of at least 10 units.

### Statistics

Level III courses in Statistics to the value of at least 10 units, including STATS 3001 Statistical Modelling III, and STATS 3006 Mathematical Statistics III, and at least 4 units chosen from:

APP MTH 3001 Applied Probability III\*

APP MTH 3003 Life Contingencies III\*

APP MTH 3016 Telecommunications Systems Modelling III\*

STATS 3000 Industrial Statistics III

STATS 3002 Environmental Statistics III

STATS 3003 Sampling Theory and Practice III

STATS 3005 Time Series III

STATS 3008 Biostatistics III

STATS 3010 Experimental Design III

STATS 3011 Bioinformatics III

STATS 3012 Elements of Time Series III.

\* These courses may be presented towards a major in Statistics or a major in Applied Mathematics but not both.

4.2 Program of study for the degree of

Bachelor of Mathematical Sciences Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of Bachelor of Mathematical Sciences may not be offered within a given calendar year.

- 4.2.1 Level I courses
- 4.2.1.1 Mathematical Sciences courses APP MTH 1000 Scientific Computing I 3 MATHS 1008 Mathematics for Information Technology I 3 MATHS 1011 Mathematics IA 3 MATHS 1012 Mathematics IB 3 STATS 1000 Statistical Practice | 3 4.2.1.2 Computer Science courses COMP SCI 1003 Internet Computing 3 COMP SCI 1008 Computer Science IA 3 3 COMP SCI 1009 Computer Science IB
- 4.2.1.3 Humanities and Social Sciences courses Level I courses listed in 6.12.1 for the degree of B.A. except COMP SCI 1004 Computer Literacy I, MATHS 1002 Quantitative Methods Using Computers I,

LBST 1010 Democratic Organising Technology I and courses listed which are taught by the Schools of Economics and Commerce.

4.2.1.4	Economics and Commerce courses Courses listed in 4.7.1 (a) for the degree of B.Ec. except the courses ECON 1005 Mathematics for Economists I and ECON 1008 Business Data Analysis Level I courses listed in 4.8.1 for the degree of B.Com	
4.2.1.5	Science courses Level I Science courses listed in 5.6.1 for the degree of B.Sc. in the Faculty of Sciences.	of
4.2.1.6	Design Studies courses Level I Design Studies courses listed in 5.1.1 for the degree of Bachelor of Design Studies	
4.2.2	Level II courses	
4.2.2.1	Mathematical Sciences courses	
	Applied Mathematics APP MTH 2000 Differential Equations and Fourier Series	2
	APP MTH 2002 Vector Analysis and Complex Analysis	2
	APP MTH 2003 Modelling with Differential Equations II	2
	APP MTH 2008 Operations Research II	2
	Mathematical Physics	
	PHYSICS 2001 Classical Mechanics II	2
	PHYSICS 2002 Classical Fields and Mathematical Methods II	2
	Pure Mathematics	
	PURE MTH 2000 Discrete Mathematics II	2
	PURE MTH 2002 Algebra II	2
	PURE MTH 2003 Real Analysis II	2
	PURE MTH 2005 Multivariable Calculus II	2
	Statistics STATS 2002 Introduction	
	to Mathematical Statistics II	2
	STATS 2003 Statistical Practice II	2
	STATS 2011 Statistical Modelling II	2
4.2.2.2	Computer Science	
	COMP SCI 2000 Computer Systems	3
	COMP SCI 2002 Database & Information Systems	3
	COMP SCI 2003 Numerical Methods	3
	COMP SCI 2004 Data Structures and Algorithms	3

	COMP SCI 2005 Systems Programming C and C++ $$	3
	COMP SCI 2006 Introduction to Software Engineering	3
4.2.2.3	R Humanities and Social Sciences courses Level II courses listed in 6.12.2 for the degree of B.A. except LBST 2010 Democratic Organising Technology and LING 2033 Language, Communication and Technology.	II,
4.2.2.4	Economics and Commerce courses Courses listed in 4.7.1 (a) for the degree of B.Ec. exce the courses ECON 2005 Mathematical Economics II a ECON 2006 Economic & Financial Data Analysis II. Lev II courses listed in 4.8.1 for the degree of B.Com. Courses listed in 4.9.1 (a) for the degree of B.Fin. excep the course APP MTH 2005 Financial Computing II.	nd el
4.2.2.5	5 Science courses Level II Science courses listed in 5.6.3 for the degree B.Sc. in the Faculty of Sciences.	of
4.2.3	Level III courses	
4.2.3.1	Mathematical Sciences courses	
	Applied Mathematics	
	APP MTH 3000 Computational Mathematics III	3
	APP MTH 3001 Applied Probability III	3
	APP MTH 3002 Fluid Mechanics III	3
	APP MTH 3003 Life Contingencies III	3
	APP MTH 3004 Mathematical Biology III	3
	APP MTH 3005 Mathematical Programming III	3
	APP MTH 3006 Industrial Mathematics III	3
	APP MTH 3010 Variational Methods	
	& Optimal Control III	3
	APP MTH 3012 Financial Modelling III	3
	APP MTH 3013 Differential Equations III	3
	APP MTH 3014 Optimisation III	3
	App Mth 3016 Telecommunication Systems Modelling III	3
	APP MTH 3017 Waves III	3
	APP MTH 3018 Mathematics of Finance III	2
	Mathematical Physics	
	PHYSICS 3004 Quantum Mechanics III	3
	PHYSICS 3006 Advanced Dynamics and Relativity	3
	PHYSICS 3009 Statistical Mechanics	2
	PHYSICS 3022 Applied Quantum Mechanics	2

	Pure Mathematics	
	PURE MTH 3002 Topology and Analysis III	3
	PURE MTH 3003 Number Theory III	3
	PURE MTH 3005 Fractal Geometry III	3
	PURE MTH 3007 Groups and Rings III	3
	PURE MTH 3009 Integration and Analysis III	3
	PURE MTH 3012 Fields and Geometry III	3
	PURE MTH 3018 Coding and Cryptology III	3
	PURE MTH 3019 Complex Analysis III	3
	PURE MTH 3020 Methods	
	of Modern Mathematics III	3
	PURE MTH 3021 Logic and Computability	3
	Statistics	
	STATS 3000 Industrial Statistics III	2
	STATS 3001 Statistical Modelling III	3
	STATS 3002 Environmental Statistics III	3
	STATS 3003 Sampling Theory and Practice III	3
	STATS 3005 Time Series III	3
	STATS 3006 Mathematical Statistics III	3
	STATS 3008 Biostatistics III	3
	STATS 3010 Experimental Design III	3
	STATS 3011 Bioinformatics III	3
	STATS 3012 Elements of Time Series III	2
4.2.3.2	Miscellaneous (non-Mathematical and Computer Sciences) courses	
	MATHS 3015 Communication Skills III	3
	MATHS 4003 Industry Practicum	Ŭ
	(Maths. & Comp. Sc.)	2
4.2.3.3	Computer Science	
	COMP SCI 3001 Computer Networks & Applications	3
	COMP SCI 3002 Programming Techniques	3
	COMP SCI 3004 Operating Systems	3
	COMP SCI 3005 Computer Architecture	3
	COMP SCI 3006 Software Engineering and Project	3
	COMP SCI 3007 Artificial Intelligence	3
	COMP SCI 3009 Advanced Programming Paradigms	3
	COMP SCI 3012 Distributed Systems	3
	COMP SCI 3013 Event Driven Computing	3
	COMP SCI 3014 Computer Graphics	3
4231	Humanities and Social Sciences courses	
7.2.0.4	Level III courses listed in 6.12.3 for the degree of B.A, except , and LING 3033 Language, Communication an	

Technology.

4.2.3.5	Econom	nics and Commerce courses
	III course Courses	listed in 4.7.1 (a) for the degree of B.Ec. Level es listed in 4.8.1 for the degree of B.Com. listed in 4.9.1 (a) for the degree of B.Fin., or APP MTH 3011 Financial Modelling ues III.
4.2.3.6	Level III	e courses Science courses listed in 5.6.5 for the degree in the Faculty of Sciences.
	01 0.50.	
4.3	To be eli program for a Bao is accep	UTS program igible to be admitted to an Honours degree i, a candidate shall complete the requirements chelor degree or equivalent to a standard which table to the Faculty for the purpose of on to the Honours degree.
	shall be shall deo	date who satisfies the requirements for Honours awarded the Honours degree, but the Faculty cide within which of the following classes and s the degree shall be awarded:
	1	First Class
	2A	Second Class div A
	2B	Second Class div B
	3	Third Class
	NAH	Not awarded.
4.3.1		onours degree of Bachelor of matical Sciences
4.3.1.1	of the D degree i	date may, subject to the approval of the Head iscipline concerned, proceed to the Honours n one of the following courses, each with the twenty-four units:
	APP MT	H 4015 A/B Honours Applied Mathematics
	APP MT Statistic	H 4017 A/B Honours Applied Mathematics and s
	MATHS	4000 A/B Honours Mathematical Sciences
	PHYSICS	S 4001 A/B Honours Mathematical Physics
	PURE M Statistic	TH 4001 A/B Honours Pure Mathematics and s
		TH 4002 A/B Honours Mathematical Physics Mathematics
	PURE M Matherr	TH 4003 A/B Honours Pure and Applied natics
		TH 4005 A/B Honours Pure Mathematics 000 A/B Honours Statistics
4.3.1.2	in each	date may, subject to the approval of the Faculty case, proceed to the Honours degree in a taught in a school in another faculty. Such

candidates must consult the Head of the School

concerned and apply in writing to the Faculty for admission to the Honours program.

- 4.3.1.3 The work of the Honours program must be completed in one year of full-time study, save that on the recommendation of the Head of the School concerned, the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.
- 4.3.1.4 Unless granted permission to spread the work of the Honours program over two years under 4.5.1.3, a candidate for the Honours degree in any course shall not begin Honours work in that course until he/she has qualified for the degree of Bachelor of Mathematical Sciences or such other degree as may be acceptable to the Faculty. A candidate who has been granted permission to spread the work of the Honours program over two years must fulfil the requirements for the Bachelor degree before beginning the work of the second year of the Honours program.
- 4.3.1.5 A candidate may not enrol a second time for the Honours program in the same course if he/she:
  - (a) has already qualified for Honours in that course or
  - (b) has presented himself/herself for examination in that course but has failed to obtain Honours *or*
  - (c) has withdrawn from the program unless the Faculty under 4.3.1.6 permits re-enrolment.
- 4.3.1.6 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if a candidate's work is unsatisfactory at any stage of the program, or if a candidate withdraws from the program, such fact shall be reported to Faculty. The Faculty may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as it may determine.
- 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Mathematical and Computer Sciences

### Academic Program Rules

### 1 General

- 1.1 There shall be a degree of Bachelor of Mathematical and Computer Sciences .
- 1.2 There shall be an Honours degree of Bachelor of Mathematical and Computer Sciences. A candidate may obtain either a degree of Bachelor of Mathematical and Computer Sciences or an Honours degree of Bachelor of Mathematical and Computer Sciences or both.

### 2 Duration of program

The program of study for the Bachelor degrees shall extend over three years of full-time study or the equivalent part-time study.

### 3 Assessment and examinations

- 3.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 3.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and other work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which such work will be taken into account and of its relative importance in the final result.
- 3.3 There shall be four classifications of pass in the final assessment of any course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degree only a limited number of courses for which a Conceded Pass has been obtained, as specified in the relevant Rule made under these Academic Program Rules.
- 3.4 A candidate who fails a course for the Bachelor degree or obtains a conceded pass result and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.

3.5 A candidate who has twice failed any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and then only under such conditions as the Faculty may prescribe.

### 4 Qualification requirements

- 4.1 General: the degree of Bachelor of Mathematical and Computer Sciences
- 4.1.2 To qualify for the Bachelor degree a candidate shall, subject to the conditions and modifications specified under 3.3 above, pass courses from 4.2 below to the value of at least 72 units which satisfy the following requirements:
  - (a) A candidate shall pass in Mathematical and Computer Sciences courses to the value of at least 36 units, of which courses to the value of at least 12 units shall be Level III Mathematical and Computer Sciences courses.
  - (b) A candidate shall present

either

MATHS 1011 Mathematics IA and MATHS 1012 Mathematics IB

or

MATHS 1011 Mathematics IA and

MATHS 1013 Mathematics IMA and

MATHS 2004 Mathematics IIM

for the degree, obtaining a Pass standard or higher for each course presented.

A candidate shall not present both MATHS 1012 Mathematics IB and MATHS 2004 Mathematics IIM for the degree.

- (c) A candidate shall pass Level I courses to the value of at least 18 units
- (d) A candidate shall pass Level II courses to the value of at least 20 units
- (e) A candidate presenting MATHS 1011 Mathematics IA and MATHS 2004 Mathematics IIM shall present passes in Level II courses other than Mathematics IIM to the value of at least 20 units, and may present no more than 24 units at Level I

- (f) A candidate shall pass Level II and Level III courses to a minimum value of 44 units, with at least 20 units being Level III courses.
- 4.1.3 A candidate may present for the degree courses with the result of Conceded Pass within the following limits: courses with an aggregate units value of not more than 6, provided that no course thus presented has a units value of more than 3.
- 4.1.4 Subject to 4.1.3, a candidate who has been previously enrolled in an Engineering degree and who has presented the following courses toward a Bachelor of Engineering degree may present them as Mathematical and Computer Sciences courses:

APP MTH 2001 Linear Programming and Numerical Analysis	2
APP MTH 2004 Numerical Methods in Engineering (Chemical)	2
APP MTH 2009 Numerical Analysis and Probability and Statistics	2
APP MTH 2010 Differential Equations and Statistical Methods (Civil)	3
CHEM ENG 1002 Engineering Computing I	2
COMP SCI 1000 Engineering Programming IE	2.5
ELEC ENG 1004 Logic Design	1.5
STATS 2001 Statistical Methods (Civil)	1.5
STATS 2004 Laplace Transforms and Probability	
and Statistical Methods	2

In addition, such a candidate may present Level I and II Engineering courses that are not listed under 4.2.1 and 4.2.2 of these Academic Program Rules. These courses do not count as Mathematical and Computer Sciences courses.

- Notes (not forming part of the Academic Program Rules) This clause enables Engineering students to complete the first three years of their program and to qualify for the B.Ma.& Comp.Sc. within four years, by fulfilling the requirements of 4.1.8. Students wishing to qualify for the B.Ma.& Comp.Sc. in this way must apply for admission to the B.Ma.& Comp.Sc. program.
- 4.1.5 Except with the permission of the Faculty, a candidate may not enrol in courses to the value of more than 18 units taught by disciplines other than Applied Mathematics, Pure Mathematics, Statistics and Computer Science before obtaining at least a Division I pass in MATHS 1011 Mathematics IA with MATHS 1013 Mathematics IMA or MATHS 1012 Mathematics IB with MATHS 1011 Mathematics IA. These courses to the value of not more than 18 units shall not include courses in which a candidate has failed or from which a candidate has withdrawn.

- 4.1.6 A candidate may enrol in no more than 12 Level II units in total offered by the Schools of Economics and Commerce. These courses to the value of not more than 12 units shall not include courses in which a candidate has failed or from which a candidate has withdrawn.
- 4.1.7 Except with the permission of the Faculty, a candidate may not enrol in courses to the value of more that 50 units taught by disciplines other than Applied Mathematics, Pure Mathematics, Statistics and Computer Science. These courses shall not include courses in which a candidate has failed or from which a candidate has withdrawn.
- 4.1.8 A graduate who wishes to qualify for the degree of Bachelor of Mathematical and Computer Sciences and to count towards that degree courses which have already been presented for another degree may do so providing such a candidate presents a range of courses which fulfils the requirements of 4.1.2 above, including Level II and Level III courses from 4.2.2 and 4.2.3 below to the value of at least 24 units, which comprise Level III courses to the value of at least 20 units and Level II courses to the value of at most 4 units which have not been presented for any other degree. This must include Level III Mathematical and Computer Sciences courses to the value of at least 12 units.
- 4.1.9 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for the degree.
- 4.1.10 Candidates who commenced their program of study for the degree prior to 1989 may qualify for the degree by fulfilling the requirements of the regulations and schedules in force prior to 1989, with such modifications as the Faculty may deem necessary to take account of changes to courses from 1989 onwards. Alternatively, candidates may complete their programs of study under present Academic Program Rules, with such modifications as the Faculty may deem necessary to ensure that courses validly passed under previous regulations and schedules may be counted under the present Rules. For the purposes of this clause the following equivalences will be used:

First year course	6 units at Level I
First year half-course	3 units at Level I
Second year course	8 units at Level II
Second year half-course	4 units at Level II
Third year course	12 units at Level III
Third year half-course	6 units at Level III.

- 4.1.11 Except with permission of the Faculty, students who have completed at another institution part of the equivalent of the requirements for the Adelaide degree of Bachelor of Mathematical and Computer Sciences will be required as a minimum to complete Level III courses from 4.2.3 with an aggregate units value of 24 including Mathematical and Computer Sciences courses with an aggregate units value of 12.
- 4.1.12 With special permission of the Faculty a student who has completed most of the courses for the degree of Bachelor of Mathematical and Computer Sciences at the University of Adelaide including Level III courses with an aggregate units value of 12 may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- 4.1.13 To complete a major in a Mathematical and Computer Sciences discipline, a candidate shall satisfy the criteria specified below and present passes (not Conceded Passes) in the required courses.

### **Applied Mathematics**

Level III courses offered in Applied Mathematics to the value of at least 10 units.

### Computer Science

Level II courses offered by the School of Computer Science to the value of 9 units. In addition, candidates must present Level III Computer Science courses to the value of at least 12 units, including COMP SCI 3006 Software Engineering and Project.

### Mathematical Sciences

Candidates who do not otherwise qualify for a major in Applied Mathematics, Pure Mathematics or Statistics and who have successfully completed Level III courses offered in the School of Mathematical Sciences to the value of at least 12 units will qualify for the award of a major in Mathematical Sciences.

### Pure Mathematics

Level III courses offered in Pure Mathematics to the value of at least 10 units

### Statistics

Level III courses in Statistics to the value of at least 10 units, including STATS 3001 Statistical Modelling III, and STATS 3006 Mathematical Statistics III, and at least 4 units chosen from:

APP MTH 3001 Applied Probability III\*

APP MTH 3003 Life Contingencies III\*

APP MTH 3016 Telecommunications Systems Modelling III\*

STATS 3000 Industrial Statistics III

STATS 3002 Environmental Statistics III

STATS 3003 Sampling Theory and Practice III

STATS 3005 Time Series III

STATS 3008 Biostatistics III

STATS 3010 Experimental Design III

STATS 3011 Bioinformatics III

STATS 3012 Elements of Time Series III

\* These courses may be presented towards a major in Statistics or a major in Applied Mathematics but not both.

4.2 Program of study for the degree of Bachelor of Mathematical and Computer Sciences

> Students are advised that some courses cannot be counted with others towards the degree of Bachelor of Mathematical and Computer Sciences.

Notwithstanding the Academic Program Rules and syllabuses published in this volume, a number of the courses listed in the program leading to the degree of Bachelor of Mathematical and Computer Sciences may not be offered in every calendar year.

### 4.2.1 Level I courses

4.2.1.1 Mathematical & Computer Sciences cours
--

APP MTH 1000 Scientific Computing I	3
COMP SCI 1003 Internet Computing	3
COMP SCI 1008 Computer Science IA	3
COMP SCI 1009 Computer Science IB	3
MATHS 1008 Mathematics for	
Information Technology I	3
MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
MATHS 1013 Mathematics IMA	3
STATS 1000 Statistical Practice I	3

4.2.1.2 Humanities and Social Sciences courses

Level I courses listed in 6.12.1 for the degree of B.A. except MATHS 1002 Quantitative Methods Using Computers I, and courses listed which are taught by the Schools of Economics and Commerce..

### 4.2.1.3 Economics and Commerce courses

Courses listed in 4.7.1 (a) for the degree of B.Ec. except the courses ECON 1005 Mathematics for Economists I and ECON 1008 Business Data Analysis I. Level I courses listed in 4.8.1 for the degree of B.Com.

4.2.1.4	Law courses*	
	LAW 1001 Introduction to Australian Law	3
	* Available only to students who have been accepted for candidature to the LL.B.	
4.2.1.5	Engineering courses*	
	C&ENVENG 1000 Engineering Planning and Design	2
	C&ENVENG 1001 Statics	2
	CHEM ENG 1000 Process Systems	2
	CHEM ENG 1003 Materials I	2
	CHEM ENG 1005 Process Heat Transfer	2
	ELEC ENG 1006 Electrical Engineering I	3
	ELEC ENG 1007 Engineering Planning, Design and Communication	3
	ELEC ENG 1008 Electrical Engineering IM	2
	MECH ENG 1000 Dynamics	2
	MECH ENG 1001 Design Graphics	2
	MECH ENG 1005 Engineering Planning, Design and Communication M	3
	* Students can not enrol in CHEM ENG 1002 Engineering Computing I and C&ENVENG 1003 Engineering Modelling an Analysis I under this degree	ıd
	Candidates who have been previously enrolled in an Engineering degree at the University of Adelaide are also directed to Academic Program Rule 4.1.4.	
4.2.1.6	Science courses	
	Level I Science courses listed in 5.6.1 for the degree of B.Sc. in the Faculty of Sciences.	of
4.2.1.7	Design Studies courses	
	Level I Design Studies courses listed in 5.1.1 for the degree of Bachelor of Design Studies	
4.2.2	Level II courses	
4.2.2.1	Mathematical and Computer Sciences courses	
	Applied and Pure Mathematics	
	MATHS 2004 Mathematics IIM	4
	Applied Mathematics	
	APP MTH 2000 Differential Equations	_
	and Fourier Series	2
	APP MTH 2002 Vector Analysis and Complex Analysis	2
	APP MTH 2003 Modelling with Differential Equations II	2
	APP MTH 2008 Operations Research II	2
	Computer Science	
	COMP SCI 2000 Computer Systems	3
	COMP SCI 2002 Database & Information Systems	3

	COMP SCI 2003 Numerical Methods	3
	COMP SCI 2004 Data Structures and Algorithms	3
	COMP SCI 2005 Systems Programming C and C++ $$	3
	COMP SCI 2006 Introduction	
	to Software Engineering	3
	Mathematical Physics	_
	PHYSICS 2001 Classical Mechanics II	2
	PHYSICS 2002 Classical Fields and Mathematical Methods II	2
	Pure Mathematics	
	PURE MTH 2000 Discrete Mathematics II	2
	PURE MTH 2002 Algebra II	2
	PURE MTH 2003 Real Analysis II	2
	PURE MTH 2005 Multivariable Calculus II	2
	Statistics	
	STATS 2002 Introduction to Mathematical Statistics II	2
	STATS 2003 Statistical Practice II	2
	STATS 2011 Statistical Modelling II	2
4.2.2.2	2 Humanities and Social Sciences courses	
	Level II courses listed in 6.12.2 for the degree of B.A.	
	except LING 2033 Language, Communication and Technology.	
4.2.2.3	3 Economics and Commerce courses	
	Courses listed in 4.7.1(a) for the degree of B.Ec. exce	
	the courses ECON 2005 Mathematical Economics II an ECON 2006 Economic & Financial Data Analysis II. Lev	
	Il courses listed in 4.8.1 for the degree of B.Com.	CI
	Courses listed in 4.9.1 (a) for the degree of B.Fin.	
	except the course APP MTH 2005 Financial Computing II.	g
4.2.2.4	4 Engineering Courses	
	Candidates who have been previously enrolled in the a	an
	Engineering degree at the University of Adelaide are directed to Academic Program Rule 4.1.4.	
4001	° °	
4.2.2.3	5 Law courses* LAW 1002 Law of Torts	4
	LAW 1003 Law of Contract	4
	* Available only to students who have been accepted for	-
	candidature to the LL.B.	
4.2.2.6	6 Science courses	
	Level II Science courses listed in 5.6.3 for the degree	of
	B.Sc. in the Faculty of Sciences.	

### 4.2.3 Level III courses

4.2.3.1 Mathematical and Computer Sciences courses

,	
Applied Mathematics	0
APP MTH 3000 Computational Mathematics III	3
APP MTH 3001 Applied Probability III	3
APP MTH 3002 Fluid Mechanics III	3
APP MTH 3003 Life Contingencies III APP MTH 3004 Mathematical Biology III	3
APP MTH 3004 Mathematical Biology III APP MTH 3005 Mathematical Programming III	3
APP MTH 3005 Mathematical Programming III APP MTH 3006 Industrial Mathematics III	3 3
APP MTH 3000 Industrial Mathematics III APP MTH 3010 Variational Methods	3
& Optimal Control III	3
APP MTH 3012 Financial Modelling III	3
APP MTH 3013 Differential Equations III	3
APP MTH 3014 Optimisation III	3
APP MTH 3016 Telecommunication Systems	
Modelling III	3
APP MTH 3017 Waves III	3
APP MTH 3018 Mathematics of Finance III	2
Computer Science	
COMP SCI 3001 Computer Networks	
and Applications	3
COMP SCI 3002 Programming Techniques	3
COMP SCI 3004 Operating Systems	3
COMP SCI 3005 Computer Architecture	3
COMP SCI 3006 Software Engineering and Project	3
COMP SCI 3007 Artificial Intelligence	3
COMP SCI 3009 Advanced Programming	3
Paradigms COMP SCI 3012 Distributed Systems	3
COMP SCI 3012 Distributed Systems	3
COMP SCI 3013 Event Driven Computing	3
	3
Mathematical Physics	2
PHYSICS 3004 Quantum Mechanics III	3
PHYSICS 3006 Advanced Dynamics and Relativity PHYSICS 3009 Statistical Mechanics	3
PHYSICS 3009 Statistical Mechanics PHYSICS 3022 Applied Quantum Mechanics	2
	2
Pure Mathematics	0
PURE MTH 3002 Topology and Analysis III	3
PURE MTH 3003 Number Theory III	3
PURE MTH 3005 Fractal Geometry III	3
PURE MTH 3007 Groups and Rings III	3
PURE MTH 3009 Integration and Analysis III	3

	PURE MTH 3012 Fields and Geometry III	3
	PURE MTH 3018 Coding and Cryptology III	3
	PURE MTH 3019 Complex Analysis III	3
	PURE MTH 3020 Methods	
	of Modern Mathematics III	3
	PURE MTH 3021 Logic and Computability	3
	Statistics	
	STATS 3000 Industrial Statistics III	2
	STATS 3001 Statistical Modelling III	3
	STATS 3002 Environmental Statistics III	3
	STATS 3003 Sampling Theory and Practice III	3
	STATS 3005 Time Series III	3
	STATS 3006 Mathematical Statistics III	3
	STATS 3008 Biostatistics III	3
	STATS 3010 Experimental Design III	3
	STATS 3011 Bioinformatics III	3
	STATS 3012 Elements of Time Series III	3
4.2.3.2	Miscellaneous (non-Mathematical and Computer Sciences) courses	
	MATHS 3015 Communication Skills III	3
	MATHS 4003 Industry Practicum	
	(Maths. & Comp. Sc.)	2
4.2.3.3	Humanities and Social Sciences courses Level III courses listed in 6.12.3 for the degree of B.A, except , and LING 3033 Language, Communication and Technology.	ł
4.2.3.4	Economics and Commerce courses	
	Courses listed in 4.7.1 (a) for the degree of B.Ec. Level III courses listed in 4.8.1 for the degree of B.Com. Courses listed in 4.9.1 (a) for the degree of B.Fin., except for APP MTH 3011 Financial Modelling Techniques III.	
4.2.3.5	Law courses*	
	LAW 1004 Law of Crime	4
	LAW 1005 Property Law	4
	Law electives to the value of 4 units	4
	* Available only to students who have been accepted for candidature to the LL.B.	
4.2.3.6	Science courses	
	Level III Science courses listed in 5.6.5 for the degree of B.Sc. in the Faculty of Sciences.	
4.3	Honours programs	
	To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements	

for a Bachelor degree or equivalent to a standard which

is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.
- 4.3.1 The Honours degree of Bachelor of Mathematical and Computer Sciences
- 4.3.1.1 A candidate may, subject to the approval of the Head of the Discipline concerned, proceed to the Honours degree in one of the following courses, each with the value of twenty-four units:

APP MTH 4011 A/B Honours Applied Mathematics and Computer Science

APP MTH 4015 A/B Honours Applied Mathematics (B.A. or B.Sc.)

APP MTH 4016 A/B Honours Applied Mathematics and Genetics

APP MTH 4017 A/B Honours Applied Mathematics and Statistics

APP MTH 4018 A/B Honours Applied Mathematics and Environmental Biology

COMP SCI 4999 A/B Honours Computer Science

Maths 4000 A/B Honours Mathematical Sciences

PHYSICS 4001 A/B Honours Mathematical Physics

PURE MTH 4001 A/B Honours Pure Mathematics and Statistics

PURE MTH 4002 A/B Honours Mathematical Physics and Pure Mathematics

PURE MTH 4003 A/B Honours Pure and Applied Mathematics (B.A. or B.Sc.)

PURE MTH 4004 A/B Honours Computer Science and Pure Mathematics

PURE MTH 4005 A/B Honours Pure Mathematics (B.A. or B.Sc.)

PURE MTH 4998 A/B Honours Philosophy and Pure Mathematics

STATS 4000 A/B Honours Statistics (B.A or B.Sc.)

STATS 4003A/B Honours Statistics and Computer Science

STATS 4004A/B Honours Statistics and Genetics.

- 4.3.1.2 A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a course taught in a department in another faculty. Such candidates must consult the Head of the school concerned and apply in writing to the Faculty for admission to the Honours program..
- 4.3.1.3 The work of the Honours program must be completed in one year of full-time study, save that on the recommendation of the Head of the School concerned, the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.
- 4.3.1.4 Unless granted permission to spread the work of the Honours program over two years under 4.3.1.3, a candidate for the Honours degree in any course shall not begin Honours work in that course until he/she has qualified for the degree of Bachelor of Mathematical and Computer Sciences or or such other degree as may be acceptable to the Faculty. A candidate who has been granted permission to spread the work of the Honours program over two years must fulfil the requirements for the Bachelor degree before beginning the work of the second year of the Honours program.
- 4.3.1.5 A candidate may not enrol a second time for the Honours program in the same course if he/she:
  - (a) has already qualified for Honours in that course or
  - (b) has presented himself/herself for examination in that course but has failed to obtain Honours *or*
  - (c) has withdrawn from the program unless the Faculty under 4.3.1.8 permits re-enrolment.
- 4.3.1.6 If a candidate is unable to complete the program for the Honours degree within the time allowed, or if a candidate's work is unsatisfactory at any stage of the program, or if a candidate withdraws from the program, such fact shall be reported to Faculty. The Faculty may permit the candidate to re-enrol for an Honours degree under such conditions (if any) as it may determine.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Mathematical and Computer Sciences – Graduate Attributes

Through the Bachelor of Mathematical & Computer Sciences, the School of Mathematical Sciences supports the mission of the University of Adelaide (to advance knowledge, understanding and culture through scholarship, research, teaching and community service of international distinction and integrity) and to provide an inclusive curriculum that allows all students to learn and progress unhindered through the program.

Graduates in the B. Ma & Comp Sci. majoring in Applied Mathematics, Pure Mathematics or Statistics, possess both an in-depth competence in their major and a general skill set making them highly desirable to potential employees. Our graduates:

- · Are able to apply knowledge of basic mathematical or statistical fundamentals.
- · Are able to interpret data or mathematical results, and draw correct conclusions.
- · Are able to define, formulate and solve a mathematical/statistical problem.
- · Possess highly developed problem-solving skills suitable for application in a wide range of situations.
- Possess the flexibility required to adapt quickly to changes in the working environment, including the emergence of new methods, technologies and theories.
- Are able to communicate effectively, not only with other mathematicians and statisticians, but with the community at large on mathematical/statistical issues.
- Can contribute effectively as members of multi-disciplinary and multi-cultural teams, with the capacity to be leaders or managers as well as effective team members.
- Are able, by self directed study, to remain up to date with developments in their careers/professions.
- · Are able to guide developments in their careers/professions.



# Faculty of Health Sciences

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Grad.DIP.PSycn. This program is listed in the the University of Adelaide Postgraduate Calendar, 2007.

### www.health.adelaide.edu.au

- Degree of Bachelor of Dental Surgery
- Degree of Bachelor of Health Sciences
- Degrees of Bachelor of Medicine and Bachelor of Surgery
- Degree of Bachelor of Nursing
- Degree of Bachelor of Oral Health
- Degree of Bachelor of Psychology
- Degree of Bachelor of Psychology (Honours)
- · Honours degree of Bachelor of Health Sciences
- Honours degree of Bachelor of Medical Science
- Honours degree of Bachelor of Science in Dentistry

### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of Discipline or centre and the Principal of the School of Dental Therapy may approve minor changes to any previously approved syllabus.

### Academic Program Rules

### 1 General

There shall be a degree of Bachelor of Dental Surgery.

### 2 Duration of program

The program of study for the degree of Bachelor of Dental Surgery, unless otherwise approved by the Council on the recommendation of the School, shall extend over five years of full-time study.

A candidate may interrupt his or her studies for the program:

- (a) for the purpose of proceeding to the Honours degree of Bachelor of Science in Dentistry *or*
- (b) for such period and on such conditions as may in each case be determined by the School.

Students wishing to interrupt their studies must apply for permission and obtain beforehand the approval of the Dean on behalf of the School for leave of absence for a defined period.

A student who leaves the program without approval or who extends leave of absence beyond the time period approved by the Dean shall be deemed to have withdrawn his or her candidature for the degree but shall be permitted to reapply for admission to the program in accordance with the procedures in operation at the time.

Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Dean of the School deems appropriate.

### 3 Enrolment

3.1 Approval of enrolment

The following students must have their programs approved by the Dean or nominee at the time of enrolment in the year concerned:

- (a) students who have been granted or are seeking status or exemption from these Rules (see relevant section under Student Related Polices in the current Student Guide)
- (b) students who are repeating a stream or streams; such students may be required to resume at a

point in the program and/or undertake such additional or special program of study as the Dean of the School deems appropriate

(c) students who have obtained permission from the School to intermit their program, either to proceed to the Honours degree of Bachelor of Science in Dentistry, or for other reasons approved in each case.

### 3.2 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine and Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's *Students With Prescribed Communicable Infections Policy* available through the University's website at www.adelaide.edu.au/ student/current/policies.html which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

### 4 Assessment and examinations

- 4.1 A candidate may not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the academic staff concerned.
- 4.2 In determining a candidate's final result in a stream (or part of a stream) the examiners may take into account oral, written, clinical, practical and examination work, provided that the candidate has been given adequate

notice at the commencement of the teaching of the stream of the way in which work will be taken into account and of its relative importance in the final result.

4.3 There shall be four classifications of pass in the final assessment of any stream for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.

> In addition there shall be a classification of Conceded Pass. Courses for which a result of Conceded Pass has been obtained shall not satisfy prerequisite requirements and may not be presented as a credit towards the award of the Bachelor of Dentistry. It is a requirement that all courses are completed at a Pass level or better in order to progress to the following year and to meet the academic requirements of the program.

- 4.4 A candidate who fails a stream or who obtains a Conceded Pass shall, unless exempted wholly or partially therefrom by the Dean of the School concerned, again complete the required work in that stream to the satisfaction of the teaching staff concerned. Such a candidate may be required to attend concurrently such lectures, clinical practice, laboratory and other practical work as the School may prescribe, in other streams of annual examination.
- 4.5 A candidate who has twice failed to obtain a Pass or higher in the examination in any stream for the Bachelor degree may not enrol for that stream again or for any other stream which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as School may prescribe.
- 4.6 A candidate who is exempt from more than 50% in a stream shall not be granted a classified pass in that stream.

### 5 Qualification requirements

5.1 Lectures, practical work, clinical instruction The program for the degree of Bachelor of Dental Surgery shall extend over five years. To qualify for the degree a candidate shall regularly attend lectures, tutorials and clinical practice, do written and laboratory or other practical work to the satisfaction of the academic staff concerned, and pass the prescribed examinations. Students shall attend at clinics of the South Australian Dental Service and other teaching hospitals and health centres as required for their clinical instruction.

### 5.2 Curriculum

### First Year:

During the first year every student shall attend programs of instruction in: (a) Human Biology, (b) General Studies, (c) Dental and Health Science, (d) Dental Clinical Practice.

### Second Year:

During the second year every student shall attend programs of instruction in: (a) Structure and Function of the Body, (b) General Studies, (c) Dental and Health Science, (d) Dental Clinical Practice.

### Third Year:

During the third year every student shall attend programs of instruction in: (a) Diseases and Disorders of the Body, (b) Dental and Health Science, (c) Dental Clinical Practice.

### Fourth Year:

During the fourth year every student shall attend programs of instruction in: (a) Selectives, (b) Dental and Health Science, (c) Dental Clinical Practice.

### Fifth Year:

During the fifth year every student shall attend programs of instruction in: (a) Selectives, (b) Dental and Health Science, (c) Dental Clinical Practice.

- 5.3 Rules for the admission of dental students to the practice of the South Australian Dental Service and other teaching hospitals and health centres:
- 5.3.1 Each dental student of the University of Adelaide shall attend clinics of the South Australian Dental Service, or other teaching hospitals or health centres, as directed by the Dean of the Dental School; and each student shall be admitted to the practice of the South Australian Dental Service or other teaching hospitals or health centres under the disciplinary control of the Chief Executive Officer, in the case of the former, or the Medical Superintendent or Director, in the case of the latter, whilst in attendance.
- 5.3.2 No student may introduce visitors into any of the said clinics, hospitals or health centres without permission of the above designated officers.
- 5.3.3 Students shall conduct themselves with propriety and discharge the duties assigned, and pay for or replace any article damaged, lost or destroyed by them together; and make good any loss sustained by their negligence.
- 5.3.4 Each student shall at all times be under the direction and supervision of a duly appointed member of the teaching staff of the University of Adelaide, or a person

who has been granted appropriate University status, and shall carry out such work as shall be allotted.

- 5.3.5 No student shall administer treatment to any patient without the approval of an appointed teacher.
- 5.3.6 Except in the performance of the associated clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Dental or Medical Officer in charge.
- 5.3.7 No student shall publish a report on any case without the written permission of the Chief Executive Officer in the case of the South Australian Dental Service, or the Medical Superintendent or Director in the case of teaching hospitals or health centres, and the Senior Dental or Medical Officer under whose care the patient is or has been.
- 5.3.8 No student shall communicate directly to the press, radio or television any matter concerning the clinical practice of the institution to which that student is attached.
- 5.3.9 Students shall pay such fees as are laid down by the South Australian Dental Service in consultation with the Dean of the School of Dentistry; no student shall be admitted to clinics until such fees are paid.
- 5.3.10 Misconduct or infringement of any of these rules, may lead to temporary suspension by the Chief Executive Officer, South Australian Dental Service, or the Medical Superintendent or Director, other teaching hospitals or health centres. In the case of such temporary suspension, written notice shall immediately be given to the Dean of the School of Dentistry.
- 5.4 Academic program
- 5.4.1 Curriculum
- 5.4.1.1 DENT 1000HO First Annual BDS Examination At the First Annual Examination the candidate shall satisfy the examiners in each of the following streams: DENT 1001 AHO/BHO Dental and Health Science I Part 1 & 2

DENT 1002 AHO/BHO Dental Clinical Practice I Part 1 & 2

- DENT 1003 AHO/BHO Human Biology ID Part 1 & 2
- DENT 1004 AHO/BHO General Studies ID Part 1 & 2
- 5.4.1.2 DENT 2000HO Second Annual BDS Examination

At the Second Annual Examination the candidate shall satisfy the examiners in each of the following streams:

DENT 2001 AHO/BHO Dental and Health Science II Part 1 & 2

DENT 2002 AHO/BHO Dental Clinical Practice II Part 1 & 2

DENT 2003 AHO/BHO Structure and Function of the Body IID Part 1 & 2 DENT 2004 AHO/BHO General Studies IID Part 1 & 2

5.4.1.3 DENT 3000H0 Third Annual BDS Examination At the Third Annual Examination the candidate shall satisfy the examiners in each of the following streams: DENT 3001 AH0/BH0 Dental and Health Science III Part 1 & 2

DENT 3002 AHO/BHO Dental Clinical Practice III Part 1 & 2 DENT 3003 AHO/BHO Diseases and Disorders of the Body IIID Part 1 & 2

5.4.1.4 DENT 4000HO Fourth Annual BDS Examination At the Fourth Annual Examination the candidate shall satisfy the examiners in each of the following streams: DENT 4001 AHO/BHO Dental and Health Science IV Part 1 & 2

DENT 4002 AHO/BHO Dental Clinical Practice IV Part 1 & 2

DENT 4003 AHO/BHO Dental Selectives IV Part 1 & 2

5.4.1.5 DENT 5000HO Fifth Annual (Final) BDS Examination At the Fifth Annual Examination the candidate shall satisfy the examiners in each of the following streams: DENT 5001 AHO/BHO Dental and Health Science V Part 1 & 2 DENT 5002 AHO/BHO Dental Clinical Practice V Part 1 & 2

DENT 5003 AHO/BHO Dental Selectives V Part 1 & 2

5.5 General

A candidate shall complete each annual examination before entering upon the work of the following year's program of study provided that:

- (a) A candidate shall enrol in all clinical streams of the year undertaken and shall enrol in any other streams that the School mandates. Except by permission of School the candidate may not enrol concurrently for any additional streams from the following year.
- (b) A candidate may begin the first semester's work in the following year's program of study pending the result of any supplementary examination for which the candidate has been permitted to present.
- (c) A candidate will not normally be re-examined at a supplementary examination in any stream previously passed at the annual examination. A supplementary examination shall not be awarded

on academic grounds in any stream where the student obtained an aggregate score of 45% or less.

- (d) The annual examination at the end of the fifth year shall be known as the Final Examination. In exceptional circumstances a candidate's results in the Final Examination may be withheld if the candidate's performance in the required clinical work is considered unsatisfactory by the Board of Examiners. In such a case, the candidate will be required to complete satisfactorily such additional work as the Dean of the School may recommend to the Board of Examiners.
- 5.6 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the School concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

### Bachelor of Dental Surgery - Graduate Attributes

### Philosophy of Dental Education

Good oral health is an integral part of good general health. The aim of this program is to enable graduates to register as dentists to practice in Australia. Graduates are encouraged to strive through their advocacy and clinical practice to empower patients and communities to maintain optimal oral health throughout their lives.

### **Graduate Outcomes/Responsibilities**

The following outcomes should be developed through the learning experiences of the dental degree. The dental graduate should

- · Adopt and employ professional attitudes and standards/values
- · Effectively manage community-based health
- · Effectively manage individual patient care
- · Effectively manage a dental team
- · Engage in self-directed life-long learning.

### **Graduate Outcome Indicators**

The dental graduate should

- 1 Adopt and employ professional attitudes and standards/values by
- · Advocating for change
- · Communicating effectively with a range of audiences, eg professional, policy-making bodies, community and patients
- · Providing dental care in a contemporary ethical and legal environment
- · Displaying integrity in all aspects of professional life
- · Applying a wide understanding of social, political and cultural perspectives to inform practice
- 2 Effectively manage community-based health by
- · Having a vision of oral health in the wider community
- Committing to improvement of oral health in the whole community including disadvantaged groups through diagnosis, treatment and education
- · Being informed by a preventive approach to management
- · Engaging in promotion of oral health as it is related to general health
- · Committed to optimising their own health.
- 3 Effectively manage individual patient care by
- · Using an evidence-based approach to provide holistic management
- · Acting as an advocate for patients
- Providing a broad range of dental interventions
- · Having expertise in diagnosis, treatment planning and dental care in the long term
- Integrating and applying an understanding of basic, clinical, behavioural and social science concepts to inform practice.

### Academic Program Rules

### 1 General

There shall be a degree and an Honours degree of Bachelor of Health Sciences. A candidate may obtain either degree or both.

### 2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or its part-time equivalent.

### 3 Admission

- 3.1 Status, exemption and credit transfer
- 3.1.1 Candidates are permitted to count towards the degree courses which have been passed in another degree program, up to a maximum value of 48 units, but will be required to present Level III courses to the value of 24 units which have not been presented for another degree, and in addition satisfy the requirements Rule 5.1.3.
- 3.1.2 A student who has withdrawn his or her candidature for the degrees of BDS or MBBS after completing at least three program years may be granted status in this degree for up to 72 units and be deemed to have satisfied the requirements of Rule 5.

### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 4.2 In determining the final result in a course (or part of a course) the examiners may take into account a candidate's oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
- 4.3 (a) There shall be four classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.

In addition there shall be a classification of Conceded Pass for courses up to a maximum of 7 units for the single degree program, or to a maximum of 4 units for the degree of Bachelor of Health Sciences/Bachelor of Laws. Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

- (b) A candidate who fails a course or who obtains a Conceded Pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the discipline concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- (c) A candidate who has twice failed to obtain a pass or higher in the examination in any course for the Bachelor degree may not enrol for that course again or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as Faculty may prescribe.
- 4.4 There shall be three classifications of Pass in the final assessment of any course for the Honours degree as follows: First Class, Second Class, Third Class. The Second Class classification shall be divided into two divisions as follows: Division A and Division B.

### 5 Qualification requirements

5.1 Academic program for the Bachelor degree To qualify for the Bachelor degree a candidate shall present passes in courses to the value of 72 units, which satisfy the following:

### 5.1.1 Level I

(a)	ANAT SC 1102 Human Biology IA	3
	ANAT SC 1103 Human Biology IB	3
	PUB HLTH 1001 Public Health IA	3
	PUB HLTH 1002 Public Health IB	3

(b) Level I courses to the value of 12 units chosen from the Health Sciences courses listed below, or from Level I courses offered by the Faculty of Humanities and Social Sciences, School of Economics, School of Commerce, School of Mathematical and Computer Sciences or Faculty of Sciences that are available to them.

		PSYCHIAT 1001 Person, Culture Medicine I	3
		PSYCHOL 1000 Psychology IA	3
		PSYCHOL 1001 Psychology IB	3
5.1.2	Lev		
0.1.2	(a)	PATHOL 2000 Biology of Disease II	4
	(b)	Level II Health Sciences courses to the value of 8 units chosen from the following:	3
		ANAT SC 2102 Cells, Tissues & Development II	4
		ANAT SC 2102 Functional Human Anatomy II	4
		ANAT SC 2106 Ethics, Science & Society II	4
		PATHOL 2000 Biology of Disease II	4
		PHARM 2002 Drugs, Chemicals & Health	4
		PHARM 2003 Drugs, Chemicals a Health PHARM 2003 Drugs, Chemicals	-
		& the Environment	4
		PSYCHIAT 2002 Emotion, Culture & Medicine II	4
		PSYCHOL 2002 Psychology IIA	4
		PSYCHOL 2003 Psychology IIB	4
		PSYCHOL 2001 Psychological Research	
		Methodology II	4
		PUB HLTH 2000 Public Health Inquiry II	4
		PUB HLTH 2001 Public Health Sciences II	4
	(c)	Level II courses to the value of 12 units from the Health Sciences courses listed in 5.1.2(b) above, or from Level II courses offered by the Faculty of Humanities and Sciences, School of Economics, School of Commerce, School of Mathematical an Computer Sciences or Faculty of Sciences that a available to them <sup>+</sup> .	ıd
5.1.3	Lev	vel III	
	(a)	Level III courses to the value of not less than 24 units, of which 12 units must include Health Science courses listed below:	
		Health Sciences	
		Anatomical Sciences	
		ANAT SC 3101 Biological Anthropology	3
		ANAT SC 3102 Comparative Reproductive Biology of Mammals	3
		ANAT SC 3103 Integrative and	
		Comparative Neuroanatomy	3
		ANAT SC 3104 Structural Cell Biology	3
		ANAT SC 3106 Ethics, Science & Society III	6
		Pathology	6
		PATHOL 3003 General Pathology	6
		PATHOL 3104 Pathology of Organ Systems	6
		PATHOL 3100 Topics in Forensic Science	3
		PATHOL 3200 Neurological Diseases	3

	Pharmacology	
	PHARM 3010 Pharmacology A III	6
	PHARM 3011 Pharmacology B III	6
	Psychology	
	PSYCHOL 3000 Psychological Research Methodology III	4
	PSYCHOL 3003 Developmental Psychology III	2
	PSYCHOL 3005 Perception and Cognition III	2
	PSYCHOL 3006 Psychology: Physiology and Behaviour III	2
	PSYCHOL 3009 Metapsychology III	2
	PSYCHOL 3010 Social Psychology III	2
	PSYCHOL 3013 Learning and Behaviour III	2
	PSYCHOL 3014 Individual Differences III	2
	PSYCHOL 3015 Human Relations III	2
	PSYCHOL 3016 Language Processes III	2
	PSYCHOL 3017 Health Psychology III	2
	Public Health	
	PUB HLTH 3004 International Health III	6
	PUB HLTH 3101HO Aboriginal Health Policy IIIHS	6
	PUB HLTH 3104HO Epidemiology of	
	Infectious Disease IIIHS	6
	PUB HLTH 3106HO Health Promotion IIIHS	6
	PUB HLTH 3108HO Environmental and Occupational Health IIIHS	6
	PUB HLTH 3109HO Introduction to Epidemiology and Biostatistics IIIHS	6
	PUB HLTH 3117HO Rural Public Health IIIHS	6
	PUB HLTH 3119HO Public Health Internship III	6
	PUB HLTH 3120HO Public Health Theory	
	and Practice III	6
	PUB HLTH 3121HO Qualitative Research in Practice III	6
	Other Health Sciences	
	MICRO 3003 Medical Microbiology and Immunology III	6
	OB&GYNAE 3000 Human Reproductive Health III	6
(b)	The completion of a major in an area of study offered by either the Faculty of Health Science or the School of Molecular and Biomedical Sciences A major is defined as the completion, at Pass leve or above, of at least 9 units of courses from with a single discipline or from a recognised interdisciplinary stream.	s. el

(c) An interdisciplinary stream is an area of study concentration across more than one discipline that is recognised by the Faculty of Health Sciences as sharing a common theme. The following are examples of approved interdisciplinary streams:

### Neuroscience

ANAT SC 3103 Integrative and	
Comparative Neuroanatomy	3
PATHOL 3200 Neurological Diseases	3
PHYSIOL 3001 Neurobiology III	6
Reproductive Health	
ANAT SC 3102 Comparative Reproductive	
Biology of Mammals	3
OB&GYNAE 3000 Human Reproductive Health III	6

(d) Candidates are able to present a maximum of 12 units of courses at Level III offered outside of the Faculty of Health Sciences by the Faculty of Humanities and Social Sciences, School of Commerce, School of Economics, School of Law\*, School of Mathematical and Computer Sciences, or the Faculty of Sciences<sup>+</sup>.

\* Candidates for the Bachelor of Health Sciences may only undertake Law courses if they are also candidates for the Bachelor of Laws.

<sup>+</sup> A listing or acceptable courses is available from: www.health.adelaide.edu.au/enrol/bhsguide.pdf

- 5.1.4 (a) A candidate may substitute appropriate courses chosen from Level II to fulfil the non-core (ie. elective) course requirements at Level I, or from Level III to fulfil the non-core course requirements at Level I or II
  - (b) No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the

same material; and no course or portion of a course may be counted twice towards an award.

### 5.2 Cross-institutional study

With prior approval of the Faculty, students may study courses offered at Bachelor degree level or higher by other universities as cross-institutional students, subject to the following provisions:

5.2.1 Students must complete all core courses as specified in 5.1 at the University of Adelaide.

5.2.2 The following limits shall apply:

Level I

12 units of cross-institutional studies in any discipline

Level II or III

12 units of cross-institutional studies in any discipline.

- 5.2.3 Students undertaking cross-institutional studies must abide by any rules and regulations the host institution shall prescribe.
- 5.2.4 On completion of any cross-institutional course, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the Faculty.
- 5.3 Academic program for the Honours degree

To be eligible to be admitted to an Honours degree program, a candidate shall complete the requirements for a Bachelor degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded
- 5.3.1 A candidate may, subject to approval by the Head of the discipline concerned, proceed to the Honours degree in one of the following courses:

ANAES&IC 4000AHO/BHO Honours Anaesthesia & Intensive Care

ANAT SC 4000 A/B Honours Anatomical Sciences BIOCHEM 400 0A/B Honours Biochemistry

CLIN NUR 4000 AHO/BHO Honours Clinical Nursing

DENT 4100 AHO/BHO Honours Dentistry

**GENETICS 4005 A/B Honours Genetics** 

MEDICINE 4000 AHO/BHO Honours Medicine

MICRO 4000 A/B Honours Microbiology and Immunology

OB&GYNAE 4000 AHO/BHO Honours Obstetrics and Gynaecology

ORT&TRAU 4000 AHO/BHO Honours Orthopaedics and Trauma

PAEDIAT 4000 AHO/BHO Honours Paediatrics PATHOL 4000 A/B Honours Pathology PHARM 4000 A/B Honours Pharmacology PHYSIOL 4000 A/B Honours Physiology PSYCHIAT 4000 AHO/BHO Honours Psychiatry PSYCHOL 4000 A/B Honours Psychology PUB HLTH 4000 AHO/BHO Honours Public Health SURGERY 4000 AHO/BHO Honours Surgery.

- 5.3.1.1 The program comprises three equally important aspects undertaken concurrently:
  - Program of reading in selected fields, and the submission of a series of essays associated therewith
  - (b) Experimental or scholarly work covering a wide range of techniques
  - (c) The undertaking of a research project which will be assigned early in the program and on which a thesis must be submitted.
- 5.3.1.2 The examination for the degree will consist of a written paper or papers, the essays submitted during the year, the thesis on the research project, an oral examination, and a practical examination if required by the examiners.
- 5.3.1.3 A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a course taught in a discipline in another faculty. Candidates must consult the Head of the discipline concerned and apply, in writing, to the Faculty before 30 November in the preceding year for admission to the Honours program.

### 6 Combined degree programs

- 6.1 Status granted in combined degree programs
- 6.1.1 Bachelor of Health Sciences/ Bachelor of Laws

A candidate who gained entry to Law studies at the University of Adelaide prior to 2003 and who undertakes Law Studies concurrently with Health Sciences may present 8 units at level II and 12 units at level III of Law courses in lieu of electives for the Bachelor of Health Sciences. A candidate who gains entry to Law in 2003 or later may present 3 units of Law courses at level I, 8 units at level II and 12 units at level III in lieu of electives for the Bachelor of Health Sciences.

6.1.2 Bachelor of Health Sciences/Bachelor of Social Sciences

> The Bachelor of Health Sciences may be undertaken concurrently with the Bachelor of Social Sciences in a double degree program that is designed to be

completed in 4 years of full-time study (96 units). Students are required to complete a major in both Social Sciences and Health Sciences. Students who complete the requirements for both degrees are awarded 2 degrees and 2 parchments.

### 6.1.2.1 Academic program

To qualify for the double degree of Bachelor of Social Sciences/Health Sciences, a student shall present passes in courses to the value of 96 units, which satisfy the following requirements:

### Level I

(a)	ANAT SC 1102 Human Biology IA	3
	ANAT SC 1103 Human Biology IB	3
	PUB HLTH 1001 Public Health IA	3
	PUB HLTH 1002 Public Health IB	3
	GEOG 1004 Population, Globalisation	
	and Social Justice	3
	SOCI 1001 Social Sciences in Australia	3

(b) Level I courses to the value of 6 units chosen from those areas listed in 5.1.1 as Social Sciences

### Level II

(c)	SOCI 2002 Social Science Techniques	4
	PATHOL 2000 Biology of Disease II	4

- (d) Level II courses to the value of 8 units chosen from those listed in 5.1.1 as Social Sciences, being the Level II component of a major sequence
- (e) Level II courses to the value of 8 units chosen from those listed in 5.1.2 (b) for the Bachelor of Health Sciences that lead to a Level III major sequence in Health Sciences.

### Level III & IV

24 units for each award separately as follows:

Bachelor of Social Sciences

- (f) SOCI 3004 Social Research
- (g) Level III courses to the value of 12 units chosen from those listed in 5.1.1 as Social Sciences, being the Level III component of a major sequence.
- (h) Level III Applied Social Science elective course to the value of 6 units.

### Bachelor of Health Sciences

- (i) Level III courses to the value of 12 units chosen from a single area of study listed in 5.1.3 (a) for the Bachelor of Health Sciences, being the Level III component of a major sequence.
- (j) Level III Health Sciences courses to the value of 12 units, or up to 12 units of Level III courses offered by the Faculty of Humanities and Social Sciences.

6

6.1.3 Bachelor of Health Sciences/Bachelor of Mathematical and Computer Sciences The Bachelor of Health Sciences may be taken concurrently with the Bachelor of Mathematical and Computer Sciences in a double degree program designed to be completed in 4 years of study (96 Units). Students are required to complete a major in both Statistics and Health Sciences. Students who complete the requirements for both degrees are awarded two degrees and two parchments.

> There are two pathways in the Bachelor of Mathematical and Computer Sciences that it is possible to follow, depending on SACE results - Maths 1A or Maths 1MA. Maths 1A requires completion of SACE Stage 2 Mathematical Studies and Specialist Mathematics. Maths 1MA requires completion of SACE Stage 2 Mathematical Studies.\* In both pathways, the Health Sciences courses remain the same.

**Note:** it is possible to switch pathways from Maths 1MA to Maths 1A if Maths 2M is undertaken as a Summer School course.

### 6.1.3.1 Academic program

### Maths 1A Pathway

To qualify for the double degree of Bachelor of Health Sciences/Bachelor of Mathematical and Computer Sciences following the Maths 1A pathway, a student shall present passes in courses to the equivalent of 96 Units which satisfy the following requirements:

### Level I

semester 1	
ANAT SC 1101 Human Biology 1A	3
APP MTH 1000 Scientific Computing 1	3
MATHS 1011 Mathematics 1A	3
PUB HLTH 1001 Public Health 1A	3
semester 2	
ANAT SC 1102 Human Biology 1B	3
MATHS 1012 Mathematics 1B	3
PUB HLTH 1002 Public Health 1B	3
STATS 1004 Statistical Practice 1 (Life Sciences)	3
or	
STATS 1000 Statistical Practice 1	3
Note: All courses at Level I are compulsory.	
Level II	
semester 1	
APP MTH 2000 Differential Equations	

PURE MTH 2005 Multivariable Calculus II	2
STATS 2002 Introduction to Maths Statistics II	2
STATS 2003 Statistical Practice II	2
semester 2	
APP MTH 2008 Operations Research II	2
PATHOL 2000 Biology of Disease II	2
STATS 2011 Statistical Modelling II	2
Any Approved Level II Health Sciences course	2

### Level III

semester 1	
STATS 3001 Statistical Modelling III	3
STATS 3006 Mathematical Statistics III	3
Any combination of Level III Health Sciences courses to the total value of 6 units*	6
semester 2	
Any combination of Level III Health Sciences courses to the total value of 6 units $^{\ast\ast}$	6
Level III Mathematical Sciences courses to total value of 6 units*	6

### Level IV

semester 1	
APP MTH 3001 Applied Probability III	3
Any combination of Level III Health Sciences courses to the total value of 6 Units	6
Level II or III Mathematical Sciences courses to total value of 3 units*	
semester 2	
Any combination of Level III Health Sciences courses to the total value of 6 Units	6
Level III Mathematical Sciences courses to total value of 6 units*	6
* Must include Biostatistics III in either 3rd or 4th Year and	9

units of other approved level III Mathematical Sciences courses over Years 3 and 4.

\*\* The combination of Health Sciences courses must include a major sequence of study from a single discipline or from a recognised interdisciplinary stream.

### Maths 1MA Pathway

2

4

To qualify for the Double Degree of Bachelor of Health Sciences / Bachelor of Mathematical and Computer Sciences following the Maths 1MA pathway, a student shall present passes in courses to the equivalent of 96 Units which satisfy the following requirements:

and Fourier Series

PUB HLTH 2001 Public Health Sciences II

#### Level I

semester 1	
ANAT SC 1101 Human Biology 1A	3
APP MTH 1000 Scientific Computing 1	3
MATHS 1013 Mathematics 1MA	3
PUB HLTH 1001 Public Health 1A	3
semester 2	
ANAT SC 1102 Human Biology 1B	3
MATHS 1011 Mathematics 1A	3
PUB HLTH 1002 Public Health 1B	3
STATS 1004 Statistical Practice 1 (Life Sciences)	3
or	
	3
Note: All courses at Level I are compulsory.	
Level II	
semester 1	_
	2
	4
	2
	2
semester 2	~
	2
	4
Ŭ	2
7 FF	4
Level III	
semester 1	
APP MTH 2000 Differential Equations and Fourier series	2
	2
Any combination of Level III Health Sciences	
,	6
Level III Mathematical Sciences courses*	2
semester 2	
Any combination of Level III Health Sciences courses	
	6
Level III Mathematical Sciences courses to total value of 6 units*	c
	6
Level IV	
Semester 1	2
	3 3
0	3 3
Any combination of Level III Health Sciences courses	J
	6

#### semester 2

	SCHICSLCI Z	
	Any combination of Level III Health Sciences courses to the total value of 6 units	6
	Level III Mathematical Sciences courses to total value of 6 units*	6
	* Must include Biostatistics III in either 3rd or 4th Year and a units of other approved level III Mathematical Sciences courses over Years 3 and 4.	8
	Maths 1A and IMA Pathways	
	In both pathways, the level III Mathematical Sciences courses must include Biostatistics III and 6 units chose from the following:	en
	STATS 3000 Industrial Statistics III	2
	STATS 3003 Sampling Theory and Practice III*	3
	STATS 3005 Time Series III*	3
	STATS 3008 Biostatistics III*	3
	STATS 3011 Bioinformatics III*	3
	The completion of a major in an area of study offered l either the Faculty of Health Sciences or School of Molecular and Biomedical Sciences is defined as the completion, at Pass level or above of at least 9 Units of courses from within a single discipline or from a recognised interdisciplinary stream.	·
	*Not offered every year.	
6.2	No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculties concerned, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.	
6.3	Cross-institutional study	
	With prior approval of the Faculty, students may study courses offered at Bachelor degree level by other universities as cross-institutional students, subject to the following provisions:	
6.3.1	Students must complete all core courses as specified above at the University of Adelaide.	
6.3.2	The following limits apply:	
	Level I: no cross-institutional study;levels II, III and IV: up to a maximum of 12 units in lieu of elective courses in Health Sciences	S
6.3.3	Students undertaking cross-institutional studies must abide by any rules and regulations the host institution shall prescribe.	
6.3.4	On completion of any cross-institutional course, the student shall be responsible for ensuring that an official transcript or result notice is forwarded to the Faculty of Health Sciences.	

#### 6.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Health Sciences – Graduate Attributes

The aim of this program is to produce graduates who are committed to advancing knowledge of health and disease and improving the health of the public. Depending on the choice of stream within the program, graduates will have the capacity to work in a variety of health settings, including government, academia, industry, business and the community, in a range of areas such as laboratory or community-based research, provision of health services, surveillance and evaluation, health promotion and policy. Graduates will possess a firm foundation for further study and be equipped for a lifetime of learning.

#### Knowledge

Detailed knowledge will depend on the choice of subjects undertaken, but every graduate will:

- · Have a population as well as an individual view of health.
- Understand the biology of the human species, the structure and function of the body and the relationship of the environment to the health of the human being.
- Know the biological bases of disease at the tissue, organ and system level and relate this knowledge to the diagnosis and treatment of common diseases.
- Possess a basic knowledge of the core disciplines within public health, in particular, epidemiology and social and political
  analysis, and understand how these disciplines can contribute to protecting the health of the public.
- Be aware of contemporary issues in health, including the leading causes of morbidity and mortality and potential for prevention.

#### Intellectual and Social Capabilities

- · An ability to read and interpret material relevant to health.
- An ability to communicate in writing and orally with a range of audiences concerning health matters.
- · An ability to critically appraise and synthesise a body of work.
- An ability to employ methods to collect, process and analyse materials and data relevant to research on health and disease.
- · An ability to articulate the practical implications of theory and research in health.
- An ability to draw on and apply knowledge gained from historical and comparative perspectives.
- · An ability to work both independently and as an effective team member.

#### **Attitudes and Values**

- A sensitivity to the cultural and ethical issues that may impact on the way that knowledge acquired within health is interpreted and used.
- · A respect for people whatever their age, gender, abilities, social circumstances or cultural background.
- · Commitment to addressing social inequalities which underpin differences in health experiences.
- · An appreciation of the value of an inquiring mind and of the questioning of the status quo in science and society.

# Bachelor of Health Sciences/ Bachelor of Mathematical and Computer Sciences – Graduate Attributes

Because students are undertaking a double degree, and completing all elements required for both programs, they would be expected to have the Graduate Attributes from both programs as listed below

#### Health Sciences

The aim of this program is to produce graduates who are committed to advancing knowledge of health and disease and improving the health of the public. Depending on the choice of stream within the program, graduates will have the capacity to work in a variety of health settings, including government, academia, industry, business and the community, in a range of areas such as laboratory or community-based research, provision of health services, surveillance and evaluation, health promotion and policy. Graduates will possess a firm foundation for further study and be equipped for a lifetime of learning.

#### Knowledge

Detailed knowledge will depend on the choice of subjects undertaken, but every graduate will:

- · Have a population as well as an individual view of health.
- Understand the biology of the human species, the structure and function of the body and the relationship of the environment to the health of the human being.
- Know the biological bases of disease at the tissue, organ and system level and relate this knowledge to the diagnosis and treatment of common diseases.
- Possess a basic knowledge of the core disciplines within public health, in particular, epidemiology and social and political
  analysis, and understand how these disciplines can contribute to protecting the health of the public.
- · Be aware of contemporary issues in health, including the leading causes of morbidity and mortality and potential for prevention.

#### **Intellectual and Social Capabilities**

- · An ability to read and interpret material relevant to health.
- · An ability to communicate in writing and orally with a range of audiences concerning health matters.
- · An ability to critically appraise and synthesise a body of work.
- An ability to employ methods to collect, process and analyse materials and data relevant to research on health and disease.
- An ability to articulate the practical implications of theory and research in health.
- An ability to draw on and apply knowledge gained from historical and comparative perspectives.
- · An ability to work both independently and as an effective team member.

#### **Attitudes and Values**

- A sensitivity to the cultural and ethical issues that may impact on the way that knowledge acquired within health is interpreted and used.
- · A respect for people whatever their age, gender, abilities, social circumstances or cultural background.
- · Commitment to addressing social inequalities which underpin differences in health experiences.
- · An appreciation of the value of an inquiring mind and of the questioning of the status quo in science and society.

# Bachelor of Health Sciences/Mathematical & Computer Sciences: Graduate Attributes - cont'd.

Mathematical and Computer Sciences Mathematical and Computer Sciences graduates:

- · Are able to apply knowledge of basic mathematical or statistical fundamentals.
- · Are able to interpret data or mathematical results, and draw correct conclusions.
- · Are able to define, formulate and solve mathematical/statistical problems.
- · Possess highly developed problem-solving skills suitable for application in a wide range of situations.
- Possess the flexibility required to adapt quickly to changes in the working environment, including the emergence of new methods, technologies and theories.
- Are able to communicate effectively, not only with other mathematicians and statisticians, but with the community at large on mathematical/statistical issues.
- Can contribute effectively as members of multi-disciplinary and multi-cultural teams, with the capacity to be leaders or managers as well as effective team members.
- · Are able, by self directed study, to remain up to date with developments in their careers/professions.
- Are able to guide developments in their careers/professions.

# Bachelor of Medicine and Bachelor of Surgery

## Academic Program Rules

#### 1 General

There shall be a degree of Bachelor of Medicine and Bachelor of Surgery.

#### 2 Duration of program

- 2.1 The program of study for the degrees of Bachelor of Medicine and Bachelor of Surgery, unless otherwise approved by the Council on the recommendation of the Faculty, shall extend over six years of full-time study.
- 2.2 A candidate may interrupt the program:
  - (a) for the purpose of proceeding to the Honours degree of Bachelor of Medical Science *or*
  - (b) for such period and on such conditions as may in each case be determined by the Faculty.
- 2.3 Students wishing to interrupt their studies in accordance with 2.2(b) above must obtain beforehand the approval of the Executive Dean on behalf of the Faculty for leave of absence for a defined period.
- 2.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.2(b) above shall be deemed to have withdrawn his or her candidature for the degrees but may reapply for admission to the program in accordance with the procedures in operation at the time.
- 2.5 Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Executive Dean of the Faculty deems appropriate.
- 3 Enrolment

3.1 Prescribed communicable infections Policy

> The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy -

available through the University's website at www.adelaide.edu.au/policies/591 - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

#### 4 Assessment and examinations

- 4.1 A candidate shall not present for the examinations unless the candidate has completed to the satisfaction of the professors and lecturers concerned, prior to the beginning of the examination, the programs of study and practice prescribed for it.
- 4.2 The examiners in any course may take into consideration written or practical work required of candidates during the program of study and practice and the results of other examinations in the courses.
- 4.3 A candidate who fails to pass in an examination shall, before presenting for the examination again, attend again such part or parts of the program of study and practice leading to that examination as the Faculty may direct.
- 4.4 (a) Candidates who pass and satisfy the assessment requirements in the whole of an examination prescribed in the Academic Program Rules shall be awarded a non-graded pass
  - (b) For the elective course/s undertaken, candidates who pass will be awarded a graded or ungraded result in accordance with the grading scheme approved for the courses/s concerned.
- 4.5 (a) The Board of Examiners may grant a candidate who has been prevented by illness or other sufficient cause from sitting for the whole or part

of an examination permission to sit for a special or supplementary examination, the extent of such special or

supplementary examination to be determined by the Board in each case.

- (b) On passing in a special or supplementary examination granted under this Academic Program Rule a candidate shall be deemed to have completed the whole of the examination; but if the candidate fails in such special or supplementary examination the candidate shall take again, and pass in, the whole of the examination before proceeding with the programs of study and practice leading to the next examination.
- (c) A candidate granted permission to sit for a supplementary or special examination may enter provisionally upon the programs of study and practice leading to the next examination pending publication of the result of the supplementary examination.

#### 4.6 Attendance requirements

To qualify for the degrees a candidate must attend regularly such tutorials and seminar work, satisfactorily perform such laboratory, practical, clinical and written work, and pass such examinations as the Faculty may from time to time prescribe.

#### 5 Qualification requirements

- 5.1 Program of study and examinations
- 5.1.1 To qualify for the degrees of Bachelor of Medicine and Bachelor of Surgery, a candidate shall complete the requirements of the six Examinations by:
  - (a) regularly attending lectures and PBL sessions
  - (b) satisfactorily participating in tutorial, practical and project work, clinical programs and attachments and
  - (c) satisfactorily completing the range of assessment tasks, including examinations, that are prescribed in the Syllabus for each of the courses of the Examinations as set out in 5.2.

Students will be required to undertake and pass a total of 24 units of courses during each of Years 1, 2 and 3 of the MBBS program. At the time of enrolment, students will be advised how these units are to be allocated.

In addition, after the end of Year 5 and before commencing the study and practice for the final Year 6 program, a students is required to undertake an external elective approved by the Dean of Medicine.

- 5.1.2 A student entering the First Year of the program shall be required to undertake an English Language Proficiency assessment. If deficiencies in the written and/or oral use of English are identified through the initial assessment or through the assessment tasks prescribed for the courses of the First Year Examination, the School may require the student to participate in a Language Development Program in parallel with the courses of study for the degree.
- 5.1.3 A candidate shall normally pass the whole of one Examination before entering into the program of study and practice leading to the next examination. A candidate who fails an Examination will normally be required to repeat the study and clinical practice and the assessment requirements of all courses set out for the Examinations in 5.2 below.
- 5.2 Academic program
- 5.2.1 The following are the courses of study for the six years of the degrees of Bachelor of Medicine and Bachelor of Surgery:

#### Medic St 1000 A/B First Year Examination

Core courses

MEDIC ST 1101 A/B Scientific Basis of Medicine I	6
MEDIC ST 1102 A/B Clinical Skills I	6
MEDIC ST 1103 A/B Medical Professional and Personal Development I	6
Students must also enrol in, and pass:	
Students without Year 12 Biology	
BIOLOGY 1101MED Molecules, Genes and Cells A	3
Students with Year 12 Biology:	
BIOLOGY 1102MED Molecules, Genes and Cells B	3
All students	
BIOLOGY 1201 Biology I: Human Perspectives	3
Medic St 2000 A/B Second Year Examination	
Core courses	
MEDIC ST 2101 A/B Scientific Basis of Medicine II	6
MEDIC ST 2102 AHO/BHO Clinical Skills II	6
MEDIC ST 2103 A/B Medical Professional and Personal Development II	6
Students will be required to undertake and pass an	

Students will be required to undertake and pass an additional 6 units of elective courses as advised in the MBBS enrolment instructions.

#### Medic St 3000 A/B Third Year Examination

Core courses

MEDIC ST 3101 A/B Scientific Basis of Medicine III	6
MEDIC ST 3102 A/B Clinical Skills III	6
MEDIC ST 3103 A/B Medical Professional and	
Personal Development III	6
Students will be required to undertake and pass	
approved elective courses to an aggregate, over Years	3
1, 2 and 3, of 18 units.	

#### Medic St 4000 A/B Fourth Year Examination

MEDIC ST 4005 AHO/BHO Medical Home Unit	1	5
MEDIC ST 4006 AHO/BHO Surgical Home Unit	1	5
MEDIC ST 4007 AHO/BHO Psychological Healt	h	3
MEDIC ST 4008 AHO/BHO Acute and Chronic	Care 1	3
MEDIC ST 4009 AHO/BHO Medical and Scient	ific	
Attachment 1		2
MEDIC ST 4010 AHO/BHO Medical and Scient	ific	
Attachment 2		2
MEDIC ST 4011 AHO/BHO Research Proposal		2
MEDIC ST 4012 AHO/BHO Common Program		2
Medic St 5000 A/B Fifth Year Examination	on	
MEDIC ST 5005 AHO/BHO Medical and Scient	ific	
Attachment 3		2
MEDIC ST 5006 AHO/BHO Medical and Scient Attachment 4	ific	2
MEDIC ST 5007 AHO/BHO Medical and Scient	ific	
Attachment 5		2
MEDIC ST 5008 AHO/BHO Medical and Scient	ific	
Attachment 6		2
MEDIC ST 5009 AHO/BHO Acute and Chronic	Care 2	4
MEDIC ST 5010 AHO/BHO Paediatrics		
and Child Health		5
MEDIC ST 5011 AHO/BHO Human Reproductiv	/e	_
Health		5
MEDIC ST 5012 AHO/BHO Common Program		2
MEDIC ST 5013 External Elective		

#### Medic St 6000 Final Sixth Year Assessment

MEDIC ST 6001 AHO/BHO Clinical Elective and Specials Week VI	3
MEDIC ST 6002 AHO/BHO Medicine Internship and Common Program VI	3
MEDIC ST 6003 AHO/BHO Surgery Internship VI	3
MEDIC ST 6004 AHO/BHO Emergency Medicine Internship VI	3

MEDIC ST 6005 AHO/BHO Primary Care SCAP VI	3
MEDIC ST 6006 AHO/BHO Psychological	
Health SCAP VI	3
MEDIC ST 6007 AHO/BHO Medicine SCAP VI	3
MEDIC ST 6008 AHO/BHO Surgery SCAP VI	3

5.3 Honours degree of Bachelor of Medical Science

> A candidate may intermit the course for the degrees of Bachelor of Medicine and Bachelor of Surgery for the purpose of proceeding to the Honours degree of Bachelor of Medical Science; or for such period and on such conditions as may in each case be determined by the School.

5.4 Unacceptable combinations of courses

> No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the School concerned, contains a substantial amount of the same material: and no course or portion of a course may be counted twice towards an award.

#### 5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the School in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Rules for the admission of medical students to the practice of the teaching hospitals, health centres and the Institute of **Medical and Veterinary Science:**

- 1 Medical students admitted to the practice of a Teaching Hospital or Health Centre shall be under the control of the Medical Director in relation to matters of common discipline; the University will otherwise be responsible for matters related to education.
- 2 No student shall publish the report of any case without the permission of the Hospital Board or Health Centre Management Committee and the Senior Medical Officer under whose care the patient is or has been.
- 3 Except in the performance of his clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Medical Officer in charge.
- 4 No student may communicate directly or indirectly to the Press, radio or television any matter concerning the clinical practice of the Institution to which he or she is attached.

- 5 No student may introduce visitors into any Hospital or Health Centre to the practice of which he or she has been admitted, without the permission of the Medical Director or his deputy.
- 6 Students shall pay such fees as are laid down from time to time by the University in conjunction with the Teaching Hospitals or Health Centres. Fees are payable directly to the University; no student will be admitted to a Teaching Hospital or Health Centre until such fees are paid.
- 7 Students shall discharge the duties assigned to them, and pay for or replace any article damaged or lost or destroyed by them through negligence or misconduct.
- 8 During any period of residence the student will comply with the directions of the Medical Director of the Hospital or Health Centre in respect of discipline and general conduct.
- 9 Subject to rule 10 any student infringing any of these rules or the rules of the Hospital or Health Centre, or otherwise misconducting himself/herself may be suspended or dismissed by the Board of the Hospital or Health Centre from the practice of the Hospital or Health Centre. If he/she is so dismissed he/she shall forfeit all payments which may have been made and all rights accruing therefrom.
- 10 In all instances where a student has been either suspended or dismissed from the practice of the Hospital or Health Centre his/her case shall be investigated by an Investigation Committee on which there shall be a representative appointed by the Hospital Board, a Senior Consultant Clinical Teacher nominated by the Head (or his/her deputy) of the appropriate Staff Committee of the Hospital or Health Centre concerned, a representative appointed by the University, and the Executive Dean of the Faculty of Health Sciences (or his/her deputy). The committee should also normally include a representative of the Adelaide Medical Students' Society (eg. a student member of Faculty of Medicine). The Investigating Committee shall make its recommendation to the Board of the Hospital or Health Centre Management Committee concerned and to the Council of the University for confirmation or otherwise.

These rules apply equally to medical students who use the facilities of the IMVS where the Director of the Institute has the authority given in these Rules to the Medical Director of a Teaching Hospital, and where the Council of the Institute replaces the Board of the hospital.

# Bachelor of Medicine & Bachelor of Surgery – Graduate Attributes

Our undergraduate program at the University of Adelaide Medical School seeks to produce an undifferentiated doctor with the abilities and skills appropriate for both the seamless transition to post-graduate training, and to continue into advanced training programs for the full spectrum of career paths.

The University of Adelaide Medical graduates will be distinguished by:

- · Being thoroughly versed in the skills and application of adult learning.
- Deriving enjoyment for the process of learning and the pursuit of knowledge and understanding (where knowledge is
  defined as information that can be used effectively in familiar and unknown situations).
- · Having a superior ability to integrate knowledge across disciplines.
- The ability to apply basic scientific knowledge to facilitate understanding and management in clinical practice.
- · A highly developed sense of their 'duty of care' for their patients.

At the end of the program of undergraduate medical education the student will have acquired through the Scientific Basis of Medicine, Medical Personal and Professional Development, and Clinical Practice streams the attitudes, knowledge and understanding, and skills essential to the practice of medicine, including:

#### **Medical Personal and Development**

- Respect for patients and colleagues that encompasses, without prejudice, diversity of background and opportunity, language, culture and way of life.
- · Recognition of patients' rights in all respects, and particularly in regard to privacy, confidentiality and informed consent.
- · Ability to cope with uncertainty and adapt to change.
- Awareness of the moral and ethical responsibilities involved in individual patient care and in the provision of care to
  populations of patients.
- · Development of the capacity of self-audit and for participation in the peer-review process.
- · Capacity to recognise and accept limitations in one's knowledge, understanding and clinical skills.
- · Ability to work effectively as a member of a team.
- Willingness to use his or her professional capabilities to contribute to community welfare as well as to individual patient
  welfare by the practice of preventive medicine and the encouragement of health promotion.
- Acceptance and practice of the theories and principles that govern ethical decision making, and of the major ethical dilemmas in medicine, particularly those that arise at the beginning and end of life and those that arise from the rapid expansion of the knowledge of genetics.
- Ability to retrieve (from electronic databases and other resources), manage, and utilise biomedical information for solving
  problems and making decisions that are relevant to the care of individuals and populations.
- Acceptance of the responsibility to contribute as far as possible to the advancement of medical knowledge and research in
  order to benefit medical practice and further improve the quality of patient care.
- · Willingness to contribute to teaching and the professional development of others.
- · Ability to communicate effectively in writing with patients, colleagues and others in carrying out their responsibilities.

## Bachelor of Medicine & Bachelor of Surgery: Graduate Attributes - cont'd.

#### **Scientific Basis of Medicine**

Knowledge and understanding of:

- The normal structure and function of the body (as an intact organism) and of each of its major organ systems.
- The molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.
- The various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of maladies and the ways in which they operate on the body (pathogenesis).
- The altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.
- Problems that are presented to doctors and the range of solutions that have been developed for their recognition, investigation, prevention and treatment.
- How disease presents in patients of all ages, how patients react to illness or the belief that they are ill, and how illness behaviour varies between social and cultural groups.
- The environmental, social and psychological determinants of disease, the principles of disease surveillance and the means by which diseases may spread, and the analysis of the burden of disease within the community.
- · The principles of disease prevention and health promotion.
- · Various approaches to the organisation, financing, and delivery of health care.
- Understanding of the power of the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies.
- · Explaining mechanisms by linking basic sciences to symptoms and signs.
- · Integrating knowledge from different areas and applying it to patient management.
- Understanding of the physical and psychological influences operating throughout the human life cycle, including development, reproduction and senescence.
- Demonstrating understanding of the factors that influence the cost-effective practice of medicine including the role of the history and examination and of appropriate investigation and management.

#### **Clinical Practice**

- Honesty and integrity in all interactions with patients' families, colleagues, and others with whom physicians must interact in their professional lives.
- Understanding the importance of effective communication to the practice of "good" medicine and the avoidance of litigation.
- Ability to effectively and empathetically communicate with both patients and their relatives and with other professionals, both medical and non-medical.
- · Knowledge and understanding of the principles of therapy, including
  - (i) the management of acute illness,
  - (ii) the actions of drugs, their prescription and their administration,

#### Bachelor of Medicine & Bachelor of Surgery: Graduate Attributes - cont'd.

- (iii) the care of the chronically ill and the disabled,
- (iv) rehabilitation, institutional and community care,
- (v) the amelioration of suffering and the relief of pain,
- (vi) the care of the dying.
- Ability to obtain an accurate medical history that covers all essential aspects of the history, including issues related to age, gender, and socio-economic status.
- · Ability to perform both complete and an organ system specific examination, including a mental status examination.
- Ability to perform routine technical procedures.
- · Ability to interpret the results of commonly used, including effective and most cost efficient, diagnostic procedures.
- Application of the knowledge and understanding of the most frequent clinical, laboratory, roentgenologic, and pathologic manifestations of common maladies.
- · Ability to reason deductively in solving clinical problems.
- Ability to construct appropriate management strategies (both diagnostic and therapeutic) for patients with common conditions, both acute and chronic, including medical, psychiatric, and surgical conditions, and those requiring short- and long-term rehabilitation.
- Ability to recognise patients with immediately life threatening cardiac, pulmonary or neurological conditions regardless of etiology, and to institute appropriate initial therapy.
- · Ability to recognise and outline an initial course of management for patients with serious conditions requiring critical care.

# Bachelor of Medical Science (Honours)

## Academic Program Rules

#### 1 General

There shall be an Honours degree of Bachelor of Medical Science.

# 2 Duration of program and qualification requirements

To qualify for the degree a candidate shall undertake a program of advanced study extending over one academic year, and shall satisfy the examiners in one of the courses prescribed in the Academic Program Rules.

#### 3 Admission requirements

- 3.1 Before admission to a program of study for the degree a candidate shall have:
  - (a) passed the Third Year Examination for the degrees of Bachelor of Medicine and Bachelor of Surgery;
  - (b) been accepted by the Head of School and Head of Discipline concerned as a suitable candidate for advanced work in the course he/she wishes to pursue and
  - (c) completed such prerequisite work as the Head of School and Head of Discipline concerned may prescribe.
- 3.2 On the recommendation of the Faculty of Health Sciences, the Council may accept as a candidate for the degree a person who in a medical program of another institution has passed examinations regarded as equivalent to that specified in 3.1(a).

#### 4 Assessment and examinations

- 4.1 The examination for the degree will consist of a written paper or papers, the essays submitted during the year, the thesis on the research project, an oral examination, and a practical examination if required by the examiners.
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.
- 4.3 A candidate shall not be eligible to present himself/herself for examination unless he/she has regularly attended the prescribed lectures and has done written and laboratory or other practical work, where required, to the satisfaction of the professors and lecturers concerned.

#### 5 Qualification requirements

#### 5.1 Academic program

A program of study for the degree may be undertaken in one of the following:

ANAES&IC 4000AHO/BHO Honours Anaesthesia & Intensive Care

ANAT SC 4000 A/B Honours Anatomical Sciences

BIOCHEM 4000 A/B Honours Biochemistry

GEN PRAC 4000 AHO/BHO Honours General Practice

MEDICINE 4000 AHO/BHO Honours Medicine

MICRO 4000 A/B Honours Microbiology and Immunology

OB&GYNAE 4000 AHO/BHO Honours Obstetrics and Gynaecology

ORT&TRAU 4000 AHO/BHO Honours Orthopaedics and Trauma

PAEDIAT 4000 AHO/BHO Honours Paediatrics

PATHOL 4000 A/B Honours Pathology

PHARM 4000 A/B Honours Pharmacology

PHYSIOL 4000 A/B Honours Physiology

PSYCHIAT 4000 AHO/BHO Honours Psychiatry

PSYCHOL 4000 A/B Honours Psychology

PUB HLTH 4000 AHO/BHO Honours Public Health

SURGERY 4000 AHO/BHO Honours Surgery

5.2 The program comprises three equally important aspects undertaken concurrently:

- (a) Program of Reading in selected fields, and the submission of a series of essays associated therewith.
- (b) Experimental work covering a wide range of techniques.
- (c) The undertaking of a research project which will be assigned early in the program and on which a thesis must be submitted.

#### 5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

#### 1 General

There shall be a degree of Bachelor of Nursing

#### 2 Duration of program

The program of study shall extend over three years of full time study.

#### 3 Admission

- 3.1 The admission requirements for the degree are subject to selection procedures currently operating in the department.
- 3.2 Status, exemption and credit transfer All applications for status will be considered on an individual basis, by the Head of Discipline. Candidates are only permitted to count towards the degree courses, which have been passed in another degree program, up to a maximum value of 36 units.

A student who leaves the program without approval shall be deemed to have withdrawn his or her candidature for the degree, but may reapply for admission to the program in accordance with the procedures in operation at the time.

Students who have interrupted their studies may be required to resume at such a point in the program and/or to undertake such additional or special program of study as the Head of Discipline deems appropriate.

#### 3.3 Physical fitness

The Bachelor of Nursing has an extensive clinical component that requires students to work as members of the health care team. To satisfactorily undertake this clinical component students need to be physically fit. Students must satisfy the individual Occupational Health and Safety requirements of the institution in which they are undertaking the clinical component of the program.

# 3.4 Prescribed communicable infections policy

The University promotes a proactive public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes towards people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Nursing, Bachelor of Medicine and Bachelor of Surgery, Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective nursing students are strongly advised to consult the University's *Students With Prescribed Communicable Infections Policy* - available through the University's website at

www.adelaide.edu.au/student/current/policies.html which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

#### 4 Assessment and examinations

- 4.1 A candidate shall not present for the examinations unless the candidate has completed to the satisfaction of the teaching staff concerned, prior to the beginning of the examination, the programs of study and practice prescribed for it. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 4.2 The examiners in any course may take into consideration written or practical work required of candidates during the program of study and practice and the results of other examinations in the courses.
- 4.3 A candidate who fails to pass an examination shall, before presenting for the examination again, attend again the parts of study and practice leading to that examination as the Faculty may direct.
- 4.4 (a) There shall be four classifications of pass in each course for the Bachelor degree as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.

In addition there shall be a classification of Conceded Pass. Courses for which a result of Conceded Pass has been obtained shall not satisfy prerequisite requirements and may not be presented as a credit towards the award of the Bachelor of Nursing. It is a requirement that all courses are completed at a Pass level or better in order to progress to the following year and to meet the academic requirements of the program.

- (b) A candidate who fails a course or who obtains a conceded pass shall, unless exempted wholly or partially therefrom by the Head of Discipline concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 4.5 The Board of Examiners may grant a candidate who has been prevented by illness or other sufficient cause from sitting for the whole or part of an examination permission to sit for a special or supplementary examination, the extent of such special or supplementary examination to be determined by the Board in each case.
- 4.6 On passing in a special or supplementary examination granted under this Academic Program Rule a candidate shall be deemed to have completed the whole of the examination; but if the candidate fails in such special or supplementary examination the candidate shall take again, and pass in, the whole of the examination before proceeding with the programs of study and practice leading to the next examination.
- 4.7 A candidate granted permission to sit for a supplementary or special examination may enter provisionally upon the programs of study and practice leading to the next examination pending publications of the result of the supplementary examination.
- 4.8 A candidate who has twice failed the examination in any course for the Bachelor degree may not enrol for that course again except by permission of the Head of Department and then only under such conditions as the Head of Discipline may prescribe.

#### 4.9 Attendance requirements

To qualify for the degrees a candidate must attend regularly such tutorials and seminar work, satisfactorily perform such laboratory, practical, clinical and written work, and pass such examinations as the Council may from time to time prescribe. Students must complete the set time for each clinical attachment. If this is not met a supplementary placement will be negotiated. If before the census date, a student finds they are unable to complete a clinical attach-ment due to circumstances such as illness, they may withdraw and re-enrol in the course in the following year. If after the census date they are unable to complete the placement due to circumstances such as illness, their mark may be withheld until the required clinical time is completed. 5 Qualification requirements

	_	•	_	
5.1	Academic program for the Bachelor degree			
	To c	ualify for the Bachelor degree a candidate shall:		
	(a)	Regularly attend lectures and PBL sessions		
	(b)	satisfactorily participate in tutorial, practical and project work and clinical attachments		
	(c)	present passes in the following courses to the value of 72 units.		
5.1.1	Lev	vel I		
	sem	ester 1		
	Hun	nan Sciences IA	6	
	Nur	sing Practice IA	6	
	sem	ester 2		
	Hun	nan Sciences IB	6	
	Nur	sing Practice IB	6	
5.1.2	Le	vel II		
	sem	ester 1		
	Hun	nan Sciences IIA	6	
	Nur	sing Practice IIA	6	
	sem	ester 2		
	Hun	nan Sciences IIB	6	
	Nur	sing Practice IIB	6	
5.1.3	Le	vel III		
	sem	ester 1		
	Hun	nan Sciences IIIA	6	
	Nur	sing Practice IIIA	6	
	sem	ester 2		
	Hun	nan Sciences IIIB	6	
	Nur	sing Practice IIIB	6	

- 5.2 A student must pass all courses in each semester before progressing to the next semester of study.
- 5.3 A candidate may begin the first semester's work in the following year's program of study pending the result of any supplementary examination for which the candidate has been permitted to present.

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

#### 5.4 Practical experience

Practical experience will be required as part of the Nursing Practice courses. Clinical placements facilitating this experience will not be restricted to the university teaching semesters.

#### 5.4.1 Uniform

During their nursing practice placements students will be required to comply with the Department of Clinical Nursing dress standards.

#### 5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### 7 Rules for the admission of nursing students to the practice of the teaching hospitals, health centres

- 7.1 Nursing students admitted to the practice of a Teaching Hospital or Health Centre shall be under the control of the Nursing Director in relation to matters of common discipline; the University will otherwise be responsible for matters related to education.
- 7.2 No student shall publish the report of any case without the permission of the Hospital Board or Health Centre Management Committee and the Clinical Nurse Consultant under whose care the patient is or has been.
- 7.3 Except in the performance of his/her clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Clinical Nurse Consultant in charge.
- 7.4 No student may communicate directly or indirectly to the Press, radio or television any matter concerning the clinical practice of the Institution to which he or she is attached.
- 7.5 No student may introduce visitors into any Hospital or Health Centre to the practice of which he or she has been admitted, without the permission of the Nursing Director or his/her deputy.

- 7.6 Students shall discharge the duties assigned to them, and pay for or replace any article damaged or lost or destroyed by them through negligence or misconduct.
- 7.7 During any period of residence the student will comply with the directions of the Nursing Director of the Hospital or Health Centre in respect of discipline and general conduct.
- 7.8 Subject to rule 10 any student infringing any of these rules or the rules of the Hospital or Health Centre, or otherwise misconducting himself/herself may be suspended or dismissed by the Board of the Hospital or Health Centre from the practice of the Hospital or Health Centre. If he/she is so dismissed he/she shall forfeit all payments which may have been made and all rights accruing there from.
- 79 In all instances where a student has been either suspended or dismissed from the practice of the Hospital or Health Centre his/her case shall be investigated by an Investigation Committee on which there shall be a representative appointed by the Hospital Board, a Clinical Nurse Consultant nominated by the Head (or his/her deputy) of the appropriate Staff Committee of the Hospital or Health Centre concerned, a representative appointed by the Department of Clinical Nursing and the Executive Dean of the Faculty of Health Sciences (or his/her deputy). The committee should also normally include a representative of the Student Union. The Investigating Committee shall make its recommendation to the Board of the Hospital or Health Centre Management Committee concerned and to the Council of the University for confirmation or otherwise.
- 7.10 Students who demonstrate unsatisfactory professional behaviour may be referred to the Faculty 'Professional Behaviour Panel' (PBP). The PBP is empowered to refer students for compulsory counselling, to the Dean for disciplinary action or to the Director, Student and Staff Services for initiation of proceedings under the University's Rules for Student Conduct, where this is appropriate.

# Bachelor of Nursing – Graduate Attributes

The Bachelor of Nursing seeks to produce a graduate who is well-prepared, both academically and clinically, to meet the ongoing changes and challenges of a 21st century healthcare system. Graduates will have the professional knowledge, skills and attitudes required to function in the role of a registered nurse, according to the Australian Nursing Council National Competency Standards for Registered Nurses and will be able to function in accordance with the professional codes of ethics and conduct as described by the Australian Nursing Council.

Nursing graduates will be particularly distinguished by the following attributes:

- · The potential to work as team leaders and managers and undertake the role of case management and care coordination.
- · A rigorous academic knowledge of the human sciences that inform nursing practice.
- The clinical and technological skills required to provide high quality effective nursing care.
- The attitudes and skills to practice person-centred nursing in a culturally sensitive and ethically sound manner;
- · Being able to use critical thinking skills and knowledge to problem solve in their nursing practice.
- Highly developed communication skills and sound interpersonal skills to work effectively as members of the multidisciplinary team and to provide quality nursing care.
- Being able to critically analyse in order to evaluate the evidence and make decisions and implement nursing care based on the best available evidence.
- Being committed to and having the skills to continue life long learning to advance their nursing practice and provide high quality nursing care.
- Being able to work effectively both independently and as members of the nursing and multidisciplinary team in a variety of health care setting.
- Being well equipped to practice as a registered nurse in an technological environment. This means being flexible, receptive
  and knowledgeable regarding technology, being literate in health informatics and general information technology and being
  able to best use this to provide quality nursing care.
- · Being able to effectively integrate skills and knowledge in order to facilitate quality nursing care.
- Having a sound understanding of the dynamics of the health care system and the sociological, cultural and political influences that influence professional practice.
- · Being prepared to practice and promote safe practice in accordance with legislation and professional codes.
- The knowledge, skills and attitudes to practice in a health system that has an increasing emphasis on health, health
  promotion and primary health care services.
- The knowledge and willingness required to contribute to the professional development of other nurses.

## Academic Program Rules

#### 1 General

There shall be a Bachelor of Oral Health.

#### 2 Duration of program

The program of study for the Bachelor of Oral Health shall extend over three years of full-time study.

Students wishing to interrupt their studies must apply for permission and obtain beforehand the approval of the Dean on behalf of the School for leave of absence for a defined period.

A student who leaves the program without approval or who extends leave of absence beyond the time period approved by the Dean shall be deemed to have withdrawn his or her candidature for the degree but shall be permitted to reapply for admission to the program in accordance with the procedures in operation at the time.

Students who have interrupted their studies in the prescribed courses may be required to resume at such a point in the program and/or undertake such additional or special program of study as the Dean of the School deems appropriate.

#### 3 Admission

- 3.1 Applicants shall, unless exempted by the Dental School, have satisfied the University's admission requirements under the South Australian Certificate of Education or the equivalent.
- 3.2 Applicants shall, in addition to meeting the admission requirements in 3.1 above, satisfactorily participate in an oral health selection test (UMAT) and interview conducted by the Selection Committee appointed by the School of Dentistry.
- 3.3 Status and exemption
- 3.3.1 No candidate may be granted more than 48 units of status toward the Degree for other studies undertaken in the University, or other post secondary institution.
- 3.3.2 A candidate who has previously passed courses or whose employment has included appropriate clinical experience may, on written application to the Dean or nominee, be exempted from part of the requirements of a course.

3.3.3 When 36 units of status or more is awarded for a previous qualification, the previous qualification shall be surrendered.

#### 4 Enrolment

#### 4.1 Approval of enrolment

The following students must have their program of study approved by the Dean or nominee at the time of enrolment in the year concerned:

- (a) students who have been granted or are seeking status or exemption from these Rules (see relevant section under Student Related Polices In Student Guide 2003)
- (b) students who are repeating a course or courses; such students may be required to resume at a point in the program and/or undertake such additional or special program of study as the Dean of Dental School deems appropriate
- (c) students who have obtained permission from the School of Dentistry to intermit their program for reasons approved in each case.

#### 4.2 General

A candidate shall satisfactorily complete each annual examination before entering upon the work of the following year's program of study provided that:

- (a) A candidate shall enrol in all clinical streams of the year undertaken and shall enrol in any other courses that the School of Dentistry mandates. Except by permission of the School of Dentistry the candidate may not enrol concurrently for any additional courses from the following year.
- (b) A candidate may begin the first semester's work in the following year's program of study pending the result of any supplementary examination for which the candidate has been permitted to present.
- (c) A supplementary examination shall not be awarded on academic grounds if the student has achieved an aggregate score of less than 35%. Students shall not be awarded more than two supplementary examinations on academic grounds per year.

#### 4.3 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine and Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's *Students With Prescribed Communicable Infections Policy* available through the University's website at www.adelaide.edu.au/ student/current/policies.html which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

#### 5 Assessment and examinations

5.1 There shall be four classifications of pass in the final assessment of any course for the Bachelor Degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. The Pass result in the Annual Oral Health Examinations shall be Non-Graded.

In addition there shall be a classification of Conceded Pass. Courses for which a result of Conceded Pass has been obtained shall not satisfy prerequisite requirements and may not be presented as a credit towards the award of the Bachelor of Oral Health. It is a requirement that all courses are completed at a Pass level or better in order to progress to the following year and to meet the academic requirements of the program.

- 5.2 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, clinical, practical and examination work.
- 5.3 A candidate may not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the academic staff concerned.

- 5.4 A candidate who fails a course or who obtains a Conceded Pass shall, unless exempted wholly or partially therefrom by the Dean of the School of Dentistry, again complete the required work in that course to the satisfaction of the teaching staff concerned. Such a candidate may be required to attend concurrently such lectures, clinical practice, laboratory and other practical work as the School of Dentistry may prescribe, in other course(s) of an annual examination.
- 5.5 A candidate who has twice failed to obtain a Pass in the examination in any course for the Degree may not enrol for that course again except by special permission of the School of Dentistry and then only under such conditions as School of Dentistry may prescribe.
- 5.6 A candidate who is exempt from more than 50% in a stream shall not be granted a classified pass in that stream.

### 6 Qualification requirements

6.1 The program for the degree of Bachelor of Oral Health shall extend over three years. To qualify for the degree a candidate shall regularly attend class meetings, tutorials and clinical practice, do written and laboratory or other practical work to the satisfaction of the academic staff concerned, and pass the prescribed examinations. Students shall attend at clinics, teaching hospitals and health centres as required for their clinical instruction.

#### 6.2 Academic program

To qualify for the Degree a candidate shall meet the requirements in the course outlines which may include attendance in class meetings, tutorials and clinical practice, do written and laboratory or other practical work to the satisfaction of the Dean of the Dental School and pass the prescribed examinations.

The following are the courses of study for DENT 1200HO First Annual Oral Health Examination:

DENT 1201 AHO/BHO Dental and Health Science I OH Part 1 & 2	6
DENT 1202 AHO/BHO Clinical Practice I OH Part 1 & 2	9
DENT 1203 AHO/BHO Human Biology I OH Part 1 & 2	6
DENT 1204AHO/BHO General Studies I OH Part 1 & 2	3

The following are the courses of study for DENT 2200HO Second Annual Oral Health Examination:

DENT 2201 AHO/BHO Dental and Health Science II OH Part 1 & 2	ł 6
DENT 2202 AHO/BHO Clinical Practice II OH Part 1 & 2	12
DENT 2203 AHO/BHO Human Biology II OH Part 1 & 2	3
DENT 2204 AHO/BHO General Studies II OH Part 1 & 2	3
The following are the courses of study for DENT 3200HO Third Annual Oral Health Examination:	
DENT 3201 AHO/BHO Dental and Health Science IIIOH Part 1 & 2	ا 3
DENT 3202 AHO/BHO Clinical Practice IIIOH Part 1 & 2	12
DENT 3203 AHO/BHO Human Biology IIIOH Part 1 & 2	3
DENT 3204 AHO/BHO Oral Health Electives IIIO H Part 1 & 2	6

- 6.3 Rules for admission of dental school students to the practice of the South Australian Dental Service and other teaching hospitals and health centres
- 6.3.1 Each Dental School student of the University of Adelaide shall attend clinics of the South Australian Dental Service, or other teaching hospitals or health centres, as directed by the Dean of the School of Dentistry; and each student shall be admitted to the practice of the South Australian Dental Service or other teaching hospitals or health centres under the disciplinary control of the Chief Executive Officer, in the case of the former, or the Medical Superintendent or Director, in the case of the latter, whilst in attendance.
- 6.3.2 No student may introduce visitors into any of the said clinics, hospitals or health centres without permission of the above designated officers.
- 6.3.3 Students shall conduct themselves with propriety and discharge the duties assigned, and pay for or replace any article damaged, lost or destroyed by them together; and make good any loss sustained by their negligence.
- 6.3.4 Each student shall at all times be under the direction and supervision of a duly appointed member of the teaching staff of the University of Adelaide, or a person who has been granted appropriate University status, and shall carry out such work as shall be allotted.

- 6.3.5 No student shall administer treatment to any patient without the approval of an appointed teacher.
- 6.3.6 Except in the performance of the associated clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Dental or Medical Officer in charge.
- 6.3.7 No student shall publish a report on any case without the written permission of the Chief Executive Officer in the case of the South Australian Dental Service, or the Medical Superintendent or Director in the case of teaching hospitals or health centres, and the Senior Dental or Medical Officer under whose care the patient is or has been.
- 6.3.8 No student shall communicate directly to the press, radio or television any matter concerning the clinical practice of the institution to which that student is attached.
- 6.3.9 Students shall pay such fees as are laid down by the South Australian Dental Service in consultation with the Dean of the School of Dentistry; no student shall be admitted to clinics until such fees are paid.
- 6.3.10 Misconduct or infringement of any of these rules, may lead to temporary suspension by the Chief Executive Officer, South Australian Dental Service, or the Medical Superintendent or Director, other teaching hospitals or health centres. In the case of such temporary suspension, written notice shall immediately be given to the Dean of the School of Dentistry.
- 6.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

#### 6.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Oral Health - Graduate Attributes

On successful completion of the Bachelor of Oral Health, the graduates will have received education and training in the theory and practice of dental therapy and dental hygiene, to enable them to work in both private and government oral health services, in accordance with the legal and legislative limitations governing each Australian state.

Each graduate will have developed the skills which will enable them to:

- · Work as an integral part of the dental team providing holistic oral health care on an individual and community level
- · Recognise dental diseases and formulate strategies that address the treatment and preventive needs of each individual
- · Promote the importance of general and oral health to individuals in a dental and community health setting
- · Work effectively with other allied health professionals to foster optimum oral health practices within the community
- Communicate effectively and provide education to people within a multicultural society that will encourage patterns of behaviour which favour effective oral health
- · Maintain the highest level of ethics and professionalism in the practice of dental hygiene and dental therapy
- Utilise the principles of self evaluation that will contribute to the continuous development of skills within their field of
  practice
- Embrace the principles of lifelong learning that will enhance the practice of dental therapy and dental hygiene.

## Academic Program Rules

#### 1 General

There shall be a degree of Bachelor of Psychology.

#### 2 Duration of program

The program of study shall extend over not less than three years of full-time study and not more than six years of part-time study.

#### 3 Admission

- 3.1 Status, exemption and credit transfer
- 3.1.1 In determining a candidate's eligibility for the award of the degree, the Discipline may disallow any course passed more than 10 years previously. Credit for other courses may be allowed at the discretion of the Head of the School of Psychology.
- 3.1.2 Candidates may be permitted to count towards the degree courses which have been passed in another degree program, up to a maximum value of 24 units, but will be required to present Level III courses to the value of 24 units that have not been presented for another degree, and in addition satisfy the requirements of Rule 6.3.
- 4 Enrolment

Each student's program of study shall be approved by the Executive Dean of Faculty (or nominee) at enrolment each year.

#### 5 Assessment and examinations

- 5.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 5.2 In determining the final result in a course (or part of a course) the examiners may take into account the candidate's oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which the work will be taken into account and of its relative importance to the final result.

#### 6 Qualification requirements

- 6.1 To qualify for the degree a candidate shall, subject to the conditions specified below, pass courses to the value of at least 72 units, which must include the following:
  - (a) Level 1 courses to the value of 24 units, which must include PSYCHOL 1000 Psychology IA (3 units) and PSYCHOL 1001 Psychology IB (3 units)
  - (b) Level 2 courses to the value of 24 units, which must include PSYCHOL 2002 Psychology IIA (4 units), PSYCHOL 2003 Psychology IIB (4 units) and PSYCHOL 2001 Psychological Research Methodology II (4 units)
  - (c) Level 3 courses to the value of 24 units, which must include PSYCHOL 3000 Psychological Research Methodology III (4 units) and other Level 3 Psychology courses to the value of at least 14 units.
- 6.1.1 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for the degree.
- 6.2 A candidate who has completed all the requirements of the Bachelor of Psychology degree to a standard acceptable to the Faculty may apply for admission to the Bachelor of Psychology (Honours) degree. In these circumstances the candidate may obtain either degree or both.
- 6.3 Academic program

#### Level I

PSYCHOL 1000 Psychology IA

PSYCHOL 1001 Psychology IB

plus courses to the value of at least 18 units selected from the following:

#### Commerce

Level I courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

#### Economics

Level I courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

#### Health Sciences

Level I courses listed under Academic Program Rule 5.1.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences Level I courses listed under Specific Academic Program Rule 6.12.1 of the degree of Bachelor of Arts.

Mathematical and Computer Sciences Level I courses listed under Academic Program Rule 4.4 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

#### Sciences

Level I courses listed under Academic Program Rule 5.9.1 of the degree of Bachelor of Science.

#### Level II

PSYCHOL 2001 Psychological Research Methodology II

PSYCHOL 2002 Psychology IIA

PSYCHOL 2003 Psychology IIB

plus other Level 2 courses from the list below to the value of at least 12 units:

#### Commerce

Level II courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

#### Economics

Level II courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

#### Health Sciences

Level II courses listed under Academic Program Rule 5.1.2 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences Level II courses listed under Academic Program Rule 6.12.2 of the degree of Bachelor of Arts.

#### Mathematical and Computer Sciences

Level II courses listed under Academic Program Rule 4.4 of the degree of Bachelor of Computer Science and Specific Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

#### Sciences

Level II courses listed under Academic Program Rule 5.9.3 of the degree of Bachelor of Science.

#### Level III

PSYCHOL 3000 Psychological Research Methodology III

plus other Psychology courses from the list shown below to the value of at least 14 units:

PSYCHOL 3003 Developmental Psychology III	2
PSYCHOL 3006 Psychology, Physiology	
& Behaviour III	2
PSYCHOL 3009 Metapsychology III	2
PSYCHOL 3010 Social Psychology III	2
PSYCHOL 3013 Learning and Behaviour III	2
PSYCHOL 3014 Individual Differences III	2
PSYCHOL 3015 Human Relations III	2
PSYCHOL 3016 Language Processes III	2
PSYCHOL 3017 Health Psychology III	2
PSYCHOL 3018 Cognition III	2
PSYCHOL 3019 Perception III	2
where each and the second as forms that following that	

plus other Level III courses from the following list:

#### Commerce

Level III courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

#### Economics

Level III courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

#### Health Sciences

Level III courses listed under Academic Program Rule 5.1.3 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences Level III courses listed under Academic Program Rule 6.12.3 of the degree of Bachelor of Arts.

#### Mathematical and Computer Sciences

Level III courses listed under Academic Program Rule 4.4 of the degree of Bachelor of Computer Science and Specific Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

#### Sciences

Level III courses listed under Academic Program Rule 5.9.7 of the degree of Bachelor of Science.

#### 6.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 7 Special circumstances

When in the opinion of the relevant Faculty, special circumstances exist, the Council, on the recommendation of the Council in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Psychology – Graduate Attributes

The principal aim of this program is to provide graduates with a comprehensive tertiary-level education in Psychology and related areas of learning. The program is also designed to enable graduates to meet the prerequisites for progression to Honours and postgraduate levels of study in this discipline.

#### Knowledge

- All of the core topics specified by the Australian Psychological Society for an accredited major within this discipline, specifically: biological bases of behaviour; perception; cognition, information processing and language; learning; motivation and emotion; social psychology; lifespan developmental psychology; individual differences in capacity and behaviour, testing and assessment, personality; and abnormal psychology.
- · The range of methodologies employed to collect and analyse data relevant to the above topics.
- · The historical origins of ideas within this discipline.
- Some of the ways whereby contemporary psychology is being/could be applied to real-world problems and issues.

#### **Intellectual and Social Capabilities**

- · An ability to communicate with audiences with differing levels of knowledge about psychological topics.
- An ability to enter into rational debate on psychological topics.
- · An ability to critically evaluate the validity of claims relevant to or derived from the discipline of psychology.
- An understanding of both qualitative and quantitative methods for the analysis of data collected for the purpose of testing the validity of psychological knowledge claims and answering specific research questions in psychology.
- · An ability to produce written reports on psychological issues and questions.
- A basic understanding of how the knowledge and methods of contemporary psychology may be applied towards the management and/or solution of human problems.

#### **Attitudes and Values**

- A sensitivity to the cultural and ethical issues that may impact on the way that the knowledge acquired within psychology is interpreted and used.
- A respect for people and their fundamental human rights, regardless of age, gender, ability, ethnic or religious background.
- A respect for the scholarly heritage of psychology as an academic discipline and for the past, present and future contributions of psychology as a profession.

## Academic Program Rules

#### 1 General

There shall be an Honours degree of Bachelor of Psychology.

2 Duration of program

The program of study shall extend over four years of full-time study or part-time equivalent.

#### 3 Admission

- 3.1 Status, exemption and credit transfer
- 3.1.1 In determining a candidate's eligibility for the award of the degree, the Discipline may disallow any course passed more than 10 years previously. Credit for other courses may be allowed at the discretion of the Head of the School of Psychology.
- 3.1.2 Candidates may be permitted to count towards the degree courses which have been passed in another degree program, up to a maximum value of 48 units, but will be required to present Level III and Level IV courses to the value of 24 units each which have not been presented for another degree, and in addition satisfy the requirements of Rule 6.2.
- 3.1.3 Candidates who have completed all the requirements for the Bachelor of Psychology degree to a standard acceptable to the Faculty may be admitted to the Bachelor of Psychology (Honours) program with status for all courses prior to Level IV.
- 4 Enrolment

Each student's program of study shall be approved by the Executive Dean of Faculty (or nominee) at enrolment each year.

#### 5 Assessment and examinations

- 5.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
- 5.2 In determining the final result in a course (or part of a course) the examiners may take into account the

candidate's oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which the work will be taken into account and of its relative importance to the final result.

- 5.3 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 5.4 The examination for Level IV will consist of written papers and the thesis on the research project.
- 5.5 Review of academic progress
- 5.5.1 A candidate must maintain the prescribed level of performance for progression from each of Levels I, II, and III. Any student who fails to achieve an average of 65 per cent or higher in psychology courses undertaken at a given Level (based on the first attempt result for each course) will be determined to be making unsatisfactory progress and will be required to show cause why they should not be excluded from the program. Students in this position will be written to by the Discipline in December of the year concerned. The letter will outline the *show cause* procedures.
- 5.5.2 A candidate who does not maintain the level of performance prescribed in 5.5.1 may not proceed with the Bachelor of Psychology (Honours) program, but may apply to transfer to another degree program.

#### 6 Qualification requirements

- 6.1 To qualify for the Honours degree a candidate shall, subject to the conditions specified below, pass courses to the value of at least 96 units, which must include the following:
  - (a) Level 1 courses to the value of 24 units, which must include Psychol 1000 Psychology IA (3 units) and PSYCHOL 1001 Psychology IB (3 units)

- (b) Level 2 courses to the value of 24 units, which must include PSYCHOL 2000 Psychology IIA (4 units), PSYCHOL 2003 Psychology IIB (4 units) and PSYCHOL 2001 Psychological Research Methodology II (4 units)
- (c) Level 3 courses to the value of 24 units, which must include PSYCHOL 3000 Psychological Research Methodology III (4 units) and other Level 3 Psychology courses to the value of at least 14 units
- (d) PSYCHOL 4000 A/B Honours Psychology (24 units).
- 6.1.1 All other components (a total of 72 units) must be completed before undertaking the Fourth Year program.
- 6.1.2 No candidate will be permitted to count for the degree any course together with any other course which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course may be counted twice towards the degree. No candidate may present the same section of a course in more than one course for the degree.

6.2 Academic program

#### Level I

PSYCHOL 1000 Psychology IA

PSYCHOL 1001 Psychology IB

plus courses to the value of at least 18 units selected from the following:

#### Commerce

Level I courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

#### Economics

Level I courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

#### Health Sciences

Level I courses listed under Academic Program Rule 5.1.1 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences Level I courses listed under Academic Program Rule 6.12.1 of the degree of Bachelor of Arts.

Mathematical and Computer Sciences

Level I courses listed under Academic Program Rule 4.4 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

#### Sciences

Level I courses listed under Academic Program Rule 5.9.1 of the degree of Bachelor of Science.

#### Level II

PSYCHOL 2001 Psychological Research Methodology II

PSYCHOL 2002 Psychology IIA

PSYCHOL 2003 Psychology IIB

plus other Level 2 courses from the list below to the value of at least 12 units:

#### Commerce

Level II courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

#### Economics

Level II courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

#### Health Sciences

Level II courses listed under Academic Program Rule 5.1.2 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences Level II courses listed under Academic Program Rule 6.12.2 of the degree of Bachelor of Arts.

Mathematical and Computer Sciences Level II courses listed under Academic Program Rule 4.4 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

#### Sciences

Level II courses listed under Academic Program Rule 5.9.3 of the degree of Bachelor of Science.

#### Level III

PSYCHOL 3000 Psychological Research Methodology III plus other Psychology courses from the list shown below to the value of at least 14 units:

PSYCHOL 3003 Developmental Psychology III	2
PSYCHOL 3006 Psychology, Physiology	
& Behaviour III	2
PSYCHOL 3009 Metapsychology III	2
PSYCHOL 3010 Social Psychology III	2
PSYCHOL 3013 Learning and Behaviour III	2
PSYCHOL 3014 Individual Differences III	2
PSYCHOL 3015 Human Relations III	2
PSYCHOL 3016 Language Processes III	2
PSYCHOL 3017 Health Psychology III	2
PSYCHOL 3018 Cognition III	2
PSYCHOL 3019 Perception III	2

Plus other Level III courses from the following list:

#### Commerce

Level III courses listed under Academic Program Rule 4.8 of the degree of Bachelor of Commerce.

#### Economics

Level III courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

#### Health Sciences

Level III courses listed under Academic Program Rule 5.1.3 of the degree of Bachelor of Health Sciences.

Humanities and Social Sciences Level III courses listed under Academic Program Rule 6.12.3 of the degree of Bachelor of Arts.

Mathematical and Computer Sciences Level III courses listed under Academic Program Rule 4.4 of the degree of Bachelor of Computer Science and Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

#### Sciences

Level III courses listed under Academic Program Rule 5.9.7 of the degree of Bachelor of Science.

#### Level IV

PSYCHOL 4000 A/B Honours Psychology

#### 6.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

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#### 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Psychology (Honours) – Graduate Attributes

The principal aim of this program is to provide graduates with the tertiary-level education required to be eligible for conditional registration as a Psychologist. The program is also designed to enable graduates to meet the prerequisites for progression to postgraduate study in this discipline

#### Knowledge

- All of the topics specified by the Australian Psychological Society as core areas of learning within this discipline, specifically: biological bases of behaviour; perception; cognition, information processing and language; learning; motivation and emotion; social psychology; lifespan developmental psychology; individual differences in capacity and behaviour, testing and assessment, personality; and abnormal psychology.
- · The range of methodologies employed to collect and analyse data relevant to the above topics.
- · The historical origins of ideas within this discipline.
- Some of the ways whereby contemporary psychology is being/could be applied to real-world problems and issues.

#### **Intellectual and Social Capabilities**

- · An ability to communicate with audiences with differing levels of knowledge about psychological topics.
- · An ability to enter into rational debate on psychological topics.
- An ability to critically evaluate claims relevant to or derived from the discipline of psychology and to formulate specific research questions with respect to those claims.
- An ability to conduct empirical investigations appropriate for testing the validity of psychological knowledge claims and for the provision of evidence appropriate for answering specific research questions in psychology.
- An ability to employ both qualitative and quantitative methods for the analysis of data collected for the purpose of testing the validity of psychological knowledge claims and answering specific research questions in psychology.
- An ability to produce written reports of a professional standard on psychological issues and questions.
- A basic understanding of how the knowledge and methods of contemporary psychology may be applied towards the management and/or solution of human problems.

#### **Attitudes and Values**

- A sensitivity to the cultural and ethical issues that may impact on the way that the knowledge acquired within psychology is interpreted and used.
- A respect for people and their fundamental human rights, regardless of age, gender, ability, ethnic or religious background.
- A respect for the scholarly heritage of psychology as an academic discipline and for the past, present and future contributions of psychology as a profession.

## Academic Program Rules

#### 1 General

There shall be a degree of Bachelor of Science in Dentistry (Honours).

#### 2 Duration of program

To qualify for the degree a candidate shall undertake advanced study extending over one academic year as a full-time candidate, or with the approval of the School of Dentistry, over a period of not more than two academic years as a half-time candidate and satisfy the examiners at the first attempt.

#### 3 Admission

- 3.1 Before entering upon the program of study for the degree a candidate must:
  - have passed the Third Annual BDS examination or completed the Bachelor of Oral Health degree or an appropriate undergraduate degree or equivalent
  - (b) have completed the prerequisite work, or work accepted by the School of Dentistry as appropriate for the proposed program of study and
  - (c) be deemed by the Dean of the School concerned to be a suitable candidate for advanced work.

# 3.2 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences. All prospective medical and dental school students are strongly advised to consult the University's *Students With Prescribed Communicable Infections Policy* available through the University's website at www.adelaide.edu.au/ student/current/policies.html which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
- 4.2 The examination for the degree may consist of such written, oral and practical examinations as may be required. Assessments of any essays submitted by the candidate, practical work completed during the program, and the report on a research investigation may be taken into account.

#### 5 Qualification requirements

#### 5.1 Academic program

5.1.1 A program of study for the degree may be undertaken in the following discipline:

#### DENT 4100 AHO/BHO Honours Dentistry

5.1.2 Assumed knowledge

All programs of study assume a pass in the Third Annual BDS Examination for the degree of Bachelor of Dental Surgery; completion of the Bachelor of Oral Health degree;or a bachelor degree in another field of study that the School of Dentistry deems equivalent.

- 5.1.3 A program of study will consist of such of the following as may be required:
  - (a) reading in selected fields and submissions of essays
  - (b) attendance at lectures
  - (c) practical work and
  - (d) the undertaking of a research investigation on a topic assigned early in the program.

#### 5.2 Honours grading scheme

A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

#### 5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.



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Bachelor of Arts and Bachelor of Science

# Undergraduate Awards in the Faculty of Humanities and Social Sciences

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- · Honours degree of Bachelor of Media
- · Honours degree of Bachelor of Social Sciences

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of School or Centre may approve minor changes to any previously approved syllabus

# Diploma in Languages

Note: The Faculty of Humanities and Social Sciences has developed this program to enable students enrolled in any undergraduate degree of the University to concurrently undertake a three-year language sequence and graduate with both a Bachelor's degree and the Diploma in Languages. Application for admission to this program shall be made directly to the Faculty of Humanities and Social Sciences. Entry to this program may not be deferred.

# Academic Program Rules

#### 1 Duration of program

The duration of the Diploma itself shall be a minimum of three years of study, but shall be taken concurrently with full- or part-time study in another undergraduate award.

#### 2 Admission

- 2.1 A student of the Diploma in Languages must be enrolled concurrently in a degree of Bachelor in the University.
- 2.2 Status, exemption and credit transfer Except by special permission of the Faculty of Humanities and Social Sciences:
- 2.2.1 no student may gain status for any part of the language sequence of the Diploma in Languages, except where the language courses were undertaken in a University of Adelaide program and will no longer count to that program.
- 2.2.2 no status will be awarded in the Diploma in Languages for courses presented for another award.

#### 3 Enrolment

3.1 Approval of program of study Students should consult both the Faculty which administers their Bachelor degree and the Faculty of Humanities and Social Sciences for advice on an appropriate program of study.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course or who obtains a lower division pass and who desires to take the course again shall, unless exempted wholly or partially by the

Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.

- 4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Diploma, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

#### 5 Qualification requirements

- 5.1 To qualify for the Diploma in Languages a student shall complete a three-year sequence (as defined in Rule 5.3 below) and satisfy the requirements of an undergraduate degree of the university.
- 5.2 A student may not have the Diploma in Languages conferred until he or she has satisfied the requirements for the approved undergraduate program.

#### 5.3 Academic program

- 5.3.1 All students shall complete a three-year language sequence to a total value of 26 units. The sequence shall consist of:
  - 6 units at level I
  - 8 units at level II
  - 12 units at level III

in a single language

5.3.2 In certain circumstances this sequence may be varied to consist of:

8 units at level II

12 units at level III

6 units of advanced language studies or approved area studies

5.3.3 The languages available are:

Ancient Greek Chinese French German Indonesian Italian Japanese Latin Modern Greek Spanish

5.3.4 With the permission of the Faculty of Humanities and Social Sciences, a student may substitute a period of study in an approved overseas tertiary institution as an exchange student in lieu of part of the requirements of the Diploma in Languages, up to a limit of 12 units.

5.4 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

#### 5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Arts Bachelor of Arts (Asian Studies) Bachelor of Arts (European Studies)

Note: Students who commenced their program of study towards the Bachelor of Arts under Specific Course Rules in 1995 or Regulations and Schedules in 1994 or earlier are subject to the following provisions:

- Students will normally complete their course of study under the provisions of the Specific Course Rules as published in 1995.
- Students may be permitted to complete their studies under the current Academic Program Rules for the Bachelor of Arts with such modifications
  as the Faculty may deem necessary.

## Academic Program Rules

1 Genera	al
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On satisfying the admission requirements for entry to the Bachelor of Arts, students will enrol in a program of study to allow them to qualify for one of the following degrees:

Degree of Bachelor of Arts

Degree of Bachelor of Arts (Asian Studies) Degree of Bachelor of Arts (European Studies)

## 2 Duration of program

- 2.1 The program of study for the Bachelor degree will extend over three years of full-time study or part-time equivalent.
- 2.2 Students will complete the requirements of the award within ten years. In determining a student's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously (see Rule 3.3).

## 3 Admission

3.1 Status, exemption and credit transfer The following status rules apply to the Bachelor of Arts and the named degrees, Bachelor of Development Studies, Bachelor of Media, Bachelor of Social Sciences, Bachelor of Environmental Studies and Bachelor of International Studies.

> Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Faculty Registrar.

No application for status is required where the previous studies have been undertaken at the University of Adelaide. The maximum status limits are as follows:

- 3.1.1 Complete Bachelor degree studies in any academic discipline
  - (a) 12 units at Level I in lieu of the requirements of 5.1.1.1 (b) (or equivalent for the named degrees) and
  - (b) 12 units at Level II in lieu of 5.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees
- 3.1.1.1 Where the complete degree includes Humanities and Social Sciences courses undertaken at The University of Adelaide (not more than 10 years previously), students are entitled to additional status as follows, subject to fulfilling the requirements of 5.1.1.2 the major sequence:
  - (a) 12 units at level I in lieu of the requirements of 5.1.1.1 (a) (or equivalent for the named degrees)
  - (b) 12 units at level II in lieu of 5.1.1.1 (c) and (d) (or equivalent for the named degrees).
- 3.1.2 Incomplete Bachelor degree studies in any academic discipline (not covered by 3.1.3 or 3.2)
  - (a) 12 units at Level I in lieu of the requirements of 5.1.1.1 (b) (or equivalent for the named degrees)

and

- (b) 12 units at Level II in lieu of 5.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees.
- 3.1.2.1 Where the incomplete degree includes the equivalent of up to 12 units of Humanities and Social Sciences not already included under 3.1.2.(a), students are entitled to additional status at level I as follows:
  - (a) Bachelor of Arts 12 units of Humanities and Social Sciences
  - (b) Bachelor of Media 3 units of Humanities and Social Sciences
  - (c) Bachelor of Social Sciences 6 units of Social Sciences.
- 3.1.2.2 If students intend to study the Bachelor degree and their original degree concurrently, they should consult the Faculty that offers the original degree for advice on fulfilling its requirements.
- 3.1.3 Bachelor of Arts, Bachelor of Commerce, Bachelor of Computer Science, Bachelor of Development Studies, Bachelor of Economics, Bachelor of Environmental Studies, Bachelor of Finance, Bachelor of International Studies, Bachelor of Mathematical and Computer Sciences, Bachelor of Media, Bachelor of Social Sciences

A student who undertakes concurrently any two of the degrees listed above, may count 12 units at each of level I and II to both degrees, by undertaking courses to a minimum total of 48 units which satisfy the level I and II requirements of both awards. Students must then present for each degree courses to the value of 24 units at level III not presented for any other award, satisfying the requirements for the two degrees with a minimum total of 96 units (or 4 years) of study.

3.2 Status in formal combined degree arrangements

#### 3.2.1 Law

Students who have passed courses in the Bachelor of Laws degree at the University of Adelaide will be granted status to the following limits:

- (a) 3 units at Level I in lieu of the requirements of 5.1.1.1 (b) (or equivalent for the named degrees) and
- (b) 12 units at Level II in lieu of 5.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the

compulsory courses or approved electives for the named degrees

- (c) Bachelor of Arts, Bachelor of Development Studies, Bachelor of Media, Bachelor of Environmental Studies and Bachelor of International Studies - 12 units at Level III in lieu of 5.1.1.1 (g) i.e. not forming part of the major sequence for the BA (or the compulsory courses or approved electives for the named degrees)
- (d) Bachelor of Social Sciences, Bachelor of Arts (Asian Studies) or (European Studies) - law courses cannot be counted at level III. An additional 9 units of law courses may be counted at level I.
- 3.2.2 Bachelor of Economics and Bachelor of Arts, Bachelor of Economics and Bachelor of International Studies, Bachelor of Arts and Bachelor of International Studies, Bachelor of Arts and Bachelor of Media, Bachelor of Media and Bachelor of International Studies

A student who undertakes concurrently any combination listed above, may count 12 units at each of level I and II to both degrees, by undertaking courses to a minimum total of 48 units which satisfy the level I and II requirements of both awards. Students must then present for each degree courses to the value of 24 units at level III not presented for any other award, satisfying the requirements for the two degrees with a minimum total of 96 units (or 4 years) of study.

3.2.3 Bachelor of Arts/Bachelor of Science Students may enrol in a program of study leading, after four years of full-time study (or part-time equivalent), to the award of both the Bachelor of Arts and the Bachelor of Science.

Students present approved courses to a minimum total value of 48 units at levels I and II to satisfy both awards. At Level II this consists of a minimum of 8 units of Arts and 16 units of Science. As this exceeds the normal limit for Science courses in the BA and Arts courses in the BSc at both levels I and II, students must complete all the requirements for both degrees in order to graduate from either.

#### Arts Component

To qualify for the BA, students must complete courses listed in 6.12 to a minimum of 44 units, as follows:

- (a) Level I courses to the value of 12 units chosen from those listed in 6.12.1
- (b) Level II courses to the value of 8 units chosen from those listed in 6.12.2, including the level II component of a major sequence

(c) Level III courses to the value of 24 units chosen from those listed in 6.12.3, including the level III component of a major sequence.

#### 3.2.4 Bachelor of Arts/Bachelor of Music

Students who have passed courses in any one of the Bachelor of Music degrees at the University of Adelaide will be granted status to the following limits:

- (a) 12 units at Level I in lieu of the requirements of 5.1.1.1 (b) and
- (b) 12 units at Level II in lieu of 5.1.1.1 (e) i.e. not forming part of the major sequence for the BA.

The combined program takes five years of full-time study (or part-time equivalent). For more information refer to the Notes (Not Forming Part of the Academic Program Rules) for the Bachelor of Music.

3.3 Status on account of studies completed more than 10 years previously

Status is not normally awarded for studies completed more than 10 years previously. Where the Faculty deems status is appropriate, it will be limited as follows:

- (a) 12 units at Level I in lieu of the requirements of 5.1.1.1 (b) (or equivalent for the named degrees) and
- (b) 12 units at Level II in lieu of 5.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees
- 3.4 Status for prior Technical and Further Education (TAFE) studies

Students who hold a completed Associate Diploma/ Diploma from an Institute of Technical and Further Education (TAFE) will be granted 6 units of status at Level I.

3.5 Status for non-award studies

Students who have completed non-award courses from any recognised higher education institution may apply for status on account of such courses towards their degree and, if successful, will be subject to the same limits and conditions outlined in 3.1 above.

3.6 Minimum number of courses to be chosen from those offered by the Faculty of Humanities and Social Sciences at the University of Adelaide

Any application of the status rules above is subject to the requirement that all students must undertake a

minimum of 36 units of courses chosen from 6.12.1-6.12.3 Humanities and Social Sciences.

## 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course or who obtains a lower division pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

## 5 Qualification requirements

## 5.1 Academic program

## 5.1.1 Bachelor of Arts

5.1.1.1 To qualify for the degree of Bachelor of Arts a student will present passes in courses to the value of 72 units which satisfy the following requirements:

#### Level I

- Level I courses to the value of 12 units chosen from those listed in 6.12.1 Humanities and Social Sciences courses
- (b) Level I courses to the value of 12 units chosen from those listed in 6.12.1 Humanities and Social Sciences courses, or other courses offered by the University at Level I which are available to them.

#### Level II

- (c) Level II courses to the value of 8 units chosen from those listed in 6.12.2 Humanities and Social Sciences courses, being the Level II component of a major sequence, see (5.1.1.2) below
- (d) Level II courses to the value of 4 units chosen from those listed in 6.12.2 Humanities and Social Sciences courses
- (e) Level II courses to the value of12 units chosen from those listed in 6.12.2 Humanities and Social

Sciences courses, or other courses offered by the University at Level II which are available to them.

#### Level III

- (f) Level III courses to the value of 12 units chosen from those listed in 6.12.3 Humanities and Social Sciences courses, being the Level III component of a major sequence, see (5.1.1.2) below
- (g) Level III courses to the value of 12 units chosen from those listed in 6.12.3 Humanities and Social Sciences courses.

#### 5.1.1.2 Level II and III - major sequence

8 units of courses at Level II and 12 units of courses at Level III must be chosen from one of the following areas of study, to form a 'major sequence':

Ancient Greek

Anthropology \*

Asian Studies \*#

Chinese

**Classical Studies** 

Development Studies \*#

Economics\*

English

European Studies#

French Studies

Gender, Work and Social Inquiry\*

Geographical and Environmental Studies\*

German Studies

History\*

Indonesian

International Studies \*#

Italian

Japanese

Latin

Linguistics\*

Mathematics

Media and Communication \*#

Modern Greek

Music Studies

Philosophy\*

Politics\*

Psychology \* (major sequence must include PSYCHOL 2001 Psychological Research Methodology II and PSYCHOL 3000 Psychological Research Methodology III) Spanish

- \* Social Science areas of study
- # Interdisciplinary areas of study

- (a) Students may choose to undertake a second major in the same or an additional area of study.
- (b) In most areas of study, eligibility to apply for Honours is subject to completion of a major sequence to a standard acceptable to the discipline concerned. Students should contact the relevant discipline for advice on appropriate course choices for eligibility for Honours.
- (c) Honours in areas in other faculties, e.g. Economics, Mathematical Sciences and Music Studies, may require more than a standard major sequence. Students should consult the relevant area for more information.

## 5.2 Bachelor of Arts (Asian Studies)

5.2.1 To qualify for the degree of Bachelor of Arts (Asian Studies) a student will present passes in courses to the value of 72 units which satisfy the following requirements:

#### Level I

- Level I courses to the value of 6 units chosen from those listed in 6.12.1 Humanities and Social Sciences courses
- (b) Level I course to the value of 6 units in an Asian language chosen from Chinese, Indonesian or Japanese
- (c) Level I courses to the value of 12 units chosen from those listed in 6.12.1 Humanities and Social Sciences courses, or other courses offered by the University at Level I which are available to them.

#### Level II

- (d) Level II courses to the value of 8 units in an Asian language undertaken to the value of 6 units at level I
- (e) ASIA 2002 Asian Studies (core topic)
- (f) Level II courses to the value of 12 units chosen from those listed in 6.12.2 Humanities and Social Sciences courses, or other courses offered by the University at Level II which are available to them.

#### Level III

- (g) Level III Asian Studies non-language courses to the value of 12 units
- (h) Level III courses to the value of 12 units in an Asian language undertaken to the value of 6 units at level I and 8 units at level II
- 5.2.2 In certain circumstances the language sequence may be varied to consist of:
  - (a) 8 units at level II
  - (b) 12 units at level III

- (c) 6 units of advanced language studies or approved area studies
- 5.3 Bachelor of Arts (European Studies)
- 5.3.1 To qualify for the degree of Bachelor of Arts (European Studies) a student will present passes in courses to the value of 72 units which satisfy the following requirements:

#### Level I

- Level I courses to the value of 6 units chosen from those listed in 6.12.1 Humanities and Social Sciences courses
- (b) Level I courses to the value of 6 units in a European language chosen from Ancient Greek, French, German, Italian, Latin, Modern Greek, or Spanish
- (c) Level I courses to the value of 12 units chosen from those listed in 6.12.1 Humanities and Social Sciences courses, or other courses offered by the University at Level I which are available to them.

## Level II

- (d) Level II European Studies non-language courses to the value of 4 units
- (e) Level II courses to the value of 8 units in a European language other than English undertaken to the value of 6 units at level I
- (f) Level II courses to the value of 12 units from those listed in 6.12.2 Humanities and Social Sciences

courses, or other courses offered by the University at Level II which are available to them.

## Level III

- (g) Level III European Studies non-language courses to the value of 12 units
- (h) Level III courses to the value of 12 units in a European language other than English undertaken to the value of 6 units at level I and 8 units at Level II.
- 5.3.2 In certain circumstances the language sequence may be varied to consist of:
  - (a) 8 units at level II
  - (b) 12 units at level III
  - (c) 6 units of advanced language studies or approved area studies

## 6 All Degrees

The following rules apply to the Bachelor of Arts and the named degrees, the Bachelor of Development Studies, Bachelor of Media, Bachelor of Social Sciences, Bachelor of Environmental Studies and Bachelor of International Studies.

- 6.1 Unacceptable combinations of courses
- 6.1.1 A course cannot be presented twice for the degree
- 6.1.2 A course cannot be presented with another course that contains a substantial amount of the same material
- 6.1.3 A course cannot be presented in addition to any course listed as a 'restriction' on it
- 6.1.4 A course with the same content that is offered at level II/III, cannot be undertaken at both levels.

## 6.2 Repeating courses

- 6.2.1 A student who repeats a course they have previously failed must again attend lectures and do all assessed work in the course.
- 6.2.2 A student who wishes to repeat a course they have already passed must enrol in it on a non-award basis.
- 6.2.3 A student who has twice failed any course may not reenrol in that course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

## 6.3 Cross-institutional study

- 6.3.1 With prior approval of the Faculty, students may present courses offered by other universities, which are not offered by the Faculty of Humanities and Social Sciences, toward the Bachelor degree to the following limits:
  - (a) 12 units at Level I in lieu of the requirements of 5.1.1.1 (b) (or equivalent for the named degrees) and
  - (b) 12 units at Level II in lieu of 5.1.1.1 (e) (or equivalent for the named degrees) i.e. not forming part of the major sequence for the BA or the compulsory courses or approved electives for the named degrees
- 6.3.2 Where students undertake any courses at another institution not approved by the Faculty, the Faculty will determine what status, if any, to award for such studies.
- 6.3.3 Flinders University Language Outreach courses are exempt from the provisions of this rule.
- 6.4 International exchanges
- 6.4.1 Students may count studies completed while on International Exchange programs formalised through the University's International Office toward the Bachelor degree to the following limits:

24 units in total at level II and III combined.

- 6.4.2 Where students undertake any courses at a host institution not approved by the Faculty, the Faculty will determine what status, if any, to award for such studies.
- 6.4.3 International exchanges are exempt from the provisions of 6.3.
- 6.5 Conceded passes

A student may present conceded passes in a maximum of two 3-unit courses.

6.6 Discipline limits

A student may not present more than 52 units of courses in a single area of study. An area of study is defined by the area that teaches it, not the majors to which it may be counted. This rule applies even where a student is undertaking an interdisciplinary major or an interdisciplinary degree.

6.7 Prerequisites

A student may only proceed to a course for which they have completed the prerequisite courses prescribed in the syllabuses.

6.8 Surplus to requirement

A student undertaking a course which is surplus to the requirements of their degree must enrol in that course on a non-award basis.

6.9 Counting units toward a lower level of the degree

A student may count any course undertaken or status awarded at Level II to fulfil the requirements of Level I, or at Level III to fulfil the requirements of Level I or II.

#### 6.10 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted.

6.11 Graduation

Subject to Chapter 89 of the Statutes, students who have satisfied the requirements for any award of the University will be admitted to that award at a graduation ceremony for the purpose.

6.12 Program of study

#### Level I

6.12.1 Humanities and Social Sciences courses

Humanities and Social Sciences courses	
Anthropology	
semester 1	
ANTH 1102 Introducing Social Anthropology	3
semester 2	
ANTH 1104 Foundations of Social Anthropology	3
Asian Studies	
semester 1	
ASIA 1101 Introduction to Chinese Society and Culture	3
semester 2	
ASIA 1102 Introduction to Japanese Society	
and Culture	3
ASIA 1103 Asia and the World	3
Chinese	
semester 1	
CHIN 1001 Chinese IA	3
CHIN 1011 Chinese ISA	3
semester 2	
CHIN 1002 Chinese IB	3
CHIN 1012 Chinese ISB	3
Classical Languages	
semester 1	
AGRE 1102 Introduction to Latin	
and Ancient Greek I	3
semester 2	_
AGRE 1101 Ancient Greek I	3
LATN 1002 Latin I	3
Classical Studies	
semester 1	
CLAS 1001 Classics: From Egypt to Ancient Greece	3
	5
semester 2	
CLAS 1002 Classics: From Ancient Greece to Rome	3
	Ũ
Development Studies semester 1	
DEVT 1001 Introduction to Development Studies	3
	0

Economics semester 1	
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
ECON 1005 Mathematics for Economists I	3
ECON 1008 Business Data Analysis I	3
ECON 1009 International Financial Institutions and Markets I	3
semester 2	
ECON 1000 Principles of Macroeconomics I	3
ECON 1004 Principles of Microeconomics I	3
ECON 1008 Business Data Analysis I	3
English semester 1	
ENGL 1101 Introduction to English: Ideas of the Real	3
ENGL 1104 Professional English (ESL)	3
semester 2	
ENGL 1102 Introduction to English: Gothic	3
ENGL 1105 Film Studies	3
European Studies semester 2	
EUST 1000 Modern Imagination in Europe	3
Faculty Courses	
semester 1	
ARTS 1006 Learn to Study/Study to Learn: Arts	3
French Studies semester 1	
FREN 1002 French IA: Beginners' French	3
FREN 1011 French ISA: Language and Culture	3
semester 2	-
FREN 1003 French IB: Beginners' French	3
FREN 1012 French ISB: Language and Culture	3
Gender, Work and Social Inquiry	U
semester 1	0
GWSI 1001 Social Sciences in Australia	3
GWSI 1002 Image, Text and Representation	3
GWSI 1004 Introduction to Gender Studies	3
semester 2 GWSI 1003 Gender, Work and Society	3
Geographical and Environmental Studies semester 1	
GEST 1002 Sustaining a Fragile Planet	3

semester 2 GEST 1001 Globalisation, Justice and a Crowded Planet	3
German Studies semester 1 GERM 1002 German Studies IA: Beginners' German	3
GERM 1011 German Studies ISA semester 2 GERM 1003 German Studies IB:	3
Beginners' German GERM 1012 German Studies ISB History	3 3
semester 1 HIST 1105 Europe, Empire and the World: 1492-1914	3
semester 2 HIST 1106 The Twentieth Century: A World in Turmoil	3
Indonesian semester 1 INDO 1001 Indonesian Introductory A INDO 1011 Indonesian Introductory SA	3 3
semester 2 INDO 1002 Indonesian Introductory B INDO 1012 Indonesian Introductory SB	3 3
Italian <i>semester 1</i> ITAL 1001 Italian IA	3
semester 2 ITAL 1002 Italian IB Japanese	3
semester 1 JAPN 1001 Japanese IA JAPN 1011 Japanese ISA	3 3
semester 2 JAPN 1002 Japanese IB JAPN 1012 Japanese ISB	3 3
Linguistics semester 1 LING 1101 Foundations of Linguistics	3

semester 2	
LING 1102 Language & Ethnography of Communication	3
Mathematics	
See syllabus entries for Mathematics, in Faculty of Engineering, Computer & Mathematical Sciences section, for available courses.	
Media	
semester 1	
MDIA 1002 Introduction to Media: Digital Revolutions	3
Modern Greek	
semester 1	
MGRE 1001 Modern Greek IA	3
semester 2	
MGRE 1002 Modern Greek IB	3
Music Studies	
semester 1	
GENMUS 1001 From Elvis to U2 I	3
MUSCORE 1007 Introduction to Theory	
& Analysis of Music I	3
MUSCORE 1009 Foundations of Music History IA	3
semester 2	
GENMUS 1003 Musics of the World I	3
GENMUS 1014 Sound & Media Technology I	3
MUSCORE 1008 Contrapuntal Analysis & Composition I	3
MUSCORE 1010 Foundations of Music History IB	3
	3
Philosophy	
semester 1 PHIL 1101 Argument and Critical Thinking	3
PHIL 1102 Mind, Knowledge and God	3
, i i i i i i i i i i i i i i i i i i i	3
semester 2	2
PHIL 1103 Morality, Society and the Individual	3
PHIL 1110 Logic I: Beginning Logic	3
Physics	
semester 2	2
PHYSICS 1005 Physics, Ideas and Society I	3
Politics	
semester 1	
POLI 1101 Introduction to Australian Politics	3
POLI 1104 Introduction to Comparative Politics	3

semester 2 POLI 1102 Introduction to International Politics	3
POLI 1105 Thinking About Politics Psychology semester 1	3
PSYCHOL 1000 Psychology IA semester 2	3
PSYCHOL 1001 Psychology IB	3
Spanish <i>semester 1</i> SPAN 1001 Spanish IA	3
semester 2 SPAN 1002 Spanish IB	3
Level II	
6.12.2Humanities and Social Sciences courses Anthropology semester 1	
ANTH 2003 Anthropology of Health and Medicine	4
ANTH 2021 Anthropology of Development	4
ANTH 2022 Popular Culture: Discourse & Desire ANTH 2024 Anthropology of Conflict and Crisis	4 4
semester 2	
ANTH 2026 Anthropology of Food and Drink	4
ANTH 2027 Poverty and Social Development ANTH 2028 Communication Technologies	4
for Development	4
ANTH 2030 Ethnography: Engaging Social Research Asian Studies	4
semester 1 ASIA 2002 Asian Studies (core topic)	4
ASIA 2002 Asian Studies (Core topic) ASIA 2008 Contemporary China: Politics & Society	4
ASIA 2015 Politics and Foreign Policy in Contemporary Japan	4
semester 2 ASIA 2012 Contemporary Japan: Culture	
and Identity ASIA 2016 Religions of China	4 4
Chinese semester 1	
CHIN 2001 Chinese IIA	4
CHIN 2003 Chinese for Chinese Speakers IIA	4
CHIN 2011 Chinese IISA	4

semester 2	
CHIN 2002 Chinese IIB	4
CHIN 2004 Chinese for Chinese Speakers IIB	4
CHIN 2012 Chinese IISB	4
Classical Languages	
semester 1	
AGRE 2002 Ancient Greek IIA	4
AGRE 2102 Introduction to Latin and Ancient Greek IIS	4
LATN 2002 Latin IIA	4
semester 2	
AGRE 2003 Ancient Greek IIB	4
AGRE 2101 Ancient Greek IIS	4
LATN 2003 Latin IIB	4
LATN 2010 Latin IIS	4
Classical Studies	
semester 1	
CLAS 2003 Science, Technology and Medicine in Antiquity	4
CLAS 2005 Egypt, Greece and the Aegean:	
Archaeology	4
CLAS 2016 Roman Imperial History A.D. 14-192	4
semester 2	
CLAS 2006 Early Mediaeval Europe: A.D. 200-800	4
CLAS 2012 Classical and Hellenistic Greek	
Archaeology	4
CLAS 2020 Afterlife and Underworld in Antiquity	4
summer semester	
CLAS 2021 Eastern Mediterranean Archaeological Field School	4
Economics	
semester 1	
ECON 2003 East Asian Economies II	4
ECON 2005 Mathematical Economics II	4
ECON 2006 Economic & Financial Data Analysis II	4
ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
ECON 2012 Financial Economics II	4
semester 2	
ECON 2000 International Trade	
and Investment Policy II	4
ECON 2001 Resource & Environmental Economics II	4
ECON 2006 Economic & Financial Data Analysis II ECON 2007 Australian Economic History II	4
LOON ZOUT AUSTIGIIGH LOUHUHHU HISTORY II	4

ECON 2009 Consumers, Firms and Markets II	4
ECON 2011 Macroeconomic Theory and Policy II	4
ECON 2012 Financial Economics II	4
English	
semester 1	
ENGL 2006 Contemporary Australian Film	4
ENGL 2018 Renaissance Writing	4
ENGL 2022 World Literature in English	4
ENGL 2025 Telling Tales	4
ENGL 2038 Icons of Decadence: British Fiction, 1880 - 1910	4
ENGL 2104 Professional English (ESL)	4
semester 2	
ENGL 2016 English for Professional Purposes	4
ENGL 2028 The Short Story:	
Introduction to Creative Writing	4
ENGL 2036 Chaucer	4
ENGL 2037 Body Language	4
ENGL 2039 Haunted Histories:Australian/ South African Writing	4
European Studies	
semester 1	
EUST 2011 Opera as Idea and Ideal	4
semester 2	
EUST 2004 Great Literary Texts	
of Western Civilisation	4
Faculty Courses	
semester 1 or 2	
EXCHANGE 1003H&SS International Exchange	_
- HUMSS (3 units)	3
EXCHANGE 1004H&SS International Exchange - HUMSS (4 units)	4
EXCHANGE 1006H&SS International Exchange	4
- HUMSS (6 units)	6
EXCHANGE 1009H&SS International Exchange	
- HUMSS (9 units)	9
EXCHANGE 1010H&SS International Exchange HUMSS (10 units)	10
EXCHANGE 1012H&SS International Exchange	
- Humanities/Social Science	12
French Studies	
semester 1	
FREN 2002 French IIA: Language and Culture	4
FREN 2007 French Studies II: Culture Topic	4

Language Topic	
FREN 2011 French IISA: Language and Culture	4
semester 2	
FREN 2003 French IIB: Language and Culture	4
FREN 2007 French Studies II:Culture Topic	4
Language Topic	
FREN 2012 French IISB: Language and Culture	4
summer semester	
Gender, Work and Social Inquiry	
semester 1	4
GWSI 2007 Risk and Moral Panic in Australia GWSI 2011 Youth, Work and Other Catastrophes	4 4
	4
semester 2 GWSI 2005 Gender in a Postcolonial World	4
GWSI 2006 Life Stories: Australia 1850-1980	4
GWSI 2015 Social Research	4
Geographical and Environmental Studies	
semester 1	
GEST 2005 Living on the Edge: Humans	
and Landscape	4
GEST 2009 Introduction to Environmental Impact Assessment	4
GEST 2010 Tourism Development & Sustainability	4
GEST 2015 Wetlands and Water Resources	4
GEST 2020 Urban Futures: Environmental	
and Social Issues	4
GEST 2023 Global International Migration	4
semester 2	4
GEST 2002 Environmental Management GEST 2016 Population and Health	4 4
GEST 2018 Environmental Change	4
GEST 2021 Resource Scarcity and Allocation	4
GEST 2022 Introductory Geographic Information	
Systems	4
GEST 2024 Global Change and Coasts	4
German Studies	
semester 1 GERM 2002 German Studies IIA:	
Language & Culture	4
GERM 2008 German Special Topic II: Culture Topic	4
Language Topic	
GERM 2011 German Studies IISA:	
Language & Culture	4

semester 2	
GERM 2003 German Studies IIB:	4
Language & Culture	4
GERM 2008 German Special Topic II: Culture Topic	4
Language Topic	
GERM 2012 German Studies IISB:	4
Language & Culture	4
summer semester	
GERM 2005 German in Germany	4
History	
semester 1	
HIST 2014 Fascism and National Socialism	4
HIST 2025 Russia in Crisis & Revolution 1890-2004	4
HIST 2030 America, Asia and the Cold War	
1945-1990	4
HIST 2042 Medieval Europe:	
The Crusades to the Black Death	4
HIST 2045 Migrants and the Making	4
of Modern Australia	4
semester 2	
HIST 2002 Uniting the Kingdoms: Britain 1534-1707	4
HIST 2029 Reel History: World War II in Film	4
HIST 2032 Colonial Identity and the Legacies	
of Empire	4
HIST 2033 Heresy and Witchcraft in Medieval Europe	4
	4
HIST 2044 Slavery and Emancipation in the Atlantic World	4
Indonesian semester 1	
INDO 2001 Indonesian Intermediate A	4
INDO 2001 Indonesian Intermediate A	4
	4
semester 2	
INDO 2002 Indonesian Intermediate B	4
INDO 2012 Indonesian Intermediate SB	4
International Studies	
semester 2	
INST 2001 International Studies (core topic)	4
Italian	
semester 1	
ITAL 2001 Italian IIA	4
semester 2	
ITAL 2002 Italian IIB	4

Japanese	
semester 1 JAPN 2001 Japanese IIA	4
JAPN 2011 Japanese IISA	4
semester 2	т
JAPN 2002 Japanese IIB	4
JAPN 2012 Japanese IISB	4
Linguistics	·
semester 1	
LING 2006 Language and Meaning	4
LING 2007 Kaurna Language & Language Ecology	4
LING 2012 Phonology LING 2030 Language & Communication Planning	4 4
semester 2	4
LING 2010 Language, Cognition and Reality	4
LING 2011 Mass Communicative Discourses	4
Mathematics	
See syllabus entries for Mathematics for available courses.	
Modern Greek	
semester 1	
MGRE 2001 Modern Greek IIA	4
semester 2	
MGRE 2002 Modern Greek IIB	4
Music Studies	
semester 1	
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
MUSST 2001 Approaches to Music IIA	3
	J
semester 2 GENMUS 2028 Blues All Around My Head II (Arts)	4
MUSCORE 2006 Western Music in Theory	4
& Practice IIB: 1850-1950	3
MUSST 2002 Approaches to Music IIB	3
Philosophy	
semester 1	
PHIL 2007 Foundations of Modern Philosophy	4
PHIL 2015 Issues in the Philosophy of Language	4
PHIL 2016 Mental Representation, Consciousness	
and Self	4
PHIL 2020 How Should I Live: Contemporary Ethical Theories	4
PHIL 2024 Beauty: Pleasures and Principles	4

semester 2	
PHIL 2011 Moral Problems	4
PHIL 2021 Justice & Power:	
Contemporary Political Philosophy	4
PHIL 2023 Professional Ethics	4
PHIL 2026 Epistemology	4
PHIL 2110 Logic II: Intermediate Logic	4
Physics	
semester 2	
Physics 2008 Physics, Ideas and Society II	4
Politics	
semester 1	
POLI 2002 Comparative Politics	4
POLI 2012 Global Politics and the Dilemmas	4
of Citizenship POLI 2061 Sex, Gender and Politics	4
POLI 2001 Sex, dender and Politics POLI 2074 Politics, Ideology and Discourse	4
POLI 2014 Folitics, ideology and Discourse POLI 2081 Post-Cold War International Relations	4
	4
semester 2 POLI 2014 Politics of the Media: Film	4
POLI 2014 Politics of the Media. Film POLI 2018 Environmental Politics	4
POLI 2018 Environmental Politics POLI 2071 Issues In Australian Politics	4
POLI 2079 Politics, Power and Popular Culture	4
POLI 2079 Folitics, Fower and Folicity:	4
Australia in the World	4
POLI 2094 Incredible India:	
Dynamics of a Rising World Power	4
Psychology	
semester 1	
PSYCHOL 2001 Psychological Research	
Methodology II	4
PSYCHOL 2002 Psychology IIA	4
semester 2	
PSYCHOL 2003 Psychology IIB	4
Social Sciences	
semester 1	
SOCI 2002 Social Science Techniques	4
Spanish	
semester 1	
SPAN 2001 Spanish IIA	4
semester 2	-
SPAN 2002 Spanish IIB	4

## Level III

0.12.51 Minumating and Social Sciences courses	6.12.3Humanities	and	Social	Sciences	courses
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Anthropology semester 1	
ANTH 3003 Anthropology of Health and Medicine	6
ANTH 3021 Anthropology of Development	6
ANTH 3022 Popular Culture: Discourse & Desire	6
ANTH 3024 Anthropology of Conflict and Crisis	6
semester 2	
ANTH 3026 Consuming Passions: Anthropology of Food and Drink	6
ANTH 3028 Communication Technologies	_
for Development	6
ANTH 3029 Anthropological Theory	6
Asian Studies	
semester 1 ASIA 3008 Contemporary China: Politics & Society	6
ASIA 3015 Politics and Foreign Policy	U
in Contemporary Japan	6
semester 2	
ASIA 3012 Contemporary Japan:	
Culture and Identity	6
ASIA 3016 Religions of China	6
Chinese	
	0
CHIN 3001 Chinese IIIA	
CLIIN 2002 Chinese for Chinese Speakers IIIA	6
CHIN 3003 Chinese for Chinese Speakers IIIA	6
CHIN 3011 Advanced Chinese A	-
CHIN 3011 Advanced Chinese A semester 2	6 6
CHIN 3011 Advanced Chinese A <i>semester 2</i> CHIN 3002 Chinese IIIB	6 6
CHIN 3011 Advanced Chinese A <i>semester 2</i> CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB	6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B	6 6 6 6
CHIN 3011 Advanced Chinese A <i>semester 2</i> CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB	6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages	6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1	6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1 AGRE 3002 Ancient Greek IIIA	6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1 AGRE 3002 Ancient Greek IIIA AGRE 3011 Ancient Greek IIISA	6 6 6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1 AGRE 3002 Ancient Greek IIIA AGRE 3011 Ancient Greek IIISA LATN 3002 Latin IIIA	6 6 6 6 6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1 AGRE 3002 Ancient Greek IIIA AGRE 3011 Ancient Greek IIISA LATN 3002 Latin IIIA LATN 3011 Latin IIISA	6 6 6 6 6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1 AGRE 3002 Ancient Greek IIIA AGRE 3011 Ancient Greek IIISA LATN 3002 Latin IIIA LATN 3011 Latin IIISA semester 2	6 6 6 6 6 6 6 6
CHIN 3011 Advanced Chinese A semester 2 CHIN 3002 Chinese IIIB CHIN 3004 Chinese for Chinese Speakers IIIB CHIN 3012 Advanced Chinese B Classical Languages semester 1 AGRE 3002 Ancient Greek IIIA AGRE 3011 Ancient Greek IIISA LATN 3002 Latin IIIA LATN 3011 Latin IIISA semester 2 AGRE 3003 Ancient Greek IIIB	6 6 6 6 6 6 6 6

Classical Studies semester 1	
CLAS 3003 Science, Technology and Medicine in Antiquity	6
CLAS 3005 Egypt, Greece and the Aegean: Archaeology	6
CLAS 3016 Roman Imperial History A.D. 14-192	6
semester 2 CLAS 3006 Early Mediaeval Europe: A.D. 200-800	6
CLAS 3012 Classical and Hellenistic	0
Greek Archaeology CLAS 3020 Afterlife and Underworld	6
in Antiquity	6
summer semester CLAS 3021 Eastern Mediterranean Archaeological Field School	6
Economics	
semester 1 ECON 3006 Development Economics III	4
ECON 3013 Applied Econometrics III	4
ECON 3017 Labour Economics III	4
ECON 3024 Public Economics III	4
ECON 3032 International Finance III	4
ECON 3035 Money, Banking and Financial Markets	4
semester 2	
ECON 3003 Resource and Environmental Economics III	4
ECON 3016 Strategic Thinking for Decision	4
Makers III ECON 3021 International Trade III	4
ECON 3023 Econometrics III	4
ECON 3030 International Economic History III	4
ECON 3034 Economic Theory III	4
English	
semester 1 ENGL 3006 Contemporary Australian Film	6
ENGL 3018 Renaissance Writing	6
ENGL 3022 World Literature in English	6
ENGL 3025 Telling Tales	6
ENGL 3038 Icons of Decadence:	
British Fiction 1880 - 1910	6

semester 2	1
ENGL 3016 English for Professional Purposes	6
ENGL 3028 The Short Story: Introduction	
to Creative Writing	6
ENGL 3036 Chaucer	6
ENGL 3037 Body Language	6
ENGL 3039 Haunted Histories: Australian/	
South African Writing	6
European Studies	
semester 1	
EUST 3011 Opera as Idea and Ideal	6
semester 2	
EUST 3004 Great Literary Texts of Western Civilisation	6
	0
Faculty Courses semester 1 or 2	
EXCHANGE 1003H&SS International Exchange	
- HUMSS (3 units)	3
EXCHANGE 1004H&SS International Exchange	
- HUMSS (4 units)	4
EXCHANGE 1006H&SS International Exchange	
- HUMSS (6 units)	6
EXCHANGE 1009H&SS International Exchange - HUMSS (9 units)	9
EXCHANGE 1010H&SS International Exchange	
- HUMSS (10 units)	10
EXCHANGE 1012H&SS International Exchange	
- Humanities/Social Science	12
French Studies	
semester 1	
FREN 3002 French IIIA: Language and Culture	6
FREN 3007 French Studies III: Culture Topic	6
Language Topic	6
FREN 3011 French IIISA: Language and Culture	6
semester 2	
FREN 3003 French IIIB: Language and Culture	6
FREN 3007 French Studies III: Culture Topic	6
Language Topic	6
FREN 3012 French IIISB: Language and Culture	6
Gender, Work and Social Inquiry	
semester 1 GWSI 3007 Risk and Moral Panic in Australia	6
GWSI 3007 Hisk and Woral Panic In Australia GWSI 3011 Youth, Work & Other Catastrophes	6
GANGE OF LEAR AND THE CARASTICATES	U

semester 2 GWSI 3005 Gender in a Postcolonial World	6
GWSI 3006 Life Stories: Australia 1850-1980 GWSI 3015 Social Research	6 6
Geographical and Environmental Studies semester 1	
GEST 3005 Living on the Edge: Humans & Landscape GEST 3009 Introduction to Environmental Impact	6
Assessment	6
GEST 3010 Tourism Development & Sustainability	6
GEST 3015 Wetlands and Water Resources GEST 3020 Urban Futures: Environmental and Social Issues	6 6
GEST 3023 Global International Migration	6
semester 2	
GEST 3002 Environmental Management	6
GEST 3016 Population and Health	6
GEST 3018 Environmental Change	
GEST 3021 Resource Scarcity and Allocation	6
GEST 3022 Introductory Geographic Information Systems	6
GEST 3024 Global Change & Coasts	6
German Studies	
semester 1	
GERM 3002 German Studies IIIA: Language & Culture	6
GERM 3008 German Special Topic III: Culture Topic	6
Language Topic	6
GERM 3011 German Studies IIISA:	
Language & Culture	6
semester 2	
GERM 3003 German Studies IIIB: Language & Culture	6
GERM 3008 German Special Topic III: Culture Topic	6
Language Topic	6
GERM 3012 German Studies IIISB: Language & Culture	6
summer semester GERM 3005 German in Germany	6
History	
semester 1	
HIST 3014 Fascism and National Socialism	6
HIST 3025 Russia in Crisis & Revolution 1890-2004	6

HIST 3030 America, Asia and the Cold War 1945-1990	6
HIST 3042 Medieval Europe: The Crusades to the Black Death	6
HIST 3045 Migrants and the Making of Modern Australia	6
semester 2	0
HIST 3002 Uniting the Kingdoms: Britain 1534-1707 HIST 3029 Reel History: World War II in Film	6 6
HIST 3032 Colonial Identity and the Legacies of Empire	6
HIST 3033 Heresy and Witchcraft in Medieval Europe	6
HIST 3044 Slavery and Emancipation in the Atlantic World	6
Indonesian semester 1	
INDO 3001 Indonesian Advanced A	6
INDO 3011 Indonesian Advanced SA	6
semester 2	
INDO 3002 Indonesian Advanced B INDO 3012 Indonesian Advanced SB	6 6
Italian	0
semester 1	
ITAL 3001 Italian IIIA	6
semester 2	
ITAL 3002 Italian IIIB	6
Japanese semester 1	
JAPN 3001 Japanese IIIA	6
JAPN 3011 Japanese IIISA	6
semester 2	
JAPN 3002 Japanese IIIB	6
JAPN 3012 Japanese IIISB	6
Linguistics	
semester 1	
LING 3006 Language and Meaning	6
LING 3007 Kaurna Language & Language Ecology	6
LING 3012 Phonology	6
LING 3030 Language & Communication Planning	6
semester 2 LING 3010 Language, Cognition and Reality	6
LING 3011 Mass Communicative Discourses	6

Mathematics See syllabus entries for Mathematics for available courses.	
Modern Greek semester 1	
MGRE 3001 Modern Greek IIIA	6
semester 2 MGRE 3002 Modern Greek IIIB	6
Music Studies semester 1	
MUSCORE 3001 Music in Context III: Music since 1900 1900	3
MUSST 3001 Approaches to Music III	3
MUSST 3003 Advanced Seminar in Music IIIB	3
MUSST 3013 The Music of Messiaen III	3
MUSST 3015 The Science of Music III	3
semester 2	
GENMUS 3028 Blues All Around My Head III (Arts)	6
MUSCORE 3004 Music and Music Making	
in the Australian Context III	3
MUSST 3002 Advanced Seminar in Music IIIA	3
MUSST 3005 Foundation for Honours III - Music Studies	3
MUSST 3012 The String Quartets of Bartok III	3
MUSST 3014 Rhythm in the 20th Century III	3
MUSST 3016 The Music of Debussy III	3
Philosophy	
semester 1	c
PHIL 3007 Foundations of Modern Philosophy	6 6
PHIL 3015 Issues in the Philosophy of Language PHIL 3016 Mental Representation, Consciousness	0
and Self	6
PHIL 3020 How Should I Live:	
Contemporary Ethical Theories	6
PHIL 3024 Beauty: Pleasures and Principles	6
semester 2	
PHIL 3011 Moral Problems	6
PHIL 3021 Justice & Power:	0
Contemporary Political Philosophy PHIL 3023 Professional Ethics	6
PHIL 3023 Professional Ethics PHIL 3026 Epistemology	6 6
THE SOLO CHISTEINDIOGY	U

Politics semester 1	
POLI 3002 Comparative Politics	6
POLI 3012 Global Politics and the Dilemmas	0
of Citizenship	6
POLI 3061 Sex, Gender and Politics	6
POLI 3074 Politics, Ideology and Discourse	6
POLI 3081 Post-Cold War International Relations	6
semester 2	
POLI 3014 Politics of the Media: Film	6
POLI 3018 Environmental Politics	6
POLI 3071 Issues in Australian Politics	6
POLI 3079 Politics, Power and Popular Culture	6
POLI 3083 South Australian Parliamentary Internship	6
POLI 3092 Problems and Policy:	
Australia in the World	6
POLI 3094 Incredible India:	0
Dynamics of a Rising World Power	6
Psychology	
semester 1	
PSYCHOL 3000 Psychological Research Methodology III	4
PSYCHOL 3010 Social Psychology III	2
PSYCHOL 3013 Learning and Behaviour III	2
PSYCHOL 3016 Language Processes III	2
PSYCHOL 3017 Health Psychology III	2
PSYCHOL 3019 Perception III	2
semester 2	
PSYCHOL 3003 Developmental Psychology III	2
PSYCHOL 3006 Psychology, Physiology & Behaviour III	2
PSYCHOL 3009 Metapsychology: Psychology, Science	-
and Society III	2
PSYCHOL 3014 Individual Differences III	2
PSYCHOL 3015 Human Relations III	2
PSYCHOL 3018 Cognition III	2
Spanish	
semester 1	
SPAN 3001 Spanish IIIA	6
semester 2	
SPAN 3002 Spanish IIIB	6

## 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Arts – Graduate Attributes

- · Broad general knowledge.
- · Specialised understanding in one or two chosen disciplines.
- An appreciation of their potential contribution to knowledge through engagement with the traditions and innovations in their fields of enquiry.
- The skills and discipline to research, synthesise, organise and present information, using a range of technologies as appropriate.
- · Problem solving skills.
- · Analytic and critical skills.
- · The ability to argue from evidence.
- · The ability to think creatively.
- · The ability to communicate ideas effectively.
- · The ability to set appropriate goals and to work independently and/or cooperatively.
- · An understanding of the importance of lifelong learning.
- An understanding of ethical issues in their professional and intellectual contexts.
- · An awareness of their potential leadership roles in the community of scholars and in the wider community.
- An awareness of social justice issues.

## Bachelor of Arts (Asian Studies) - Graduate Attributes

- Knowledge of at least one Asian language (Chinese, Japanese or Indonesian).
- An understanding of key issues in the study of Asian countries and the region as a whole.
- · A broad general knowledge and specialised knowledge of at least one Asian country.
- · An appreciation of the importance and manner of Australia-Asian interactions.
- Ability to research, synthesise, analyse and present information using a range of appropriate technologies and resources.
- · Increased critical and analytical thinking skills.
- Ability to work with others and to be able to present cogent arguments using well developed verbal, written and other relevant skills.
- · Ability to use Asian language materials to undertake research.
- Ability to negotiate in an Asian language environment and handle relevant socio-cultural differences.
- · An appreciation of the social, political and cultural complexity and variations among Australia's Asian neighbours.
- · A realisation of the need for specific cultural knowledge.
- · An understanding of the need for lifelong learning .

## Bachelor of Arts (European Studies) – Graduate Attributes

- Broad general knowledge.
- Specialised understanding in one or two chosen disciplines within the area of European Studies.
- An appreciation of their potential contribution to knowledge through engagement with the traditions and innovations in their fields of enquiry.
- The skills and discipline to research, synthesise, organise and present information, using a range of technologies as appropriate.
- · Problem solving skills.
- · Analytic and critical skills.
- · The ability to argue from evidence.
- · The ability to think creatively.
- · The ability to communicate ideas effectively.
- · The ability to set appropriate goals and to work independently and/or cooperatively.
- · Competency in at least one European language.
- · An understanding of the importance of languages.
- · An understanding of the importance of lifelong learning.
- · An understanding of ethical issues in their professional and intellectual contexts.
- · An awareness of their potential leadership roles in the community of scholars and in the wider community.
- An awareness of issues of civic responsibility..

#### 1 General

There shall be a degree of Bachelor of Development Studies.

## 2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the parttime equivalent.
- 2.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

#### 3 Admission

3.1 Status, exemption and credit transfer Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

> Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results must be submitted to the Faculty Registrar. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- (a) 12 units at level I on account of studies in any academic discipline in lieu of the requirements of 5.1(c)
- (b) 12 units at level II on account of studies in any academic discipline in lieu of the requirements of 5.1(f)
- 3.2 Status will not normally be awarded for any of the compulsory courses.
- 3.3 For further information on status rules, refer to 3.1 of the Academic Program Rules for the Bachelor of Arts.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 4.3 A candidate, who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
- 5 Qualification requirements

#### 5.1 Academic program

To qualify for the degree of Bachelor of Development Studies a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

#### Level I

(a)	DEVT 1001 Introduction to Development Studies	3
(b)	Three nominated Development Studies Core courses at 3 units value each to the total value o 9 units:	f
	GEST 1001 Globalisation, Justice & a Crowded Planet	3
	or	
	GEST 1002 Sustaining a Fragile Planet	3
	ANTH 1101 Introduction to Anthropology	3
	ECON 1000 Principles of Macroeconomics	3

	(c)	Level I courses to the value of 12 units chosen from those listed in 6.12.1 for the Bachelor of Arts, or other courses offered by the university at Level I which are available to them.
	Lev	rel II
	(d)	· · · / · · · · · · · · · · ·
	(e)	Two Development Studies electivesto the value of 8 units8
	(f)	Level II courses to the value of 12 units chosen from those listed in 6.12.2 for the Bachelor of Arts, or other courses offered by the University at Level II, which are available to them 12
	Lev	rel III
	(g)	Contemporary Critiques of Development (currently Anthropology of Development ANTH 2021/3021) 6
	(h)	Level III Development Studies Electives to the value of 18 units 18
5.2	Un	acceptable combination of courses
5.3	Re	peating courses
5.4	Cro	oss Institutional study
5.5	Inte	ernational exchange
5.6	Со	nceded passes
5.7	Dis	scipline limits
5.8	Pr€	erequisites
5.9	Su	rplus to requirement
5.10		unting units toward a lower level of the gree
5.11	Re	view of academic progress
5.12	For	aduation information on Rules 5.2 - 5.12, refer to Rule 7 of Academic Program Rules for the Bachelor of Arts.
5.13	Sta	atus and double degree arrangements
		information on Rule 5.13, refer to Rule 3.1 of the demic Program Rules for the Bachelor of Arts.
6	Sp	ecial circumstances
	Wh	en in the opinion of the relevant Faculty special

circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Development Studies - Graduate Attributes

- Knowledge and understanding of the content and techniques of Development Studies at advanced levels that are
  internationally recognised.
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner.
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.
- Skills of a high order in interpersonal understanding, teamwork and communication.
- · A proficiency in the appropriate use of contemporary technologies.
- · A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.

#### 1 General

There shall be a degree of Bachelor of Environmental Studies.

## 2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the parttime equivalent.
- 2.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

#### 3 Admission

3.1 Status, exemption and credit transfer Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

> Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Faculty Registrar. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- (a) 12 units at level I on account of studies in any academic discipline in lieu of the requirements of 5.1
   (c)
- (b) 12 units at level II on account of studies in any academic discipline in lieu of the requirements of 5.1 (f).
- 3.2 Status will not normally be awarded for any of the compulsory courses.
- 3.3 For further information on status rules, refer to Rule 3.1 of the Academic Program Rules for the Bachelor of Arts.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course or who obtains a lower division pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
- 5 Qualification requirements

#### 5.1 Academic program

To qualify for the degree of Bachelor of Environmental Studies a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

#### Level I

(a)	GEST 1001 Globalisation, Justice and a	
	Crowded Planet	3
	GEST 1002 Sustaining a Fragile Planet	3
(b)	Courses to the value of 6 units chosen from the following approved Geographical and Environmental Studies electives:	
	APP ECOL 1002RW Field Studies IA	3
	DESST 1028 Natural and Urban Systems	3
	ECON 1000 Principles of Macroeconomics I	3
	ENV BIOL 1002 Ecological Issues	3
	GEOLOGY 1103 Earth Systems	3
	GEOLOGY 1200 Earth's Environments I	3

GWSI 1001 Social Sciences in Australia Soil&Wat 1000RW Soils and Land Management Systems I

3

3

4

(c) Level I courses to the value of 12 units chosen from those listed in 6.12.1 for the Bachelor of Arts, or other courses offered by the University at Level I which are available to them.

#### Level II

- (d) GEST 2002 Environmental Management
- (e) Level II Geographical and Environmental Studies courses to the value of 8 units
- (f) Level II courses to the value of 12 units chosen from those listed in 6.12.2 for the Bachelor of Arts, or other courses offered by the University at Level II which are available to them.

#### Level III

- (g) Level III Geographical and Environmental Studies (GEST) courses to the value of 24 units (may include GEST 3100 Environmental Studies: Internship - but a quota applies)
- 5.2 Unacceptable combination of courses
- 5.3 Repeating courses
- 5.4 Cross Institutional study
- 5.5 International exchange
- 5.6 Conceded passes
- 5.7 Discipline limits
- 5.8 Prerequisites
- 5.9 Surplus to requirement
- 5.10 Counting units toward a lower level of the degree
- 5.11 Review of academic progress
- 5.12 Graduation
   For information on Rules 5.2 5.12, refer to Rule 7 of the Academic Program Rules for the Bachelor of Arts.
- 5.13 Status and double degree arrangements For information on Rule 5.13, refer to Rule 3.1 of the Academic Program Rules for the Bachelor of Arts.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Environmental Studies – Graduate Attributes

- · Broad general knowledge.
- · Specialised knowledge of current environmental issues from a social sciences perspective.
- · An appreciation of the various theoretical and philosophical frameworks within which environmental issues are raised.
- A trained mind with the skills and discipline to research, synthesise, organise and present information on the environment, using a range of technologies as appropriate.
- · Problem solving skills and the ability to argue from evidence.
- The ability to think creatively and communicate ideas effectively for the purpose of developing appropriate environmental policies.
- The ability to set appropriate goals and to work independently and/or cooperatively to achieve specified outcomes.
- · A clear understanding of ethical issues in their professional and intellectual contexts.
- A commitment to researching and solving environmental problems and raising awareness of environmental issues in an intellectual and broader social context.

#### 1 General

There shall be a degree of Bachelor of International Studies.

## 2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years of full-time study or the parttime equivalent.
- 2.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

#### 3 Admission

3.1 Status, exemption and credit transfer Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

> Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Faculty Registrar. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- (a) 12 units at level I on account of studies in any academic discipline in lieu of the requirements of 5.1 (c)
- (b) 12 units at level II on account of studies in any academic discipline in lieu of the requirements of 5.1 (e).
- 3.2 Status will not normally be awarded for any of the compulsory courses.
- 3.3 For further information on status rules, refer to 3.1 of the Academic Program Rules for the Bachelor of Arts.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course or who obtains a lower division pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
- 5 Qualification requirements

#### 5.1 Academic program

To qualify for the degree of Bachelor of International Studies a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

#### Level I

- POLI 1102 Introduction to International Politics
   POLI 1104 Introduction to Comparative Politics
- (b) Two courses from the following:

ASIA 1103 Asia and the World HIST 1105 Europe Empire and the World

1492 - 1914

HIST 1106 The Twentieth Century: A World in Turmoil

(c) Level I courses to the value of 12 units chosen from those listed in 6.12.1 for the Bachelor of Arts, or other courses offered by the University at Level I which are available to them.

#### Level II

- (d) INST 2001 International Studies (core)
   POLI 2002 Comparative Politics
   POLI 2081 Post-Cold War International Relations
- (e) Level II courses to the value of 12 units chosen from those listed in 6.12.2 for the Bachelor of Arts, or other courses offered by the University at Level II which are available to them.

#### Level III

- (f) Level III International Studies elective courses to the value of 24 units (including International Exchange or In-country studies to the value of 24 units, and language courses to the value of 12 units).
- 5.2 Unacceptable combinations of courses
- 5.3 Repeating courses
- 5.4 Cross-institutional study
- 5.5 International exchanges
- 5.6 Conceded passes
- 5.7 Discipline limits
- 5.8 Prerequisites
- 5.9 Surplus to requirement
- 5.10 Counting units toward a lower level of the degree
- 5.11 Review of academic progress
- 5.12 Graduation

For information on Rules 5.2 - 5.12, refer to Rule 7 of the Academic Program Rules for the Bachelor of Arts.

#### 5.13 Double degree arrangements

For information on Rule 5.13, refer to Rule 3.1 of the Academic Program Rules for the Bachelor of Arts.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of International Studies – Graduate Attributes

- A complex understanding of key processes in international relations such as diplomacy, the world economy, security and conflict.
- An understanding of the interests and interrelationships of key actors and institutions in world politics, including states, NGOs, people, and international organisations such as the UN, WTO and IMF.
- · A broad general knowledge, and knowledge in at least one region of the world in an international context.
- · An appreciation of the processes of globalisation and their impact in social, economic, political, cultural and legal contexts.
- · A heightened sensitivity to causal relationships between events in world politics.
- A trained mind with the skills and discipline to research, synthesise, analyse and present information, using a range of technologies and resources.
- A clear understanding of ethical issues in their professional and intellectual contexts, relating in particular to human rights, transparency and accountability, good governance and the public interest.
- · Increased critical and analytical thinking skills.
- Well-developed conceptual skills.
- · Highly developed verbal and written skills.
- · An understanding of, and respect for, global cultural difference and diversity.
- · An enhanced capacity for democratic and global citizenship.
- · An increased maturity of social judgement.
- · An appreciation of questions of global inequality and responsibility.
- · An understanding of, and commitment to, the importance of lifelong learning.
- A sense of their place in the community of scholars and in the wider community, including their role in contributing to the disciplines within International Studies.

#### 1 General

There shall be a degree of Bachelor of Media.

#### 2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years of full-time study or part-time equivalent.
- 2.2 Candidates shall complete the requirements of the award within ten years. In determining a candidate's eligibility for the award of the degree, the Faculty will not normally count courses passed more than 10 years previously.

#### 3 Admission

3.1 Status, exemption and credit transfer Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such

courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Faculty Registrar. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- (a) 12 units at level I on account of studies in any academic discipline in lieu of the requirements of 5.1 (c)
- (b) 12 units at level II on account of studies in any academic discipline in lieu of the requirements of 5.1 (e).
- 3.2 Status will not normally be awarded for any of the compulsory courses.
- 3.3 For further information on status rules, refer to 3.1 of the Academic Program Rules for the Bachelor of Arts.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course or who obtains a lower division pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
- 5 Qualification requirements

#### 5.1 Academic program

To qualify for the degree of Bachelor of Media a candidate shall present passes in courses to a value of 72 units that satisfy the following requirements:

#### Level I

(a)	ENGL 1105 Film Studies				
	GWSI1002 Image, Text and Representation	3			
	MDIA 1002 Introduction to Media: Digital Revolutions	3			
		0			

- (b) Level I courses to the value of 3 units chosen from those listed in 6.12.1 for the Bachelor of Arts.
- (c) Level I courses to the value of 12 units chosen from those listed in 6.12.1 for the Bachelor of Arts, or other courses offered by the University at Level I which are available to them.

#### Level II

 (d)
 MDIA 2202 Media Policy and Media Law
 4

 MDIA 2204 Media Research Methods
 4

 PHIL 2023 Professional Ethics
 4

(e) Level II courses to the value of 12 units chosen from the following:

Humanities and Social Sciences courses listed in 6.12.2 for the Bachelor of Arts, or other courses offered by the University at Level II which are available to them.

#### Level III

- (f) MDIA 3301 Professional Practice MDIA 3303 Media Theory
- (g) Level III courses to the value of 12 units chosen from the following:

Humanities and Social Sciences courses listed in 6.12.3 for the Bachelor of Arts  $\it or$ 

Media courses not previously undertaken.

- 5.2 Unacceptable combinations of courses
- 5.3 Repeating courses
- 5.4 Cross-institutional study
- 5.5 International exchanges
- 5.6 Conceded passes
- 5.7 Discipline limits
- 5.8 Prerequisites
- 5.9 Surplus to requirement
- 5.10 Counting units toward a lower level of the degree
- 5.11 Review of academic progress
- 5.12 Graduation

For information on Rules 5.2 - 5.12, refer to Rule 7 of the Academic Program Rules for the Bachelor of Arts.

5.13 Double degree arrangements

For information on Rule 5.13, refer to Rule 3.1 of the Academic Program Rules for the Bachelor of Arts.

6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Media – Graduate Attributes

- Acquire highly developed theoretical, critical and practical skills necessary to function effectively in any field of the media and communication industry
- Acquire excellent research skills including analytical, conceptual and communication skills and written report skills for further study as higher degree students in the Faculty or to use in the workplace
- Acquire the cognitive and critical skills necessary to produce, evaluate and interpret media texts and audiovisual and literary materials
- · Be empowered with the understanding of the role and effects of the media and new technologies in everyday life
- · Equipped with the necessary research skills to understand and analyse media cultures from a local and global perspective
- · Develop an understanding of professional, ethical and cultural policy issues in relation to the media
- · Develop an understanding of the impacts of changing media technologies in society
- Acquire the necessary skills required to develop positive interpersonal relationship in their place of work
- · Develop skills in teamwork and the ability to work effectively on group projects.

#### 1 General

There shall be a degree of Bachelor of Social Sciences.

#### 2 Duration of program

- 2.1 The program of study for the Bachelor degree shall extend over three years full-time or part-time equivalent.
- 2.2 Students shall complete the requirements of the award within ten years. In determining a student's eligibility for the award of the degree, the Faculty will not normally count any course passed more than 10 years previously.

#### 3 Admission

3.1 Status, exemption and credit transfer

Students who have passed courses in Bachelor degree awards or equivalent at the University of Adelaide or another recognised institution, who wish to count such courses towards their degree, will be granted status to specified maximum limits. Students are not obliged to count the status awarded.

Where studies have been undertaken at an institution other than the University of Adelaide, a written application for status, accompanied by a transcript or statement of results, must be submitted to the Faculty Registrar. No application for status is required where the previous studies have been undertaken at the University of Adelaide.

The maximum status limits are as follows:

- (a) 12 units at level I on account of studies in any academic discipline in lieu of the requirements of 5.1
   (c)
- (b) 12 units at level II on account of studies in any academic discipline in lieu of the requirements of 5.1
   (f)
- 3.2 Status will not normally be awarded for any of the compulsory courses. However, students enrolled in PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB and PSYCHOL 2001 Psychological Research Methodology II may apply for exemption from the compulsory course SOCI 2002 Social Science Techniques.

3.3 For further information on status rules, refer to 3.1 of the Academic Program Rules for the Bachelor of Arts.

#### 4 Assessment and examinations

- 4.1 A candidate shall not be eligible to be assessed by examination or otherwise unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to be assessed by examination or otherwise shall be deemed to have failed the course.
- 4.2 A candidate who fails in a course or who obtains a lower division pass and who desires to take the course again shall, unless exempted wholly or partially by the Executive Dean of the Faculty concerned, again complete all the required work in that course to the satisfaction of the teaching staff concerned.
- 4.3 A candidate who does not complete the required assessment tasks in any course, shall be deemed to have failed the course.
- 4.4 There shall be four classifications of pass in any courses for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

## 5 Qualification requirements

#### 5.1 Academic program

To qualify for the degree of Bachelor of Social Sciences a student shall present passes in courses to the value of 72 units which satisfy the following requirements:

#### Level I

(a)	GEST 1001 Globalisation, Justice and a	
	Crowded Planet	3
	GWSI 1001 Social Sciences in Australia	3

- (b) Level I courses to the value of 6 units chosen from those areas listed in 5.1.1 as Social Sciences
- (c) Level I courses to the value of 12 units chosen from those listed in 6.12.1 for the Bachelor of Arts, or other courses offered by the University at Level I which are available to them.

#### Level II

(d) SOCI 2002 Social Science Techniques

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- (e) Level II courses to the value of 8 units chosen from those listed in 5.1.1 as Social Sciences, being the Level II component of a major sequence (see 5.1.1 below)
- (f) Level II courses to the value of 12 units chosen from those listed in 6.12.2 for the Bachelor Arts or other courses offered in the University at Level II which are available to them.

#### Level III

- (g) GWSI 3015 Social Research
- (h) Level III Applied Social Science elective course to the value of 6 units
- Level III courses to the value of 12 units chosen from those listed in 5.1.1 as Social Sciences, being the Level III component of a major sequence (see 5.1.1 below).
- 5.1.1 Level II and III Major Sequence

8 units of courses at Level II and 12 units of courses at Level III must be chosen from one of the following Social Sciences areas of study, to form a 'major sequence':

- Anthropology Asian Studies
- **Development Studies**
- Economics
- Gender Work & Social Inquiry
- Geographical and Environmental Studies

History

- International Studies
- Linguistics
- Media and Communication
- Philosophy

Politics

- Psychology major sequence must include:
- PSYCHOL 2001 Psychological Research Methodology II

and

PSYCHOL 3000 Psychological Research Methodology III

- 5.2 Bachelor of Social Sciences/Health Sciences double degree program
- 5.2.1 The Bachelor of Social Sciences/Health Sciences is a double degree which is designed to be completed in 4 years of full-time study or part-time equivalent (96 units). Students are required to complete a major in both Social

Sciences and Health Sciences. Students who complete the requirements for both degrees are awarded 2 degrees and 2 parchments.

#### 5.2.2 Academic program

To qualify for the double degree of Bachelor of Social Sciences/Health Sciences, a student shall present passes in courses to the value of 96 units, which satisfy the following requirements:

#### Level I

(a)	ANAT SC 1102 Human Biology IA	3
	ANAT SC 1103 Human Biology IB	3
	PUB HLTH 1001 Public Health IA	3
	PUB HLTH 1002 Public Health IB	3
	GEST 1001 Globalisation, Justice and a	
	Crowded Planet	3
	GWSI 1001 Social Sciences in Australia	3

(b) Level I courses to the value of 6 units chosen from those areas listed in 5.1.1 as Social Sciences

#### Level II

- (c) SOCI 2002 Social Science Techniques 4 PATHOL 2000 Biology of Disease II 4
- (d) Level II courses to the value of 8 units chosen from those listed in 5.1.1 as Social Sciences, being the Level II component of a major sequence (see 5.1.1 above)
- (e) Level II courses to the value of 8 units chosen from those listed in 5.1.2 (b) for the Bachelor of Health Sciences that lead to a Level III major sequence in Health Sciences

#### Level III & IV

24 units for each award separately as follows:

Bachelor of Social Sciences

- (f) GWSI 3015 Social Research
- (g) Level III courses to the value of 12 units chosen from those listed in 5.1.1 as Social Sciences, being the Level III component of a major sequence (see 5.1.1 above)

6

(h) Level III Applied Social Science elective course to the value of 6 units

Bachelor of Health Sciences

- Level III courses to the value of 12 units chosen from a single area of study listed in 5.1.3 (a) for the Bachelor of Health Sciences, being the Level III component of a major sequence
- Level III Health Sciences courses to the value of 12 units, or up to 12 units of Level III courses offered by the Faculty of Humanities and Social Sciences.

- 5.3 Unacceptable combinations of courses
- 5.4 Repeating courses
- 5.5 Cross-institutional study
- 5.6 International exchanges
- 5.7 Conceded passes
- 5.8 Discipline limits
- 5.9 Prerequisites
- 5.10 Surplus to requirement
- 5.11 Counting units toward a lower level of the degree
- 5.12 Review of academic progress
- 5.13 Graduation

For information on Rules 5.3 - 5.13, refer to Rule 7 of the Academic Program Rules for the Bachelor of Arts.

- 5.10 Status and double degree arrangements For information on Rule 5.15, refer to Rule 3.1 of the Academic Program Rules for the Bachelor of Arts.
- 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Bachelor of Social Sciences - Graduate Attributes

- A working knowledge of the range of social science disciplines and the research methodologies used within them.
- An understanding of the principles underlying both qualitative and quantitative social research methods.
- The capacity to interpret and critically evaluate social science research from a range of disciplines.
- · The capacity to frame a research problem and devise appropriate and effective ways of examining it.
- Competency in applied research within at least one social science discipline (including design, analysis, conduct of
  research and reporting findings).
- · Proficiency in computer based skills appropriate to research in at least one social science discipline.
- · Skills to work independently as well as collaboratively as part of a research team.
- · An understanding of the interdependence of theoretical and research activities within the social sciences.
- · The capacity to transfer learning from one research context to another.
- Recognition of and respect for the ethical principles which underpin socially responsible social science research and scholarship.
- · Commitment to principles of social justice and respect for cultural diversity.

#### 1 General

There shall be a degree of Bachelor of Arts (Honours). It is designed as a one year degree program to be undertaken following completion of an approved undergraduate degree.

A student may gain one or more (subject to the provisions outlined in 3.4 below) of the following degree:

Honours degree of Bachelor of Arts.

## 2 Duration of program

- 2.1 The work of the Honours year must be completed in one full year of full-time study, other than that on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 2.2 below.
- 2.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited to the following:
  - (i) students with care-giver responsibilities
  - students in greater than or equal to half time employment
  - (iii) students with a significant sickness or disability
  - (iv) students enrolled for part of the Honours program in an overseas institution
  - (v) compassionate reasons.

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Faculty Registrar before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

#### 3 Admission

3.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor degree of the Faculty of Humanities and Social Sciences, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree

syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.

- 3.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 3.3 A student may not enrol a second time for Honours in the same degree and School if the student
  - (i) has presented for examination in that School but has failed to obtain Honours *or*
  - (ii) withdraws from the program, unless the Faculty under Rule 4.4 permits the student to re-enrol.
- 3.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Arts in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

#### 4 Assessment and examinations

- 4.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded.	0-49

#### 4.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

#### 4.4 Review of academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

#### 5 Qualification requirements

- 5.1 A student may proceed to the Honours degree in one of the courses listed in Rule 5.5 below, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.
- 5.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.
- 5.3 A student may not proceed to the Honours degree in a course that is not listed in Rule 5.5 below.
- 5.4 A student wishing to proceed to Honours in courses within the Faculty of Mathematical and Computer Sciences is referred to the Academic Program Rules for the Honours Degree of Bachelor of Mathematical and Computer Sciences.

#### 5.5 Academic program

A student may proceed to the Honours degree in one of the following courses or certain approved combinations of the following courses, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

AGRE 4401 A/B Honours Ancient Greek	24
ANTH 4401 A/B Honours Anthropology	24
ASIA 4401 A/B Honours Asian Studies	24
CHIN 4401 A/B Honours Chinese Studies	24
CLAS 4401 A/B Honours Classical Studies	24
CULT 4401 A/B Honours Cultural Studies	24
ENGL 4401 A/B Honours English	24

ENGL 4402 A/B Honours Creative Writing 24 ETHNO 4004 A/B Honours Ethnomusicology (B.A.) 24 EUST 4401 A/B Honours European Studies 24 FREN 4401 A/B Honours French Studies 24 GERM 4401 A/B Honours German Studies 24 GEST 4401 A/B Honours Geographical and Environmental Studies 24 GWSI 4401A/B Honours Gender, Work and Social Inquiry 24 HIST 4401 A/B Honours History 24 INST 4402A/B Honours International Studies 24 JAPN 4401 A/B Honours Japanese Studies 24 LATN 4401 A/B Honours Latin 24 LING 4401 A/B Honours Linguistics 24 MUSICOL 4007 A/B Honours Musicology (B.A.) 24 PHIL 4401 A/B Honours Philosophy 24 POLI 4401 A/B Honours Politics 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

#### 5.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Note: To Academic Program Rule 5 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.A. (Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

# 1 General

There shall be a degree of Bachelor of Development Studies (Honours). It is designed as a one-year degree program to be undertaken following completion of the Bachelor of Development Studies or an approved undergraduate degree.

# 2 Duration of program

The work of the Honours year must be completed in one full year of full-time study, other than that on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 2.1 below.

2.1 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 2.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Faculty Registrar before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

# 3 Admission

- 3.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor of Development Studies degree, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 3.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 3.3 A student may not enrol a second time for Honours in the same degree and School if the student
  - (i) has presented for examination in that School but has failed to obtain Honours *or*

(ii) withdraws from the program, unless the Faculty under Rule 4.4 permits the student to re-enrol.

3.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Development Studies in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

# 4 Assessment and examinations

- 4.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded.	0-49.

4.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

# 4.4 Review of academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

# 5 Qualification requirements

- 5.1 A student may proceed to the Honours degree, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.
- 5.2 The Head of the School/s concerned before enrolment must approve the program of study and dissertation topic for the Honours year for students.
- 5.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

#### DEVT 4401 A/B Honours Development Studies 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Note: To Academic Program Rule 5 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Dev.St. (Hons) are marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

# 1 General

There shall be a degree of Bachelor of Environmental Studies (Honours). It is designed as a one year degree program to be undertaken following completion of the Bachelor of Environmental Studies or an approved undergraduate degree.

# 2 Duration of program

- 2.1 The work of the Honours year must be completed in one year of full-time study, save that on the recommendation of the Head of the School or Schools or Award Committee concerned, the Faculty may permit a student to spread the work over two years, but not more, under such conditions as it may determine but not more, under such conditions as are listed under 2.2 below.
- 2.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 2.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Faculty Registrar before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

# 3 Admission

- 3.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor degree of Environmental Studies or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 3.2 Students wishing to take Honours must obtain the approval of the Head of the School or School/s.
- 3.3 A student may not enrol a second time for Honours in the same degree and School if the student:

- (i) has presented for examination in that School but has failed to obtain Honours *or*
- (ii) withdraws from the program, unless the Faculty under Rule 4.4, below permits the student to reenrol.
- 3.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Environmental Studies in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

# 4 Assessment and examinations

- 4.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded.	0-49.

# 4.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

# 4.4 Review of academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

# 5 Qualification requirements

- 5.1 A student may proceed to the Honours degree, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.
- 5.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.
- 5.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

# GEST 4401A/B Honours Geographical & Environmental Studies

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Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

# 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Note: To Academic Program Rule 5 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Env.St.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

# 1 General

There shall be a degree of Bachelor of International Studies (Honours). It is designed as a one year degree program to be undertaken following completion of the Bachelor of International Studies or an approved undergraduate degree.

# 2 Duration of program

The work of the Honours year must be completed in one full year of full-time study, other than that on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 2.2 below.

2.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 2.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Faculty Registrar before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

# 3 Admission

- 3.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor degree of International Studies, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 3.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 3.3 A student may not enrol a second time for Honours in the same degree and School if the student
  - (i) has presented for examination in that School but has failed to obtain Honours *or*

(ii) withdraws from the program, unless the Faculty under Rule 4.4 permits the student to re-enrol.

3.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of International Studies in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

# 4 Assessment and examinations

- 4.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded.	0-49.

# 4.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

# 4.4 Review of academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

# 5 Qualification requirements

- 5.1 A student may proceed to the Honours degree, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.
- 5.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.
- 5.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

INST 4401 A/B Honours International Studies 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

## 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Note: To Academic Program Rule 5 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Int.St.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

# 1 General

There shall be a degree of Bachelor of Media (Honours). It is designed as a one year degree program to be undertaken following completion of the Bachelor of Media or an approved undergraduate degree.

# 2 Duration of program

The work of the Honours year must be completed in one full year of full-time study, other than that on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 2.1 below:

2.1 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 2.1 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Faculty Registrar before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

# 3 Admission

- 3.1 Students for the Honours degree shall not begin their Honours work until they have qualified for a Bachelor degree of the Faculty of Humanities and Social Sciences, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School concerned, in their undergraduate degree.
- 3.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 3.3 A student may not enrol a second time for Honours in the same degree and School if the student
  - (i) has presented for examination in that School but has failed to obtain Honours *or*

(ii) withdraws from the program, unless the Faculty under Rule 4.4 permits the student to re-enrol.

3.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Media in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

#### 4 Assessment and examinations

- 4.1 Except by permission of the Faculty, a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded	0-49.

# 4.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the School/s concerned.

A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation or project and project exegesis component of the program. Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

# 4.4 Review of academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

# 5 Qualification requirements

- 5.1 A student may proceed to the Honours degree, comprising coursework and a dissertation or project and project exegesis, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of 24 units.
- 5.2 The program of study and dissertation topic or project and project exegesis topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.
- 5.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

#### MDIA 4401A/B Honours Media 24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Note: To Academic Program Rule 5 (not forming part of the Rule)

The coursework and dissertation submitted to fulfil the requirements of the B.Media (Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The coursework and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

# 1 General

There shall be a degree of Bachelor of Social Sciences (Honours). It is designed as a one year degree program to be undertaken following completion of the Bachelor of Social Sciences or an approved undergraduate degree.

# 2 Duration of the award

- 2.1 The work of the Honours year must be completed in one full year of full-time study, other than that on the recommendation of the Head of the School/s concerned, or the Award Committee concerned, where the Faculty may permit a student to spread the work over two years, but not more, under such conditions as are listed under 2.2 below.
- 2.2 Honours over two years is taken to mean two consecutive years. The grounds for granting permission to do Honours over two years are limited (see rule 2.2 of Bachelor of Arts Honours degree).

In all reasons it should be clear that the student is unable to (rather than chooses not to) complete the requirements on a full-time basis.

Application for permission to spread the work of Honours over two years should be made to the Faculty Registrar before 31 March (or 31 August for students commencing mid year) and will not normally be granted if the students has chosen to enrol in another course concurrently.

# 3 Admission

- 3.1 Students for the Honours degree shall not begin their Honours work until they have qualified for an Bachelor degree of Social Sciences, or some other degree deemed by the Faculty to be appropriate preparation, and have completed a major sequence relevant to the appropriate Honours degree syllabus, or equivalent acceptable to the School or Award Committee concerned, in their undergraduate degree.
- 3.2 Students wishing to take Honours must obtain the approval of the Head of School/s.
- 3.3 A student may not enrol a second time for Honours in the same degree and School if the student
  - (i) has presented for examination in that School but has failed to obtain Honours *or*

(ii) withdraws from the program, unless the Faculty under Rule 4.4 permits the student to re-enrol.

3.4 No graduate who has obtained an Honours degree in a course or field of study in another School or equivalent may obtain the Honours degree of Bachelor of Social Sciences in a corresponding course, field of study, or School of the Faculty of Humanities and Social Sciences.

# 4 Assessment and examinations

- 4.1 Except by permission of the Faculty a student shall take the whole of the final examination (if any) for the Honours degree at the one annual examination.
- 4.2 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

1	First Class	80-100
2A	Second Class div A	70-79
2B	Second Class div B	60-69
3	Third Class	50-59
NAH	Not awarded.	0-49.

# 4.3 Attendance requirements

A candidate shall not be eligible to present for assessment, by examination, dissertation or otherwise, unless he or she has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the school/s concerned. A candidate is required to meet regularly with his or her supervisor during the preparation and writing of the dissertation component of the program.

Pursuant to this clause, a candidate who is not eligible to present work for assessment will receive a final result of NAH (Not Awarded), unless he or she withdraws from the program before the required date.

# 4.4 Review of academic progress

A student who is unable to complete the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, or who withdraws from the program, shall be reported to the Faculty which may permit the student to re-enrol for the Honours degree under such conditions (if any) as it may determine and to ensure that the student does not in effect spread the work of Honours over 2 years.

# 5 Qualification requirements

- 5.1 A student may proceed to the Honours degree in one of the courses listed in Rule 6, below, comprising coursework and a dissertation, or, if being supervised by more than one School, a combination of those courses. A combination requires Faculty approval on the recommendation of the Schools concerned and shall include such work as shall be deemed by the Faculty to be equivalent to a single course of a units value of 24 units.
- 5.2 The program of study and dissertation topic for the Honours year for students must be approved by the Head of the School/s concerned before enrolment.
- 5.3 A student may proceed to the Honours degree in the following course or certain approved combinations of courses offered within the Faculty, provided that the student has obtained, before enrolment, the approval of the Head of the School/s concerned:

ANTH 4401 A/B Honours Anthropology	24
ASIA 4401 A/B Honours Asian Studies	24
GEST 4401A/B Honours Geographical and Environmental Studies	24
GWSI 4401A/B Honours Gender, Work	
and Social Inquiry	24
HIST 4401 A/B Honours History	24
INST 4402 A/B Honours International Studies	24
PHIL 4401 A/B Honours Philosophy	24
POLI 4401 A/B Honours Politics	24

Students who have been granted permission to study an honours program supervised by two disciplines will be advised of the appropriate course title and code at the time of enrolment.

Students who complete the requirements of the double degree program of Social Sciences/Health Sciences at a sufficiently high level will be able to undertake an honours study worth 24 units comprising:

Honours Health Sciences coursework	6
Honours Social Sciences coursework	6
Thesis jointly supervised between Health Sciences	
and Social Sciences	12

# 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

#### Note: To Academic Program Rule 5 (not forming part of the Rule)

The program, work and dissertation submitted to fulfil the requirements of the B.Soc.Sc.(Hons) is marked twice and referred to a third marker in the event of a discrepancy between the two original markers. The course work and dissertation may not be submitted for additional remarking after the final result for Honours has been awarded.

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# Contents

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# Bachelor of Laws

- Degree of Bachelor of Laws
- · Degree of Bachelor of Laws with Honours
- · Honours degree of Bachelor of Laws

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each School or Centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of School or Centre may approve minor changes to any previously approved syllabus

# 1 General

There shall be a degree, which may be awarded with Honours, and an Honours degree of Bachelor of Laws.

# 2 Duration of program

The program for all combined degrees shall extend over 5.5 years of full-time study or the part-time equivalent, except for Engineering which shall extend over 6.5 years.

For candidates studying for the Bachelor of Laws only, full-time study shall extend over 4 years for nongraduates, 3.5 years for Graduate entrants and no less than 2 years for Later Year Entrants.

# 3 Admission

3.1 Admission as a candidate for the degree is subject to quotas and selection procedures currently operating in the School. The admission requirements for this program of study are those outlined in the Rules made by Council pursuant to Chapter IX of the University Statutes - Of Admission and Enrolment.

# Note to Academic Program Rule 3.1 (not forming part of the Rule)

1 The normal admission procedure recommended for students other than graduates or later year entrants who wish to proceed to the degree of Bachelor of Laws is as follows:

- (a) apply for entry to candidature in the School Leavers, Special Entry or Tertiary Transfer subquota
- (b) apply for entry to candidature for one of the following degrees at the University of Adelaide:

Bachelor of Arts (B.A.)

Bachelor of Commerce (B.Com.)

Bachelor of Computer Science (B.Comp.Sc.)

Bachelor of Design Studies (B.Des.St.)

Bachelor of Economics (B.Ec.)

Bachelor of Engineering (Chemical) (B.E.(Chem))

Bachelor of Engineering (Civil and Environmental) (B.E.(Civil & Env.))

Bachelor of Engineering (Civil and Structural) (B.E.(Civil & Struct.))

Bachelor of Engineering (Computer Systems) (B.E.(Comp.Sys.))

Bachelor of Engineering (Electrical & Electronic)(B.E.(Elec.))

Bachelor of Engineering (Mechanical) (B.E. (Mech)) Bachelor of Engineering (Telecommunications) (B.E. (Telecomm.))

Bachelor of Environmental Studies (B.Env.St.)

Bachelor of Finance (B.Fin.)

Bachelor of Health Sciences (B.Health Sc.)

Bachelor of International Studies (B.Int.St.)

Bachelor of Mathematical and Computer Sciences (B.Ma.& Comp.Sc.)

Bachelor of Media (B.Media)

Bachelor of Science (B.Sc)\*

Bachelor of Social Sciences (B.Soc.Sc.)

#### or

applicants who have already commenced but have not completed non-law studies, and who wish to continue studying their current program concurrently with Law, apply using the Tertiary Transfer stream code or No Second degree stream codee

or

applicants who are not graduates and intend to study law only apply using the No Second Degree stream code.

\* It should be noted that in Science the resultant degree awarded shall be the Bachelor of Science (Jurisprudence). Entrants to Science seeking to do Law should ensure their first year enrolment meets the B.Sc. (Juris.) requirements.

- 3.2 Places in the courses LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts and LAW 1003 Law of Contract are only available to students who have been accepted as a candidate for the LL.B.
- 3.3 Candidates wishing to interrupt their studies must do so in accordance with the procedures outlined in the University Leave of Absence Policy.

In determining a candidate's eligibility for the award of the degree, the School may disallow any course completed more than 10 years ago. Where a course(s) is disallowed under this rule, a student will be required to undertake such additional or special programs of study as the School deems appropriate.

- 3.4 Status
  - (a) In lieu of any of the courses referred to in 5.4.1.1(b) below a candidate may present a law course or courses passed outside the University. Such courses must be approved and their units value determined by the School in each case.

(b) A candidate granted status must present courses taught at the University of Adelaide to the value of at least 50 units.

# 4 Assessment and examinations

- 4.1 (a) In determining a candidate's final result in a course, the assessors may take into account the assessments of the candidate's oral, written, practical or examination work in that course, provided that the candidate has been given notice at the beginning of the course of the circumstances in which the work may be taken into account and its relative importance in the final result
  - (b) A candidate may be required by the assessors in any course to do essays or other written work in a satisfactory manner as prerequisite to being assessed in that course, provided that candidates are given precise information about those requirements at the beginning of the course.
- 4.2 The School may grant to any student such exemption from 4.1 above, and under such conditions, as it shall decide.
- 4.3 There shall be five classifications of pass in any course or division of a course for the Bachelor degree as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass, Conceded Pass. Courses for which a result of conceded pass has been obtained may not be presented towards the degree requirements for the Bachelor of Laws or the Honours Degree of Bachelor of Laws programs, nor to satisfy prerequisite requirements within any law course.
- 4.4 If in the opinion of the School, a student for the degree is not making satisfactory progress the following action may be taken:
  - 1 Where a student has failed courses they will be advised to seek Course Advice to assist them in their future studies.
  - 2 If a student has failed more than three quarters of their previous year studies they will be restricted to enrolling in no more that 12 units of study each semester for the following year.
  - 3 Where a student has twice failed to pass any compulsory course they will be permitted to present again for the subject only if their enrolment is restricted to a total of 12 units in the semester in which the course is undertaken.
  - 4 Where a student has twice failed to pass any elective subject they will not permitted to enroll in the subject for a third time.

Exemption from these restrictions may only be varied by the Dean, where exceptional circumstances exist.

# 5 Qualification requirements

- 5.1 To qualify for the Bachelor degree candidates admitted to the program after 1 January 2007 shall comply with the relevant provisions of the Academic Program Rules set out in Clause 5.4 . Candidates admitted to the program prior to 1 January 2007 shall comply with the relevant provisions of the Academic Program Rules operative at the time of their admission.
- 5.2 To qualify for the Bachelor degree with Honours a candidate shall comply with the relevant provisions of Academic Program Rule 5.4.1.2 (a) & (b.
- 5.3 (a) to qualify for the Honours degree a candidate shall comply with the relevant provisions of Academic Program Rule 5.4.2.
  - (b) a candidate who satisfies the requirements of 5.3(a) above shall be awarded the Honours degree of Bachelor of Laws, but the School shall decide within which of the following classes and divisions the degree shall be awarded:

First Class

Second Class Division A Division B

Third Class.

# 5.4 Academic program

5.4.1 The Bachelor degree

# Introductory note to Academic Program Rule 5.4.1 (not forming part of the Rule):

The standard course load for the Bachelor of Laws degree is four years of full-time study for candidates studying Law only and three and a half years of full-time study for graduates or candidates completing a non-law degree also.

- 5.4.1.1 A candidate shall qualify for the degree if:
  - (a) the candidate has
    - (i) qualified for a degree in another faculty/school of the University *or*
    - been awarded at another university a degree which, in the opinion of the School of Law, is at least equivalent, for the purpose, to a degree in another faculty/school of the University or
    - been awarded at another tertiary institution a non-Law qualification at an academic level which has been accepted by the School or
    - (iv) elects to study an additional 12 units of elective courses from, 5.4.1.1(b) (ii.) below, or 12 units of non-law courses subject to the approval of the School / Faculty concerned.

(b)	the	candidate	has	completed:	
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(i)	all the following compulsory courses:	
	LAW 1001 Introduction to Australian Law	4
	LAW 1002 Law of Torts	4
	LAW 1003 Law of Contract	4
	LAW 1004 Law of Crime	4
	LAW 1005 Property Law	4
	LAW 1007 Law of Torts 2	4
	LAW 2001 Legal Research & Writing	2
	LAW 2002 Administrative Laws	4
	LAW 2003 Australian Constitutional Law	4
	LAW 2004 Corporate Law	4
	LAW 2005 Equity	4
	LAW 2117 Law of Contract 2	4
	LAW 3001 Litigation Practice	2
	LAW 3002 Civil and Criminal Procedure	4
	LAW 3003 Law of Evidence	4
	LAW 3004 Legal Ethics	2
	LAW 3007 Introduction to Advocacy	2
	and	
(ii)	elective courses with an aggregate units value of 24 units from the following (note 5.4.1.1 (a)(iv) above):	
	LAW 1006 Introduction to Public	
	International Law	4
	LAW 2006 Australian Legal History	4
	LAW 2007 Workers Compensation Law	2
	LAW 2009 Guilt and Punishment:	4
	Principles of Sentencing	4 4
	LAW 2010 Research Project B LAW 2011 Tax and the Revenue	4
	Concept Law	2
	LAW 2013 Bestitution	2
	LAW 2014 Selected Issues in	
	International Law	2
	LAW 2015 Family Law	4
	LAW 2016 Transnational Crime	4
	LAW 2017 Human Rights Internship Program	4
	LAW 2018 Revenue Law	4
	LAW 2019 Remedies under the TPA	4
	LAW 2020 Commercial Law	
	and the Market	4
	LAW 2021 Medical Law and Ethics	4

LAW 2022 Consumer Protection	
and Unfair Trading	2
LAW 2023 Roman Law	4
LAW 2024 Moot A	2
LAW 2026 Aboriginal People and the Law	4
LAW 2031 Financial Transactions	4
LAW 2032 Federal Criminal Law	4
LAW 2036 Land Transactions	4
LAW 2052 Moot B	4
LAW 2053 Feminist Legal Theory	2
LAW 2059 Intellectual Property Law	4
LAW 2060 Selected Issues in Law	
of Crime and Procedure	4
LAW 2061 Public & Private Provision	
of Income Maintenance	4
LAW 2062 Succession	2
LAW 2064 Jurisprudence	4
LAW 2070 Environmental Law	2
LAW 2074 Property Theory	2
LAW 2081 Research Project A	2
LAW 2084 Jessup Moot	4
LAW 2085 Human Rights: International and National Perspectives	4
LAW 2092 Advanced Property Law	4
LAW 2096 Minerals and Energy Law	4
LAW 2097 Securities and Investment Law	4
LAW 2099 Law of the Person	4
LAW 2100 Commercial Equity	2
LAW 2104 The Conflict of Laws	4
LAW 2107 Media Law	4
LAW 2108 Media Law	2
LAW 2122 Criminology	4
LAW 2132 Remedies	4
LAW 2135 Housing Law	2
LAW 2140 Expert Evidence	2
LAW 3005 Comparative Constitutional Law	4
LAW 3010 Alternative Dispute Resolution	4
LAW 3011 Advanced Advocacy	4
LAW 3012 Advanced Public Law	4
LAW 3013 Environmental	
Dispute Resolution	2
LAW 3014 Equality and	
Anti-Discrimination Law	2
LAW 3015 International Environmental Law	4

LAW 3016 Comparative Law	4
LAW 3017 Technology Law	4
LAW 3018 Comparative Native Title:	
Australia and Canada	2
LAW 3020 Public Interest Litigation	4
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Taxation of Entities	2
LAW 3022 Immigration and Refugee Law	2
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LAW 3028 Regulation of Competition	4 4
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and Theory	2
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Rescue Law	2
LAW 3065 Land and Water Resources Law	4
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LAW 4041 Wine Law	4
LAW 4144 International Justice	
and the Rule of Law	4
POLI 3082 South Australian Parliamentary	
Internship (Law)	4
POLI 3085 South Australian Internship	4
Program (Law)	4
School may determine that any elective	Ч

The School may determine that any elective course or courses referred to above be not offered in a particular year.

The units value of each course shall be that appearing after the name of the course.

(c) The School may determine, on such conditions as it considers appropriate, that a pass in a course offered under previous schedules is to be deemed to be a pass in a course or courses referred to in 5.4.1.1 (b) above.

	Sch Hon avai	ocument setting out guidelines approved by the bool providing the criteria by which the award of the ours degree is determined in any given year is lable from the School Office and is published in the helor of Laws Handbook.
5.4.2	Intr	e Honours degree oductory note to Academic Program Rule 2 (not forming part of the Rule).
	Back 308 309 are peni of th	udent who wishes to obtain an Honours degree of helor of Laws must complete the courses LAW 9 Honours Research and Writing (2 units) and LAW 9 Dissertation Honours Law (6 units). These courses normally undertaken in the second semester of the ultimate year and the first semester of the final year he LL.B. program respectively. They are taken in lieu ther elective courses with an equivalent units value.
5.4.2.1	(a)	Except with the permission of the School which will be granted only in special circumstances, candidates may not enrol for LAW 3089 Honours Research and Writing (2 units) and LAW 3099 Dissertation Honours Law (6 units) unless they have an honours course average of at least 75. An honours course average for this purpose is the average mark obtained in the best 48 units of whatever Law courses under this Bule a candidate

5.4.1.2 A candidate may be awarded the degree of Bachelor of

Law with Honours.

has completed to at least pass level, provided that a candidate who is seeking to qualify for the Honours degree pursuant to 5.4.2.4 below must have completed Law courses under 5.4.1.1(b) above with an aggregate units value of at least 62.

- (b) In calculating an Honours course average the following procedure shall be used:
  - (i) the aggregate units value of all courses completed is calculated
  - courses are selected for the average in the order of marks gained, highest first, until their combined units value constitutes 48 units of courses completed
  - (iii) the last course selected is given that units value which brings the total units value of courses selected to exactly 48 units
  - (iv) the mark in each course selected is multiplied by the course's units value, the marks (so multiplied) are added together, and their sum is divided by 48 units
  - (v) to the average thus produced a bonus of .2 per course unit for a Distinction and .4 per course unit for a High Distinction will be

added. This applies to all courses undertaken towards the program.

- (c) When the School gives special permission under 5.4.2.1(a) above it shall at the same time settle an honours course average.
- (d) In cases where a candidate has been
  - granted status in a course (see relevant section on status under Student Related Polices In Student Guide 2003)
  - permitted by the School to present a course for the degree pursuant to 3.4 above the School shall determine a mark for the course which shall be used for the purposes of calculating the candidate's honours course average.
- 5.4.2.2 The School of Law shall determine each year how many eligible candidates qualified under this rule its resources allow it to supervise. Only candidates accepted for supervision shall be permitted to enrol for LAW 3089 Honours Research and Writing (2 units) and LAW 3099 Dissertation Honours Law (6 units) ('the honours program').
- 5.4.2.3 In order to be considered for honours supervision in a particular year a candidate who has qualified for the Bachelor degree and who, although eligible to do so, did not undertake the course LAW 3099 A/B Dissertation Honours Law, in the year after qualifying for the degree, must notify the Honours Convenor in writing of the intention to enrol in that course. The notice must be provided to the Honours Convenor by December of the year prior to the course being undertaken.
- 5.4.2.4 A candidate shall qualify for the Honours degree of Bachelor of Laws if:
  - (a) the candidate has
    - (i) qualified for a degree in another faculty/school of the University *or*
    - obtained in another university a degree which in the opinion of the School of Law is at least equivalent, for the purpose, to a degree in another faculty/school of the University,
  - (b) the candidate has passed
    - (i) the compulsory courses listed in 5.4.1.1(b)(i) above or their equivalent *and*
    - elective courses with a total units value of 24 from those listed in 5.4.1.1(b)(ii) above or those available under previous program rules,

and

(c) the candidate has satisfactorily completed the courses LAW 3089 Honours Research and Writing

(2 units) and LAW 3099 Dissertation Honours Law (6 units).

The award abbreviation Hons.LLB shall be used by candidates awarded the Honours degree of Bachelor of Laws.

- 5.4.2.5 A candidate for the Honours Degree who does not qualify for that degree may present LAW 3089 Honours Research and Writing (2 units) as an elective course of 2 units for the purposes of 5.4.1.1(b)(ii), if considered sufficient for the purpose by the Honours Board of Examiners; or a candidate for the Honours Degree who does not qualify for that degree may present LAW 3089 Honours Research and Writing (2 units) and LAW 3099 Dissertation Honours Law (6 units) as elective courses counting as 8 units of elective courses for the purpose of 5.4.1.1(b)(ii), if considered sufficient for the purpose by the Honours Board of Examiners.
- 5.4.2.6 Clause 3 of Academic Program Rule 5.4.1.1 (c) & (d) and Rule 3.9 also apply to the Honours degree.
- 5.5 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

# 5.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Laws – Graduate Attributes

#### Knowledge

- A Law graduate from Adelaide Law School will have a clear and detailed knowledge and understanding of the basic principles of the Australian legal system, including the separation of powers, the role of courts, the legislative process, and the role and control of the executive
- The Law graduate will also have knowledge and understanding of the basic principles of the primary areas of Australian law as required to satisfy the academic standards for admission to practice law in an Australian jurisdiction, and knowledge and understanding of the development of law and legal principle within both those subject areas and other areas, such as to maintain appropriate familiarity with, and a capability to access the content of, legal principle in a given area
- The Law graduate will have knowledge and understanding of the principles and standards of ethical and professional conduct of a lawyer.

#### Intellectual and social capabilities

- A Law graduate will have the cognitive skills to analyse, evaluate and synthesise information from a wide variety of sources and experiences so as to identify and address as appropriate legal and related issues
- A Law graduate will have an awareness of the incompleteness of law and the continuous state of development of legal
  principle in response to social and technical change, and a capacity to respond to such change and assist such
  development as appropriate
- · A Law graduate will have critical thinking and problem solving skills
- · A Law graduate will have oral and written communication skills of a high order
- A Law graduate will have skills to work both independently and cooperatively in a professional environment
- A Law graduate will have the capacity to learn and maintain intellectual curiosity, and to engage in life long personal and professional learning
- A Law graduate will be familiar with and proficient in legal research techniques, including in the appropriate use of modern research technologies
- A Law graduate will have a capacity to work in a professional and ethical relationship with both clients and colleagues
- A Law graduate will have a capacity to be informed, responsible and critically discriminating in his or her participation in the community.

#### Attitudes and values

- A Law graduate will have a commitment to the rule of law and an understanding of social justice through the operation of law
- · A Law graduate will have a commitment to the highest standards of ethical and professional behaviour
- A Law graduate will have an understanding of social and cultural diversity, and sensitivity of the operation of the law and legal structures in that context.



# Elder Conservatorium of Music

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# Undergraduate and VET Awards in the Elder Conservatorium of Music

- Certificate III in Music
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- Certificate IV in Music (Technology)
- Diploma in Instrumental Music
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- Diploma in Music (Jazz)
- Diploma in Music (Sound Engineering)
- Degree of Bachelor of Music
- Degree of Bachelor of Music Education
- Degree of Bachelor of Music Studies
- Honours degree of Bachelor of Music
- · Honours degree of Bachelor of Music Education
- Honours degree of Bachelor of Music Studies

# Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

Diploma in Music (Classical)
Diploma in Music (Jazz)
Diploma in Music (Sound Engineering)
Certificate IV in Music (Classical)
Certificate IV in Music (Jazz)
Certificate IV in Music (Technology)
Certificate III in Music

# Academic Program Rules

# 1 General

1.1 There shall be a: Diploma in Music (Classical)
Diploma in Music (Jazz)
Diploma in Music (Sound Engineering)
Certificate IV in Music (Classical)
Certificate IV in Music (Jazz)
Certificate IV in Music (Technology)
Certificate III in Music.

# 2 Duration of programs

2.1 The program of study for the Diploma in Music (Classical) shall extend over one academic year of fulltime study or equivalent.

The program of study for the Diploma in Music (Jazz) shall extend over one academic year of full-time study or equivalent.

The program of study for the Diploma in Music (Sound Engineering) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate IV in Music (Classical) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate IV in Music (Jazz) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate IV in Music (Technology) shall extend over one academic year of full-time study or equivalent.

The program of study for the Certificate III in Music shall extend over one academic year of part-time study or the equivalent.

- 2.2 A student may interrupt the program for such periods and on such conditions as may in each case be determined by the School.
- 2.3 Students wishing to interrupt their studies in accordance with 2.2 above must apply through the School Registrar for permission and obtain beforehand the approval of the Dean on behalf of the School for leave of absence for a defined period.
- 2.4 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.2 above shall be deemed to have withdrawn his or her candidate for the award but may reapply for admission to the program in accordance with the procedures in operation at that time.
- 2.5 Students who have interrupted their studies in prescribed courses may be required to resume at such point in the program and/or to undertake such additional or special program of study as the Dean of the School deems appropriate.
- 3 Admission
- 3.1 Diploma in Music (Classical)

Admission to the program of study for the Diploma in Music (Classical) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent. A candidate will not be permitted to defer an offer of admission to the program.

# 3.2 Diploma in Music (Jazz)

Admission to the program of study for the Diploma in Music (Jazz) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.3 Diploma in Music (Sound Engineering)

Admission to the program of study for the Diploma in Music (Sound Engineering) shall be determined on the basis of academic merit and the presentation of a portfolio at interview. All applicants shall be interviewed prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or equivalent.

# 3.4 Certificate IV in Music (Classical)

Admission to the program of study for the Certificate IV in Music (Classical) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.5 Certificate IV in Music (Jazz)

Admission to the program of study for the Certificate IV in Music (Jazz) shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.6 Certificate IV in Music (Technology)

Admission to the program of study for the Certificate IV in Music (Technology) shall be determined on the basis of academic merit and the presentation of a portfolio at interview. All applicants shall be interviewed prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.7 Certificate III in Music

Admission to the program of study for the Certificate III in Music shall be determined on the basis of academic merit and musical performance or the presentation of a portfolio at interview. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

# 4 Enrolment

- 4.1 Candidates must obtain the approval of the Dean of the School, or the nominee of the Dean, for the proposed programs of study.
- 4.2 The requirements of courses taken in one semester must be completed within the same semester and courses taken in one year must be completed in the same year.
- 4.3 The School may permit a candidate to complete the requirements of a full year course over a period of two years on such conditions as it may determine.
- 4.4 Except where otherwise determined by the School, a candidate who is eligible in any year to enrol in Performance or Practical Study courses and who fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum standard for enrolment in the course in question before being authorised to enrol in that course.
- 4.5 A candidate must satisfy the prerequisite requirements for enrolment in semester two courses.

# 5 Assessment and examinations

- 5.1 A candidate shall not be eligible to present for examination unless the prescribed classes have been regularly attended, and the written, practical or other work required has been completed to the satisfaction of the teaching staff concerned.
- 5.2 A candidate who is not granted permission to sit for an examination, or who does not attend all or part of the examination after having attended substantially the full program of instruction in that course, shall be deemed to have failed the examination.

- 5.3 There are specific attendance requirements for all Music programs. In particular, students are expected to attend all classes, lectures or ensemble sessions and this requires students to provide reasonable explanations for, or proper notification of, failure to attend. Students who do not comply with these requirements may be failed in a given course. Full details on attendance requirements are available from the program advisers and lecturers.
- 5.4 In determining a candidate's final result in a course the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course, of the way in which work will be taken into account and of its relative importance in the final result.
- 5.5 There shall be four classifications of pass in the final assessment of any course for the Certificate and Diploma awards as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

There shall also be a classification of Conceded Pass. A candidate may present for the certificate and diploma awards only a limited number of courses for which a conceded pass has been obtained, as specified in the relevant Rules under these Academic Program Rules.

A particular competency shall be deemed to have been achieved when all relevant sections of courses mapped against it have been completed.

In the case of the Diplomas, conceded passes will be accepted for:

VETMUS 1502 OH&S	1	
VETMUS 1505 Copyright Law	1	
In the case of the Certificates, conceded passes wil accepted for:	l be	
VETMUS 1501 Music Industry & Business Management	1	
VETMUS 1502 OH&S	1	

- 5.6 A candidate who fails a course, or who obtains a conceded pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the School, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 5.7 A candidate who has twice failed the examination in any course for the program in which the candidate is enrolled may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material, except by special permission of the School and then only under such conditions as the School may prescribe.

- 6 Qualification requirements
- 6.1 Academic program: Diploma in Music (Classical)
- 6.1.1 The program for the Diploma in Music (Classical) may be taken with a major study in Classical Performance.
- 6.1.2 To qualify for the Diploma a candidate shall satisfactorily complete the requirements for courses listed below in 6.1.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.
- 6.1.2.1 Diploma in Music (Classical)

Candidates shall satisfactorily complete the following:

VETMUS 1502 OH&S	1
VETMUS 1504 A/B Career Management Part 1 & 2	2
VETMUS 1505 Copyright Law	1
VETMUS 1614 A/B Aural Development (Dip)	
Part 1 & 2	2
VETMUS 1755 Sound Production A	2
VETMUS 1756 Sound Production B	2
VETMUS1850 A/B Individual Tuition (Classical Dip)	
Part 1 & 2	4
VETMUS 1851 A/B Ensemble (Classical Dip)	
Part 1 & 2	3
VETMUS 1852 A/B Classical Diploma Forum	
Part 1 & 2	1
VETMUS 1853 A/B Music Language Studies	
Part 1 & 2	4
and	
VETMUS 1855 A/B Keyboard Musicianship Minor (Dip	·
Part 1 & 2	2

or

VETMUS 1854 A/B Keyboard Musicianship Major (Dip) Part 1 & 2 2

- 6.1.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.1.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# Notes (not forming part of the Academic Program Rules)

#### 1 Work required to complete the Diploma in Music (Classical)

To qualify for the award of the Diploma in Music (Classical) a candidate granted status (see relevant section under Student Related Polices In Student Guide 2007) except in special cases approved by the School, complete all the work of the prescribed program while attending the University.

#### 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

- 6.2 Academic program: Diploma in Music (Jazz)
- 6.2.1 The program for the Diploma in Music (Jazz) may be taken with a major study in Jazz Performance.
- 6.2.2 To qualify for the Diploma a candidate shall satisfactorily complete the requirements for courses listed below in 6.2.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

# 6.2.2.1 Diploma in Music (Jazz)

Candidates shall satisfactorily complete the following:

VETMUS 1502 OH&S	1
VETMUS 1504 A/B Career Management Part 1	822
VETMUS 1505 Copyright Law	1
VETMUS 1614 A/B Aural Development (Dip) Part 1 & 2	2
VETMUS 1750 A/B Individual Tuition (Jazz Dip) Part 1 & 2	4
VETMUS 1751 A/B Small Ensemble (Jazz Dip) Part 1 & 2	3
VETMUS 1752 A/B Jazz Diploma Workshop Part 1 & 2	4
VETMUS 1753 A/B Jazz Diploma Forum Part 1 8	i 2 1
VETMUS 1754 A/B Jazz Accompaniment Part 1	& 2 2
VETMUS 1755 Sound Production A	2
VETMUS 1756 Sound Production B	2

6.2.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office. 6.2.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### Notes (not forming part of the Academic Program Rules)

#### 1 Work required to complete the Diploma in Music (Jazz)

To qualify for the award of the Diploma in Music (Jazz) a candidate granted status (see relevant section under Student Related Polices In Student Guide 2007) except in special cases approved by the School, complete all the work of the prescribed program while attending the University.

# 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

# 6.3 Academic program: Diploma in Music (Sound Engineering)

- 6.3.1 The program for the Diploma in Music (Sound Engineering) may be taken with a major study in Sound Engineering.
- 6.3.2 To qualify for the Diploma a candidate shall satisfactorily complete the requirements for courses listed in 6.3.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

#### 6.3.2.1 Diploma in Music (Sound Engineering)

# Candidates shall satisfactorily complete the following courses:

	VETMUS 1502 0 H & S	1
	VETMUS 1504A/B Career Management Part 1& 2	2
	VETMUS 1505 Copyright Law	1
	VETMUS 1951 A/B Concepts of Music (Dip) Part 1 & 2	3
	VETMUS 1952 A/B Sound Engineering (studio) Part 1 & 2	4
	VETMUS 1956 Sound Engineering (live)	2
	VETMUS1953 A/B Audio Studies (Dip) Part 1 & 2	4
	VETMUS 1954 A/B MIDI Studies (Dip) Part 1 & 2	4
	VETMUS 1955 A/B Music Technology Forum	3
6.3.3	No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, conta a substantial amount of the same material; and no course or portion of a course may be counted twice	ins

course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from the Elder Conservatorium of Music Office. 6.3.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the university shall be admitted to that award at a graduation ceremony for the purpose.

#### Notes (not forming part of the Academic Program Rules)

#### 1 Work required to complete the Diploma in Music (Sound Engineering)

To qualify for the award of the Diploma in Music (Sound Engineering) a candidate granted status (see relevant section under Student Related Policies In Student Guide 2007) except in special cases approved by the School, shall complete all the work of the prescribed program while attending the University.

# 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than 20 then the course might not be offered

- 6.4 Academic program: Certificate IV in Music (Classical)
- 6.4.1 The program for the Certificate IV in Music (Classical) may be taken with a major study in Classical Performance on an instrument or voice.
- 6.4.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 6.4.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

# 6.4.2.1 Classical Performance

Candidates shall satisfactorily complete the following:

VETMUS 1501 Music Industry and	
Business Management	1
VETMUS 1502 OH&S	1
VETMUS 1503 Assignment Writing & Research Skills	1
VETMUS 1602 A/B Aural Development (VET)	
Part 1 & 2	2
VETMUS 1605 A/B Ensemble (C4) Part 1 & 2	2
VETMUS 1607 A/B History of 20th Century Music	
Part 1 & 2	2
VETMUS 1608 A/B Theory of Music Part 1 & 2	2
VETMUS 1609 A/B Individual Tuition (C4)	
Part 1 & 2	4
VETMUS 1801 A/B Composition Class Part 1 & 2	2
VETMUS 1804 A/B Performance Class Part 1 & 2	2
VETMUS 1807 A/B Technique & Repertoire Part 1 & 2	3
and	

VETMUS 1802 A/B Keyboard Musicianship (Majors) Part 1 & 2

2

2

# or

VETMUS 1808 A/B Keyboard Musicianship (Minors) Part 1 & 2

- 6.4.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.4.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# Notes (not forming part of the Academic Program Rules)

# 1 Work required to complete the Certificate

To qualify for the award of the Certificate IV in Music (Classical) a candidate granted status (see relevant section under Student Related Polices In Student Guide 2007) must, except in special cases approved by the School, complete all the work of the prescribed program while attending the University.

# 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

# 6.5 Academic program: Certificate IV in Music (Jazz)

- 6.5.1 The program for the Certificate IV in Music (Jazz) may be taken with a major study in Jazz Performance.
- 6.5.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 6.5.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

# 6.5.2.1 Certificate IV in Music (Jazz)

Candidates shall satisfactorily complete the following:VETMUS 1501 Music Industry andBusiness Management1VETMUS 1502 OH&S1VETMUS 1503 Assignment Writing8& Research Skills1VETMUS 1602 A/B Aural Development (VET)Part 1 & 2Part 1 & 22

VETMUS 1701 A/B Jazz Styles I Part 1 & 2	3
VETMUS 1702 A/B Jazz Theory I Part 1 & 2	2
VETMUS 1703 A/B Jazz Piano Class Part 1 & 2	2
VETMUS 1704 A/B Jazz Performance I Part 1 & 2	4
VETMUS 1705 A/B Improvisation I Part 1 & 2	3
VETMUS 1707 A/B Small Ensemble Part 1 & 2	2
VETMUS 1708 A/B Jazz Masterclass Part 1 & 2	2
VETMUS 1709 A/B Jazz Forum Part 1 & 2	1

- 6.5.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.5.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### Notes (not forming part of the Academic Program Rules)

1 Work required to complete the Certificate IV in Music (Jazz)

To qualify for the award of the Certificate IV in Music (Jazz) a candidate granted status (see relevant section under Student Related Polices In Student Guide 2007) except in special cases approved by the School, complete all the work of the prescribed program while attending the University.

# 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

- 6.6 Academic program: Certificate IV in Music (Technology)
- 6.6.1 The program for the Certificate IV in Music (Technology) may be taken with a Practical Study in Music Technology.
- 6.6.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 6.6.2.1. Courses to a total value of 24 units must be presented. No student shall gain credit for a course more than once.

6.6.2.1 M	lusic Technology	
Ca	andidates shall satisfactorily complete the following:	
	ETMUS 1501 Music Industry	1
	Business Management	Ċ
VE	etmus 1502 ohas	1
	ETMUS 1503 Assignment Writing Research Skills	1
VE	ETMUS 1615 A/B Concepts of Music (C4)	
Pa	art 1 & 2	6
VE	ETMUS 1801 A/B Composition Class Part 1 & 2	2
VE	ETMUS 1911 A/B Audio studies (C4) Part 1 & 2	4
VE	ETMUS 1912 A/B Midi Studies (Cert)	
Pa	art 1 & 2	4
	ETMUS 1913 A/B Music Technology Forum (C4) art 1 & 2	3
an	nd	
	ETMUS 1802 A/B Keyboard Musicianship (Majors) art 1 & 2	2
or		
	ETMUS 1808 A/B Keyboard Musicianship (Minors) art 1 & 2	2

- 6.6.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.6.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### Notes (not forming part of the Academic Program Rules)

1 Work required to complete the Certificate IV in Music (Technology):

To qualify for the award of the Certificate IV in Music (Technology) a candidate granted status (see relevant section under Student Related Polices In Student Guide 2007) must, except in special cases approved by the School, complete all the work of the prescribed program while attending the University.

## 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

- 6.7 Academic program: Certificate III in Music
- 6.7.1 The program for the Certificate III in Music may be taken with a major study in performance or composition.
- 6.7.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below in 6.7.2.1. Courses to a total value of 14 units must be presented. No student shall gain credit for a course more than once.
- 6.7.2.1 Certificate III in Music

Candidates shall satisfactorily complete the following:

VETMUS 1501 Music Industry and	
Business Management	1
VETMUS 1502 OH&S	1
VETMUS 1503 Assignment Writing & Research Skills	1
VETMUS 1601 A/B History and Literature Part 1 & 2	2
VETMUS 1610 A/B Individual Tuition (C3) Part 1 & 2	3
VETMUS 1611 A/B Aural Development (C3) Part 1 & 2	2
VETMUS 1612 A/B Ensemble (C3) Part 1 & 2	2
VETMUS 1613 A/B Theory of Music (C3)	2

- 6.7.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.7.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# Notes (not forming part of the Academic Program Rules)

Work required to complete the Certificate III in Music. To qualify for the award of the Certificate III in Music a candidate granted status (see relevant section under Student Related Polices In Student Guide 2007) must, except in special cases approved by the School, complete all the work of the prescribed program while attending the University.

## 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

# 7 External Performances/Engagements

Students are encouraged to take outside engagements, provided that:

- (a) a student shall not take part in any public concert or engagement that prohibits the student from attending a scheduled lesson or class except by permission of the Director.
- (b) The Director reserves the right to determine whether or not a student shall be required to acknowledge the name of the School or its staff, at any public concert or engagement in which the student participates.

# 8 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

1 General

There shall be a Diploma in Instrumental Music.

# 2 Duration of program

- 2.1 The duration of the Diploma itself shall be a minimum of two years of study, but shall be taken concurrently with full- or part-time study in another undergraduate award.
- 2.2 The program must be undertaken in no more than three consecutive years of study. A student who leaves the program shall be deemed to have discontinued his or her candidature for the award and may not reenrol.

# 3 Admission

3.1 Admission to the program of study for the Diploma in Instrumental Music shall be determined on the basis of academic merit and musical performance. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12 or the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

3.2 A student of the Diploma in Instrumental Music must be enrolled concurrently in a degree of Bachelor of the University.

# 4 Enrolment

- 4.1 Candidates must obtain approval of the Director of the Conservatorium, or nominee for the proposed program of study and also obtain advice from the Faculty that administers their Bachelor degree on an appropriate program of study.
- 4.2 The requirements of courses taken in one semester must be completed within the same semester and courses taken in one year must be completed in the same year.
- 4.3 Except where otherwise determined by the School, a candidate who is eligible in any year to enrol in Performance courses and who fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum standard for enrolment in the course in question before being authorised to enrol in that course.

4.4 A candidate must satisfy the prerequisite requirements for enrolment in semester two courses.

# 5 Assessment and examinations

- 5.1 A candidate shall not be eligible to present for examination unless the prescribed classes have been regularly attended, and the written, practical or other work required has been completed to the satisfaction of the teaching staff concerned.
- 5.2 A candidate who is not granted permission to sit for an examination, or who does not attend all or part of the examination after having attended substantially the full program of instruction in that course, shall be deemed to have failed the examination.
- 5.3 There are specific attendance requirements for all Music programs. In particular, students are expected to attend all classes, lectures or ensemble sessions and this requires students to provide reasonable explanations for, or proper notification of, failure to attend. Students who do not comply with these requirements may be failed in a given course. Full details on attendance requirements are available from the program advisers and lecturers.
- 5.4 In determining a candidate's final result in a course the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course, of the way in which work will be taken into account and of its relative importance in the final result.
- 5.5 There shall be four classifications of pass in the final assessment of any course for the undergraduate awards offered by the School: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
- 5.6 A candidate who fails a course, and who desires to take that course again shall, unless exempted wholly or partially there from by the School, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 5.7 A candidate who has twice failed the examination in any course for the program in which the candidate is enrolled may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material,

except by special permission of the School and then only under such conditions as the School may prescribe.

# 6 Qualification requirements

- 6.1 To qualify for the Diploma in Instrumental Music a candidate shall complete a performance sequence (as defined in rule 6.3), and satisfy the requirements of an undergraduate degree of the university.
- 6.2 A candidate may not have the Diploma in Instrumental Music conferred until he or she has satisfied the requirements for the approved undergraduate program
- 6.3 Academic program
- 6.3.1 All candidates shall complete a performance sequence to a total value of 24 units. The sequence shall consist of either:

PERF 1500A/B Classical Performance I Part 1 & 2	9
and one large ensemble or elective chosen from claus 6.1.2.3 of the degree of Bachelor of Music	ie 3
PERF 2500A/B Classical Performance II Part 1 & 2	9
and one large ensemble or elective chosen from claus 6.1.2.3 of the degree of Bachelor of Music	ie 3
or	
JAZZ 1000A/B Jazz Performance I Part 1 & 2	9
and one large ensemble or elective chosen from claus 6.1.2.3 of the degree of Bachelor of Music <i>and</i>	ie 3
JAZZ 2000A/B Jazz Performance II Part 1 & 2	9
and one large ensemble or elective chosen from claus 6.1.2.3 of the degree of Bachelor of Music	ie 3
Unacceptable combinations of courses	

- 6.4 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
- 6.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Music Bachelor of Music Education Bachelor of Music Studies Bachelor of Music (Honours) Bachelor of Music Education (Honours) Bachelor of Music Studies (Honours)

# Academic Program Rules

# 1 General

# 1.1 There shall be:

A degree and an Honours degree of Bachelor of Music A degree and an Honours degree of Bachelor of Music Education

A degree and an Honours degree of Bachelor of Music Studies

# 2 Duration of programs

- 2.1 The program of study for the degree of Bachelor of Music shall extend over three academic years and that for the Honours degree over four academic years of fulltime study or equivalent. Details and requirements for the Honours degree are provided in 2.4 below.
- 2.2 The program of study for the degree of Bachelor of Music Education shall extend over four academic years and that for the Honours degree over five academic years of full-time study or equivalent. Details and requirements for the Honours degree are provided in 2.4 below.
- 2.3 The program of study for the degree of Bachelor of Music Studies shall extend over three academic years and that for the Honours degree over four academic years of full-time study or equivalent. Details and requirements for the Honours degree are provided in 2.4 below.
- 2.4 The work of the Honours year shall normally be completed in one year of full-time study. The School may permit a candidate to present the work over a period of not more than two years on such conditions as it may determine.
- 2.5 A student may interrupt the program for such periods and on such conditions as may in each case be determined by the School.

- 2.6 Students wishing to interrupt their studies in accordance with 2.5 above must apply through the School Registrar for permission and obtain beforehand the approval of the Dean on behalf of the School for leave of absence for a defined period.
- 2.7 A student who leaves the program without approval or who extends a leave of absence beyond the time period approved under 2.5 above shall be deemed to have withdrawn his or her candidate for the award but may reapply for admission to the program in accordance with the procedures in operation at that time.
- 2.8 Students who have interrupted their studies in prescribed courses may be required to resume at such point in the program and/or to undertake such additional or special program of study as the Dean of the School deems appropriate.

# 3 Admission

# 3.1 Bachelor of Music

Admission to the program of study for the degree of Bachelor of Music shall be determined on the basis of musical performance and academic merit. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.2 Bachelor of Music Education

Admission to the program of study for the degree of Bachelor of Music Education shall be determined on the basis of academic merit and performance by audition in one of Music Performance, Music Technology or Composition. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.3 Bachelor of Music Studies

Admission to the program of study for the degree of Bachelor of Music Studies shall be determined on the basis of academic merit and performance by audition in one of Music Performance, Music Technology or Composition. All applicants shall be auditioned prior to admission and shall be ranked, for selection purposes, in order of their audition results and in order of the selection score from satisfactory completion of Year 12.

A candidate will not be permitted to defer an offer of admission to the program.

# 3.4 The Honours degrees

Before enrolling in the Honours program a candidate must obtain the approval of the Dean, who will take into account the candidate's academic record up to the time of application. Normally such approval should be sought towards the end of Level III of the program for the degree of Bachelor of Music or Bachelor of Music Studies or Level IV in the case of the degree of Bachelor of Music Education. Before entering the Honours year, candidates must have qualified for the Bachelor degree, including Level III or IV courses in the field in which it is proposed to undertake Honours.

# 4 Enrolment

- 4.1 Candidates must obtain the approval of the Dean of the School, or nominee, for the proposed programs of study.
- 4.2 The requirements of courses taken in one semester must be completed within the same semester and courses taken in one year must be completed in the same year.
- 4.3 The School may permit a candidate to complete the requirements of a full year course over a period of two years on such conditions as it may determine.
- 4.4 Except where otherwise determined by the School, a candidate who is eligible in any year to enrol in Performance or Practical Study courses and who fails to do so, and who wishes to enrol in one of these courses in a subsequent year, shall be required to attend an audition and to reach a minimum standard for enrolment in the course in question before being authorised to enrol in that course.

4.5 A candidate who has satisfied the prerequisite requirements for enrolment in later year courses, may so enrol before completing all the courses of the preceding level.

# 5 Assessment and examinations

- 5.1 A candidate shall not be eligible to present for examination unless the prescribed classes have been regularly attended, and the written, practical or other work required has been completed to the satisfaction of the teaching staff concerned.
- 5.2 A candidate who is not granted permission to sit for an examination, or who does not attend all or part of the examination after having attended substantially the full program of instruction in that course, shall be deemed to have failed the examination.
- 5.3 There are specific attendance requirements for all Music programs. In particular, students are expected to attend all classes, lectures or ensemble sessions and this requires students to provide reasonable explanations for, or proper notification of, failure to attend. Students who do not comply with these requirements may be failed in a given course. Full details on attendance requirements are available from the program advisers and lecturers.
- 5.4 In determining a candidate's final result in a course the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course, of the way in which work will be taken into account and of its relative importance in the final result.
- 5.5 There shall be four classifications of pass in the final assessment of any course for the Bachelor degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

There shall also be a classification of Conceded Pass. A candidate may present for the Bachelor degrees only a limited number of courses for which a conceded pass has been obtained, as specified in the relevant Rules under these Academic Program Rules..

- 5.6 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.

- 57 A candidate who fails a course, or who obtains a conceded pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the School, again complete the required work in that course to the satisfaction of the teaching staff concerned.
- 5.8 A candidate who has twice failed the examination in any course for the program in which the candidate is enrolled may not enrol for that course again or for any other course which in the opinion of the School contains a substantial amount of the same material. except by special permission of the School and then only under such conditions as the School may prescribe.
- 5.9 Candidates may not enrol a second time for an Honours program if they have
  - (a) already qualified for Honours or
  - (b) presented for examination, but failed to obtain Honours or
  - (c) withdrawn from the Honours program, unless the Faculty on such conditions as it may determine permits re-enrolment.

#### 6 Qualification requirements

- 6.1 Academic program: Bachelor of Music
- 6.1.1 The program for the degree of Bachelor of Music may be taken with a major study in Classical Performance on an instrument or voice, or in Jazz Performance.
- 6.1.2 To qualify for the Bachelor degree a candidate shall satisfactorily complete the requirements for courses listed below and those courses listed in any one of 6.1.2.1 to 6.1.2.3. Courses to a total value of 72 units must be presented. At least 20 units shall comprise Level III courses. No student shall gain credit for a course more than once.

Subject to Clause 6.1.2, conceded passes may be presented for elective courses only, from Clause 6.1.2.3, provided that they do not exceed 6 units in total.

6.1.2.1 Classical Performance

Candidates shall satisfactorily complete the following courses:

# Level I

MUSCORE 1007 Introduction to Theory & Analysis of	
Music I	3
MUSCORE 1008 Contrapuntal Analysis	
& composition IB	3
MUSCORE 1009 Foundations of Music History IA	3

and

MUSCORE 1010 Foundations of Music History IB 3 PERF 1500 A/B Classical Performance I Part 1 & 2 g and an Ensemble from one of the following unless specified otherwise in the Specialist Requirements: ENS 1001 A/B A Kind of Blue I Part 1 & 2 3 ENS 1002 A/B Adelaide Connection I Part 1 & 2 3 ENS 1009 A/B Elder Conservatorium Symphony Orchestra | Part 1 & 2 3 ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 & 2 3 ENS 1025 A/B Elder Conservatorium Chorale I Part 1 & 2 3 ENS 1026 A/B Adelaide Voices I Part 1 & 2 3 ENS 1027 A/B Bella Voce | Part 1 & 2 3 Please note that in some instrumental/vocal specialisations there are ensembles that are required by your specialist requirements listed below: Brass: ENS 1009 A/B Elder Conservatorium Symphony Orchestra | Part 1 & 2 3 nr ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 & 2 3 Keyboard: PERF 1002 A/B Keyboard Musicianship I Part 1 & 2 3 Percussion: ENS 1017 A/B Percussion Ensemble I Part 1 & 2 3 Strings: ENS 1009 A/B Elder Conservatorium Symphony Orchestra | Part 1 & 2 3 Voice: One of: ENS 1025 A/B Elder Conservatorium Chorale I Part 1 & 2 3 ENS 1026 A/B Adelaide Voices I Part 1 & 2 3 ENS 1027 A/B Bella Voce I Part 1 & 2 3 Woodwind: ENS 1009 A/B Elder Conservatorium Symphony Orchestra | Part 1 & 2 3 ٥r FNS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 & 2 3

Level II	
MUSCORE 2005 Western Music in Theory	
& Practice IIA: 1750-1850	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
and	
PERF 2500 A/B Classical Performance II Part 1 & 2	9
and an Ensemble from one of the following:	
ENS 2001 A/B A Kind of Blue II Part 1 & 2	3
ENS 2002 A/B Adelaide Connection II Part 1 & 2	3
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
ENS 2010 A/B Elder Conservatorium Wind Orchestra Part 1 & 2	Ш З
ENS 2025 A/B Elder Conservatorium Chorale II Part 1 & 2	3
ENS 2026 A/B Adelaide Voices II Part 1 & 2	3
ENS 2027 A/B Bella Voce II Part 1 & 2	3
and specialist requirements as listed below:	
Brass:	
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
or	
ENS 2010 A/B Elder Conservatorium Wind Orchestra Part 1 & 2	∥ 3
Keyboard:	
PERF 2001 A/B Accompanying II Part 1 & 2	3
Percussion:	
ENS 2017 A/B Percussion Ensemble II Part 1 & 2	3
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
or	
ENS 2010 A/B Elder Conservatorium Wind Orchestra Part 1 & 2	∥ 3
Strings:	
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
ENS 2030 Chamber Music IIA	1.5
ENS 2031 Chamber Music IIB	1.5
Voice:	
PERF 2003 A/B Stagecraft II Part 1 & 2	3
PERF 2004 A/B Voice Practicum II Part 1 & 2	3

and one of: ENS 2025 A/B Elder Conservatorium Chorale II Part 1 & 2 3 ENS 2026 A/B Adelaide Voices II Part 1 & 2 3 ENS 2027 A/B Bella Voce II Part 1 & 2 3 Woodwind: ENS 2009 A/B Conservatorium School Symphony 3 Orchestra II Part 1 & 2 or ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 & 2 3 and ENS 2030 Chamber Music IIA 1.5 ENS 2031 Chamber Music IIB 1.5 and Electives selected from clause 6.1.2.3 to complete a full load of 24 units. Level III MUSCORE 3001 Music Since 1900 3 MUSCORE 3004 Music & Music Making in the Australian Context III 3 and PERF 3500 A/B Classical Performance III Part 1 & 2 9 and an Ensemble from one of the following unless specified otherwise in the Specialist Requirements: ENS 3001 A/B A Kind of Blue III Part 1 & 2 3 ENS 3002 A/B Adelaide Connection III Part 1 & 2 3 ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2 3 ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 & 2 3 ENS 3025 A/B Elder Conservatorium Chorale III Part 1 & 2 3 ENS 3026 A/B Adelaide Voices III Part 1 & 2 3 ENS 3027 A/B Bella Voce III Part 1 & 2 3 and specialist requirements as specified: Brass: ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2 3 ٥r ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 & 2 3 Keyboard: ENS 3030 Chamber Music IIIA 1.5 ENS 3031 Chamber Music IIIB 1.5

	PERF 3010 Accompanying III	3
	or another course from clause 6.1.2.3 of 3 units	3
	Percussion:	
	ENS 3017 A/B Percussion Ensemble III Part 1 & 2 and	3
	ENS 3009 A/B Elder Conservatorium	
	Symphony Orchestra III Part 1 & 2	3
	0r	
	ENS 3010 A/B Elder Conservatorium Wind Orchest Part 1 & 2	ra III 3
	Strings:	
	ENS 3009 A/B Elder Conservatorium	
	Symphony Orchestra II Part 1 & 2	3
	and	
	ENS 3030 Chamber Music IIIA	1.5
	ENS 3031 Chamber Music IIIB	1.5
	Voice:	
	PERF 3003 A/B Stagecraft III Part 1 & 2	3
	PERF 3004 A/B Voice Practicum III Part 1 & 2	3
	and one of:	
	ENS 3025 A/B Elder Conservatorium Chorale III Part 1 & 2	3
	ENS 3026 A/B Adelaide Voices III Part 1 & 2	3
	ENS 3027 A/B Bella Voce III Part 1 & 2	3
	Woodwind:	
	ENS 3009 A/B Elder Conservatorium	
	Symphony Orchestra III Part 1 & 2	3
	Or	
	ENS 3010 A/B Elder Conservatorium Wind Orchest Part 1 & 2	ra III 3
	and	
	ENS 3030 Chamber Music IIIA	1.5
	ENS 3031 Chamber Music IIIB	1.5
	and Electives selected from Clause 6.1.2.3 to com a full load of 24 units.	plete
6.1.2.2	2 Jazz	
	Candidates shall satisfactorily complete the followic courses:	ng
	Level I	
	JAZZ 1000 A/B Jazz Performance I Part 1 & 2	9
	JAZZ 1003 A/B Jazz Improvisation I Part 1 & 2	3
	MUSCORE 1005 Music Foundations I: Jazz	3
	MUSCORE 1006 Music in Context I: Jazz	3

and an Ensemble from one of the following: ENS 1001 A/B A Kind of Blue | Part 1 & 2 3 ENS 1002 A/B Adelaide Connection I Part 1 & 2 3 ENS 1004 A/B Big Band One I Part 1 & 2 3 ENS 1005 A/B Big Band Two I Part 1 & 2 3 ENS 1006 A/B Big Band Three I Part 1 & 2 3 ENS 1011 A/B Jazz Guitar Band One I Part 1 & 2 3 ENS 1012 A/B Jazz Guitar Band Two I Part 1 & 2 3 and an Elective from clause 6.1.2.3 of 3 units. Note: An elective from Clause 6.1.2.3 may be presented in lieu of a large Jazz Ensemble when an Ensemble is unavailable.

# Level II

JAZZ 2000 A/B Jazz Performance II Part 1 & 2	9
JAZZ 2006 A/B Jazz Improvisation II Part 1 & 2	3
JAZZ 2007 A/B Jazz Arranging Class II Part 1 & 2	3
MUSCORE 2003 Music in Context IIA: Jazz	3
MUSCORE 2004 Music in Context IIB: Jazz	3
and an Ensemble from one of the following:	
ENS 2001 A/B A Kind of Blue II Part 1 & 2	3
ENS 2002 A/B Adelaide Connection II Part 1 & 2	3
ENS 2004 A/B Big Band One II Part 1 & 2	3
ENS 2005 A/B Big Band Two II Part 1 & 2	3
ENS 2006 A/B Big Band Three II Part 1 & 2	3
ENS 2011 A/B Jazz Guitar Band One II Part 1 & 2	3
ENS 2012 A/B Jazz Guitar Band Two II Part 1 & 2	3
Note: An elective from Clause 6.1.2.3 may be presented in lieu of a large Jazz Ensemble when an Ensemble is unavailable.	

#### Level III

JAZZ 3000 A/B Jazz Performance III Part 1 & 2	9		
JAZZ 3005 A/B Jazz Improvisation III Part 1 & 2	3		
MUSCORE 3002 Music in Context IIIA: Jazz	3		
MUSCORE 3003 Music in Context IIIB: Jazz	3		
and an Ensemble from one of the following:			
ENS 3001 A/B A Kind of Blue III Part 1 & 2	3		
ENS 3002 A/B Adelaide Connection III Part 1 & 2	3		
ENS 3004 A/B Big Band One III Part 1 & 2	3		
ENS 3005 A/B Big Band Two III Part 1 & 2	3		
ENS 3006 A/B Big Band Three III Part 1 & 2	3		
ENS 3011 A/B Jazz Guitar Band One III Part 1 & 2	3		
ENS 3012 A/B Jazz Guitar Band Two III Part 1 & 2	3		
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.			

Note: An elective from Clause 6.1.2.3 may be presented in lieu of a large Jazz Ensemble when an Ensemble is unavailable.

# 6.1.2.3 Electives

ENS 1001 A/B A Kind of Blue I Part 1 & 2	3
ENS 1002 A/B Adelaide Connection I Part 1 & 2	3
ENS 1004 A/B Big Band One I Part 1 & 2	3
ENS 1005 A/B Big Band Two I Part 1 & 2	3
ENS 1006 A/B Big Band Three I Part 1 & 2	3
ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 & 2	3
ENS 1010 A/B Elder Conservatorium Wind Orchest Part 1 & 2	ra I 3
ENS 1011 A/B Jazz Guitar Band One I Part 1 & 2	3
ENS 1012 A/B Jazz Guitar Band Two I Part 1 & 2	3
ENS 1023 A/B Chamber Orchestra I Part 1 & 2	3
ENS 1025 A/B Elder Conservatorium Chorale I Part 1 & 2	3
ENS 1026 A/B Adelaide Voices I Part 1 & 2	3
ENS 1027 A/B Bella Voce I Part 1 & 2	3
ENS 1030 Chamber Music IA	1.5
ENS 1031 Chamber Music IB	1.5
ENS 2001 A/B A Kind of Blue II Part 1 & 2	3
ENS 2002 A/B Adelaide Connection II Part 1 & 2	3
ENS 2004 A/B Big Band One II Part 1 & 2	3
ENS 2005 A/B Big Band Two II Part 1 & 2	3
ENS 2006 A/B Big Band Three II Part 1 & 2	3
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 & 2	3
ENS 2010 A/B Elder Conservatorium Wind Orchest	ra II
Part 1 & 2	3
ENS 2011 A/B Jazz Guitar Band One II Part 1 & 2	3
ENS 2012 A/B Jazz Guitar Band Two II Part 1 & 2	3
ENS 2023 A/B Chamber Orchestra II Part 1 & 2	3
ENS 2025 A/B Elder Conservatorium Chorale II Part 1 & 2	3
ENS 2026 A/B Adelaide Voices II Part 1 & 2	3
ENS 2027 A/B Bella Voce II Part 1 & 2	3
ENS 2030 Chamber Music IIA	1.5
ENS 2031 Chamber Music IIB	1.5
ENS 3001 A/B A Kind of Blue III Part 1 & 2	3
ENS 3002 A/B Adelaide Connection III Part 1 & 2	3
ENS 3004 A/B Big Band One III Part 1 & 2	3
ENS 3005 A/B Big Band Two III Part 1 & 2	3
ENS 300 6A/B Big Band Three III Part 1 & 2	3

ENS 3009 A/B Elder Conservatorium Symphony Orchestra III Part 1 & 2	3
ENS 3010 A/B Elder Conservatorium Wind Orchestra	
Part 1 & 2	3
ENS 3011 A/B Jazz Guitar Band One III Part 1 & 2	3
ENS 3012 A/B Jazz Guitar Band Two III Part 1 & 2	3
ENS 3023 A/B Chamber Orchestra III Part 1 & 2	3
ENS 3025 A/B Elder Conservatorium Chorale III	
Part 1 & 2	3
ENS 3026 A/B Adelaide Voices III Part 1 & 2	3
ENS 3027 A/B Bella Voce III Part 1 & 2	3
ENS 3030 Chamber Music IIIA	1.5
ENS 3031 Chamber Music IIIB	1.5
EUST 2011 Opera as Idea & Ideal II	4
EUST 3011 Opera as Idea & Ideal III	6
GENMUS 1001 From Elvis to U2 I	3
GENMUS 1003 Musics of the World I	3
GENMUS 1010 A/B Studies in Composition I	
Part 1 & 2	3
GENMUS 1014 Sound & Media Technology	3
GENMUS 1020 Choral Masterworks I	3
GENMUS 2020 Choral Masterworks II	3
GENMUS 3020 Choral Masterworks III	3
GENMUS 1026 A/B Perspectives in Music Technolog Part 1 & 2	gy I 3
GENMUS 2003 Instrumental Music Pedagogy II	3
GENMUS 2006 Orchestration II	3
	J
GENMUS 2010 A/B Studies in Composition II Part 1 & 2	3
GENMUS 2023 Conducting IIA	1.5
GENMUS 2024 Conducting IIB	1.5
GENMUS 2026 A/B Perspectives	
in Music Technology II Part 1 & 2	3
GENMUS 2027 Blues All Around My Head II	3
GENMUS 3027 Blues All Around My Head III	3
GENMUS 3003 Instrumental Music Pedagogy III	3
GENMUS 3010 A/B Studies in Composition III	
Part 1 & 2	3
GENMUS 3023 Conducting IIIA	1.5
GENMUS 3024 Conducting IIB	1.5
GENMUS 3026 A/B Perspectives	
in Music Technology III Part 1 & 2	3
MUSCORE 1005 Music Foundations I: Jazz	3
MUSCORE 1006 Music in Context I: Jazz	3

MUSCORE 1007 Introduction to Theory & Analysis of Music I	3
MUSCORE 1008 Contrapuntal Analysis	
& Composition IB	3
MUSCORE 1009 Foundations of Music History IA	3
MUSCORE 1010 Foundations of Music History IB	3
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
MUSCORE 2002 Music in Context IIB:	
Nineteenth Century Music	3
MUSCORE 2003 Music in Context IIA: Jazz	3
MUSCORE 2004 Music in Context IIB: Jazz	3
MUSCORE 3001 Music in Context III:	
Music Since 1900	3
MUSCORE 3002 Music in Context IIIA: Jazz	3
MUSCORE 3003 Music in Context IIIB: Jazz	3
MUSCORE 3004 Music & Music Making	
in the Australian Context III	3
MUSST 2001 Approaches to Music IIA	3
MUSST 2002 Approaches to Music IIB	3
MUSST 3001 Approaches to Music III	3
MUSST 3002 Advanced Music Seminar IIIA	3
MUSST 3003 Advanced Music Seminar IIIB	3
MUSST 3005 Foundation for Honours III:	
Music Studies	3
MUSST 3012 The String Quartets of Barkok III	3
MUSST 3013 The Music of the Messiaen III	3
MUSST 3014 Rhythm in the 20th Century III	3
MUSST 3015 The Science of Music III	3
MUSST 3016 The Music of Debussy III	3
PERF 1002 A/B Keyboard Musicianship I Part 1 & 2	3
PERF 2003 A/B Stagecraft II	3
No candidate will be permitted to count towards an	

- 6.1.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.1.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

Notes (not forming part of the Academic Program Rules)

#### Work required to complete the Bachelor degree

To qualify for the award of the degree of Bachelor of Music a candidate granted status (see relevant section under Student Related Polices in Student Guide 2007) must, except in special cases approved by the School, complete all the work of the final Level of the prescribed program while attending the University.

2 Availability of courses and options:

1

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

#### 3 Candidates undertaking study for the programs of Bachelor of Music and Bachelor of Arts concurrently:

Candidates may enrol for the programs of Bachelor of Music and Bachelor of Arts concurrently if they apply for admission and are admitted to both programs.

Candidates already enrolled for the degree of Bachelor of Music wishing to proceed to the degrees of B.Mus. and B.A. concurrently may apply towards the end of their first year in the School for admission to the B.A. program in the following year.

The School advises:

- The combined program takes five years of full-time study.
- (2) All of the requirements of the Bachelor of Music program must be completed, together with courses taken from the Academic Program Rules of the degree of Bachelor of Arts. The minimum Arts requirements to be satisfied are:

Level I courses to the minimum value of 12 units

Level II courses to the minimum value of 12 units

Level III courses to the minimum value of 24 units

Candidates must complete all of the Level III requirements in accordance with Academic Program Rule 5.6.9 of the degree of Bachelor of Arts.

- (3) The attention of candidates is drawn to the Academic Program Rules of the degree of Bachelor of Arts. No course may be counted twice towards the degree and two courses which contain a substantial amount of the same material may not both be counted.
- (4) Candidates should have continuous enrolment in their instrumental or vocal studies. The attention of candidates is drawn to Academic Program Rule 4.
- (5) Candidates should complete lower level prerequisites before commencing higher level courses.
- (6) Candidates should submit their proposed programs of study in the combined program to the School for approval.
- (7) Candidates should note that an enrolment in courses exceeding a total value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload.

#### 4 Changing specialisation:

Students may change specialisation by auditioning for the relevant specialisation. Students should apply to the School Registrar. Applications to change specialisation are subject to the approval of the Dean or Nominee of the Dean.

- 6.2 Academic program: Bachelor of Music Education
- 6.2.1 The program for the degree of Bachelor of Music Education may be taken with a Practical Study in Performance or in Composition or in Music Technology from Level II in conjunction with studies in Music Education.
- 6.2.2 To qualify for the Bachelor degree a candidate shall satisfactorily complete the requirements for courses listed below and those courses listed in 6.1.2.3. Courses to a total value of 96 units must be presented. Studies for Level IV may not be commenced until all of the requirements for Levels I -III have been completed. At least 18 units shall comprise Level IV courses. No student shall gain credit for a course more than once.

Subject to Clause 6.2.2, conceded passes may be presented for elective courses only from Clause 6.1.2.3, provided that they do not exceed 6 units in total.

### 6.2.2.1 Music Education

Candidates shall satisfactorily complete the following:

## Level I

### either

- 1 the requirements of Level I of clause 6.1.2.1 or 6.1.2.2 of the degree of Bachelor of Music *or*
- 2 the requirements of Level I of clause 6.3.2.1 or 6.3.2.2 or 6.3.2.3 of the degree of Bachelor of Music Studies before proceeding to Level II.

### Level II

MUSED 2001 Music Education IIA	3
MUSED 2002 Music Education IIB	3
MUSED 2003 A/B Music Education Ensembles II Part 1 & 2	3
and either	
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
or	
MUSCORE 2003 Music in Context IIA: Jazz	3
MUSCORE 2004 Music in Context IIB: Jazz	3
and	
COMP 2500 A/B Composition II Part 1 & 2	6

### or

MUSTECH 2003 A/B Music Technology II Part 1 & 2 6 and GENMUS 2026 A/B Perspectives in Music Technology II Part 1 & 2 3 or PERF 2600 A/B Practical Study II: Performance Part 1 & 2 6 or JAZZ 2600 A/B Practical Study II: Jazz Part 1 & 2 6 and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

### Level III

MUSED 3001 Music Education IIIA	3
MUSED 3002 Music Education IIIB	3
MUSED 3003 A/B Music Education Ensembles III Part 1 & 2	3
MUSED 3004 Music Education Practicum III	3
and either	
MUSCORE 3001 Music in Context: Music Since 1900	3
0ľ	
MUSCORE 3002 Music in Context IIIA: Jazz	3
Or	
MUSCORE 3003 Music in Context IIIB: Jazz	3
and	
COMP 3500 A/B Composition III Part 1 & 2	6
Or	
MUSTECH 3003 A/B Music Technology III Part 1 & 2	6
and	
GENMUS 3026 A/B Perspectives in Music Technology III Part 1 & 2	3
0ľ	
PERF 3600 A/B Practical Study III: Performance Part 1 & 2	6
or	
JAZZ 3600 A/B Practical Study III: Jazz Part 1 & 2	6
0r	
Elective courses from other schools to the value of 6 points	
and	
Electives selected from clause 6.1.2.3 to complete a full load of 24 units.	

### Level IV

	EDUC 4700 Families, Schools & Students' Outcomes (UG)	2
	EDUC 4701 Student-Teacher Interaction in the Classroom Pt 1(UG)	2
	EDUC 4702 Teaching Practice I (UG)	3
	EDUC 4703 Teaching Practice II (UG)	3
	EDUC 4704 Professional Practice & ICT for Teachers (UG)	2
	EDUC 4705 Curriculum & Assessment of Learning (UG)	2
	EDUC 4706 Student-Teacher Interaction in the Classroom Pt 2(UG)	2
	EDUC 4707 Culture, Education & Society (UG)	2
	MUSED 4001 A/B Music Education IV Part 1 & 2	3
	and an elective selected from clause 6.1.2.3 or MUSED 4002 A/B Music Education Project IV Part 1 & 2	3
6.2.3	No candidate will be permitted to count towards an	

- award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.2.4. Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### Notes (not forming part of the Academic Program Rules)

Work required to complete the Bachelor degree To qualify for the award of the degree of Bachelor of Music Education a candidate granted status (see relevant section under Student Related Polices in Student Guide 2007) must, except in special cases approved by the School, complete all the work of the final level of the prescribed program while attending the University.

#### 2 Availability of courses and options:

1

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

3 Candidates undertaking study for the programs of Bachelor of Music Education and Bachelor of Arts concurrently:

Candidates may enrol for the programs of Bachelor of Music Education and Bachelor of Arts concurrently if they apply for admission and are admitted to both programs.

Candidates already enrolled for the degree of Bachelor of Music Education wishing to proceed to the degrees of B.Mus.Ed. and B.A. concurrently may apply towards the end of their first year in the School for admission to the B.A. program the following year.

The School advises:

- The combined program takes six years of full-time study.
- (2) All of the requirements of the Bachelor of Music Education program must be completed, together with courses taken from the Academic Program Rules of the degree of Bachelor of Arts. The minimum Arts requirements to be satisfied are:

Level I course to the minimum value of 12 units

Level II courses to the minimum value of 12 units

Level III courses to the minimum value of 24 units.

Candidates must complete all of the Level III requirements in accordance with Academic Program Rule 5.6.9 of the degree of Bachelor of Arts.

- (3) The attention of candidates is drawn to the Academic Program Rules of the degree of Bachelor of Arts. No course may be counted twice towards the degree and two courses which contain a substantial amount of the same material may not both be counted.
- (4) Candidates should have continuous enrolment in their instrumental or vocal studies. The attention of candidates is drawn to Academic Program Rule 4.
- (5) Candidates should complete lower level prerequisites before commencing higher level courses.
- (6) Candidates should submit their proposed program of study in the combined program to the School for approval.
- (7) Candidates should note that an enrolment in courses exceeding a total value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload.

#### 4 Changing specialisation:

Students may change specialisation by auditioning for the relevant specialisation. Students should apply to the School Registrar. Applications to change specialisation are subject to the approval of the Dean or Nominee of the Dean of School.

#### 5 Music Education Students in a Jazz Major

Students who change specialisation to a Jazz major who do not have the necessary prerequisites to take Music in Context IIIA Jazz and Music in Context IIIB Jazz may substitute MUSCORE 3999A/B Jazz Theory for Music Education III Part 1 & 2 worth 3 units.

### 6.3 Academic program: Bachelor of Music Studies

6.3.1 The program for the degree of Bachelor of Music Studies may be taken with a specialisation in Performance on an instrument or voice, or in Composition or in Music Technology.

6.3.2	To qualify for the Bachelor degree a candidate shall satisfactorily complete the requirements for courses listed below and those courses listed in any one of 6.3.2.1 to 6.3.2.3. Courses to a total value of 72 units must be presented. At least 20 units shall comprise Level III courses. No student shall gain credit for a course more than once.	
	Subject to Clause 6.3.2, conceded passes may be presented for elective courses only from Clause 6.1.2. provided that they do not exceed 6 units in total.	3,
6.3.2.1	Composition Candidates shall satisfactorily complete the following courses:	
	Level I	
	COMP 1500 A/B Composition I Part 1 & 2	6
	GENMUS 1003 Musics of the World I	3
	MUSCORE 1007 Introduction to Theory & Analysis of Music I	3
	MUSCORE 1008 Contrapuntal Analysis & Composition IB	3
	MUSCORE 1009 Foundations of Music History IA	3
	MUSCORE 1010 Foundations of Music History IB	3
	and Electives selected from clause 6.1.2.3 to complet a full load of 24 units.	е
	Level II	
	COMP 2500 A/B Composition II Part 1 & 2	6
	MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
	MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
	MUSST 2001 Approaches to Music IIA	3
	MUSST 2002 Approaches to Music IIB	3
	and Electives selected from clause 6.1.2.3 to complet a full load of 24 units.	е
	Level III	
	COMP 3500 A/B Composition III Part 1 & 2	6
	MUSCORE 3001 Music in Context III: Music Since 1900	3
	MUSCORE 3004 Music & Music Making in the Australian Context III	3
	MUSST 3001 Approaches to Music III	3
	and Electives selected from clause 6.1.2.3 to complet a full load of 24 units.	e

### 6.3.2.2 Integrated Studies

# Level I

	Level I	
	MUSCORE 1007 Introduction to Theory	0
	& Analysis of Music I	3
	MUSCORE 1008 Contrapuntal Analysis & Composition IB	3
	MUSCORE 1009 Foundations of Music History IA	3
	MUSCORE 1010 Foundations of Music History IB	3
	MUSST 1001A/B Studies in Music I Part 1 & 2	6
	PERF 1600 A/B Practical Study I:	
	Performance Part 1 & 2	6
	Level II	
	MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
	MUSCORE 2006 Western Music in Theory & Practice IIB: 1850-1950	3
	MUSST 2001 Approaches to Music IIA	3
	MUSST 2002 Approaches to Music IIB	3
	PERF 2600 A/B Practical Study II:	
	Performance Part 1 & 2	6
	and/or Electives selected from clause 6.1.2.3 to complete a full load of 24 units.	
	Level III	
	MUSCORE 3001 Music in Context III: Music Since 1900	3
	MUSCORE 3004 Music & Music Making	
	in the Australian Context III	3
	MUSST 3001 Approaches to Music III	3
	PERF 3600 A/B Practical Study III: Performance Part 1 & 2	6
	and/or Electives selected from clause 6.1.2.3 to	0
	complete a full load of 24 units.	
6.3.2.3	P Music Technology	
	Candidates shall satisfactorily complete the following courses:	
	Level I	
	GENMUS 1026 A/B Perspectives in Music Technology I Part 1 & 2	3
	MUSCORE 1007 Introduction to Theory & Analysis of Music I	3
	MUSCORE 1008 Contrapuntal Analysis & Composition IB	3
	MUSCORE 1009 Foundations of Music History IA	3
	MUSCORE 1010 Foundations of Music History IB	3

MUSTECH 1003 A/B Music Technology I Part 1 & 2 6

and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

### Level II

GENMUS 2026 A/B Perspectives in Music Technology II Part 1 & 2	3
MUSCORE 2005 Western Music in Theory & Practice IIA: 1750-1850	3
MUSCORE 2006 Western Music in Theory & Practice IIE	3:
1850-1950	3
MUSST 2001 Approaches to Music IIA	3
MUSST 2002 Approaches to Music IIB	3
MUSTECH 2003 A/B Music Technology II Part 1 & 2	6
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.	Э
Level III GENMUS 3026 A/B Perspectives in Music Technology	

MUSCORE 3001 Music in Context III:3Music Since 19003MUSCORE 3004 Music & Music Making in the Australian Context III3MUSST 3001 Approaches to Music III3MUSTECH 3003 A/B Music Technology III Part 1 & 26and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.1	GENMUS 3026 A/B Perspectives in Music Technology Part 1 & 2	' III 3
in the Australian Context III3MUSST 3001 Approaches to Music III3MUSTECH 3003 A/B Music Technology III Part 1 & 26and Electives selected from clause 6.1.2.3 to complete		3
MUSTECH 3003 A/B Music Technology III Part 1 & 2 6 and Electives selected from clause 6.1.2.3 to complete	5	3
and Electives selected from clause 6.1.2.3 to complete	MUSST 3001 Approaches to Music III	3
	MUSTECH 3003 A/B Music Technology III Part 1 & 2	6
		e

- 6.3.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.3.4 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### Notes (not forming part of the Academic Program Rules)

Work required to complete the Bachelor degree To qualify for the award of the degree of Bachelor of Music Studies a candidate granted status (see relevant section under Student Related Polices in Student Guide 2007 must, except in special cases approved by the School, complete all the work of the final level of the prescribed program while attending the University.

#### 2 Availability of courses and options:

The School reserves the right not to offer certain courses in any particular year. Decisions on which courses are to be offered will be determined partly by the availability of relevant staff members and partly by the numbers of students who enrol in a course or option. If the numbers are less than forty then the course might not be offered.

#### 3 Candidates undertaking study for the programs of Bachelor of Music Studies and Bachelor of Arts concurrently:

Candidates may enrol for the programs of Bachelor of Music Studies and Bachelor of Arts concurrently if they apply for admission and are admitted to both programs.

Candidates already enrolled for the degree of Bachelor of Music Studies) wishing to proceed to the degrees of B.Mus.St. and B.A. concurrently may apply towards the end of their first year in the School for admission to the B.A. program the following year.

The School advises:

- (1) The combined program takes five years of full-time study.
- (2) All of the requirements of the Bachelor of Music Studies program must be completed, together with courses taken from the Academic Program Rules of the degree of Bachelor of Arts. The minimum Arts requirements to be satisfied are:

Level I course to the minimum value of 12 units

Level II courses to the minimum value of 12 units

Level III courses to the minimum value of 24 units

Candidates must complete all of the Level III requirements in accordance with Academic Program Rule 5.6.9 of the degree of Bachelor of Arts

- (3) The attention of candidates is drawn to the Academic Program Rules of the degree of Bachelor of Arts. No course may be counted twice towards the degree and two courses which contain a substantial amount of the same material may not both be counted.
- (4) Candidates should have continuous enrolment in their instrumental or vocal studies. The attention of candidates is drawn to Academic Program Rule 4.
- (5) Candidates should complete lower level prerequisites before commencing higher level courses.
- (6) Candidates should submit their proposed program of study in the combined program to the School for approval.
- (7) Candidates should note that an enrolment in courses exceeding a total value of 24 units per year will result in a program overload. Candidates should be aware of the full implications of their choice to take a program overload.

#### 4 Changing specialisation:

Students may change specialisation by auditioning for the relevant specialisation. Students should apply to the School Registrar. Applications to change specialisation are subject to the approval of the Dean or Nominee of the Dean of School.

- 6.4 Academic program: The Honours degree of Bachelor of Music
- 6.4.1 To qualify for the Honours degree a candidate shall complete the requirements for the Bachelor degree and comply with the provisions of Academic Program Rule 6.4.
- 6.4.2 To qualify for the Honours degree a candidate shall satisfactorily complete PERF 4005 A/B Honours Performance Part 1 & 2 or PERF 4006 A/B Honours Music Pedagogy Part 1 & 2.
- 6.4.3 In special circumstances this course may be taken in combination with other Honours courses approved by the School. The combination shall include such parts as shall, when combined, be deemed by the School to be equivalent to one course.
- 6.4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.4.5 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.
- 6.5 Academic program: The Honours degree of Bachelor of Music Education
- 6.5.1 To qualify for the Honours degree a candidate shall complete the requirements for the Bachelor degree and comply with the provisions of Academic Program Rule 6.5.
- 6.5.2 To qualify for the Honours degree a candidate shall satisfactorily complete MUSICED 4006 A/B Honours Music Education Part 1 & 2
- 6.5.3 In special circumstances this course may be taken in combination with other courses approved by the School. The combination shall include such parts as shall, when combined, be deemed by the School to be equivalent to one course.
- 6.5.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.

- 6.5.5 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.
- 6.6 Academic program: The Honours degree of Bachelor of Music Studies
- 6.6.1 To qualify for the Honours degree a candidate shall complete the requirements for the Bachelor degree and comply with the provisions of Academic Program Rule 6.6.
- 6.6.2 To qualify for the Honours degree a candidate shall satisfactorily complete one of the following Honours courses:

ETHNO 4003 A/B Honours Ethnomusicology (B.Mus.) Part 1 & 2

MUSCOMP 4010 A/B Honours Composition Part 1 & 2 MUSICOL 4011 A/B Honours Musicology (B.Mus.) Part 1 & 2

MUSTECH 4001 A/B Honours Music Technology Part 1 & 2

- 6.6.3 In special circumstances this course may be taken in combination with other Honours courses approved by the School. The combination shall include such parts as shall, when combined, be deemed by the School to be equivalent to one course.
- 6.6.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award. A list of unacceptable course combinations is available from The Elder Conservatorium of Music Office.
- 6.6.5 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.
- 7. External performances/engagements

Students are encouraged to take outside engagements, provided that:

(a) a student shall not take part in any public concert or engagement that prohibits the student from attending a scheduled lesson or class except by permission of the Dean. (b) The Dean reserves the right to determine whether or not a student shall be required to acknowledge the name of the School or its staff, at any public concert or engagement in which the student participates.

### 8 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

### Rules

- 1 The Elder Conservatorium of Music provides for the teaching and study of various branches of music as Single Study courses.
- 2 Before admission as a Single Study student, the intending student shall satisfy the Dean of his/her fitness to enter upon the course of study proposed, and shall be admitted irrespective of age or Year 12 status. Fitness to proceed will usually be determined by audition.
- 3 Students may take Single Study courses without proceeding to a degree or diploma and, subject to the approval of the Dean, they may attend class courses without enrolling in an individual course.
- 4 In commencing a program of Single Study tuition, a student shall:
  - (a) complete and sign a Single Study enrolment form
  - (b) pay such fees and charges (entrance fee, general service fee, tuition fee, consumables fee and late fee) in accordance with timelines approved by the Vice-Chancellor.

### Single studies in music

- 5 The following Music courses will be offered:
  - (a) Principal Study Courses

Flute, oboe, clarinet, bassoon, horn, trumpet, trombone, tuba, percussion, harp, saxophone, violin, violoncello, double bass, voice, pianoforte, harpsichord, organ, guitar, recorder, composition and jazz instruments.

(b) Class Courses

Theory of music, history and literature of music, general musical knowledge, musical form and analysis, aural development, chamber music, orchestral and ensemble playing, choral singing, class teaching of practical courses, ethnomusicology, composition, electronic music and selected jazz theory courses.

- 6 The principal study courses will consist of 7.5 hours or 15 hours tuition per semester or 15 hours or 30 hours per year. The class courses will consist of 12 weekly lessons per semester or 24 classes per year.
- 7 At the end of the year, a student of a Single Study course may upon application in writing, receive a report on progress from the Dean.

### 8 Scholarships

- (a) Auditions for Music Single Study scholarships offered by the Elder Conservatorium of Music shall be held annually. Applications on forms available from the Conservatorium Office must be lodged by the nominated closing date with payment of the prescribed entrance fee.
- (b) Unless the rules of the scholarship concerned allow otherwise:
  - Single Study scholarships shall be available only to Single Study students and shall be applied towards tuition in the individual course for which it is awarded.
  - (ii) The Single Study student shall pay the difference between the sum awarded and the fees due for tuition.
- (c) A scholarship shall be awarded to the candidate who shows the greatest musical promise and not necessarily to the most advanced candidate at the audition. In most cases, preference will be given to singers who are aged eighteen years or over and, for major scholarships, to instrumentalists who are aged fifteen years or over.
- (d) Each holder of a scholarship tenable for tuition shall take part in such concerts, classes and other activities as the Dean may require.
- (e) If the holder of a scholarship tenable for more than one year fails to make satisfactory progress in the opinion of the Dean, the student shall thereupon forfeit the scholarship for the remainder of its term of award, unless the Council shall otherwise decide.

# Single studies for international music students (SSIMS)

- 9 The Conservatorium will offer Single Studies for International Music Students (SSIMS) to enable students to maintain performance skills whilst English language studies are undertaken or to continue performance studies while other tertiary studies are undertaken.
- 10 The following Music courses will be offered:

### Principal Courses

Flute, oboe, clarinet, bassoon, horn, trumpet, trombone, tuba, percussion, harp, saxophone, violin, violoncello, double bass, voice, pianoforte, harpsichord, organ, guitar, recorder, composition and jazz instruments.

- 11 The principal study courses will consist of 7.5 hours or 15 hours tuition per semester or 15 hours or 30 hours per year.
- 12 At the end of the year, a student of a Single Study course may upon application in writing, receive a report on progress from the Dean.

# Bachelor of Music – Graduate Attributes

The Elder Conservatorium of Music facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the structure of music and its role as an expressive tool.
- Knowledge, understanding and mastery of the elements of musical performance, encompassing technique, style, interpretation and communication.
- · Knowledge, understanding and mastery of the conceptual and practical components of music.
- · The ability to analyse and synthesise complex material.
- · Confidence in the use of oral and written communication skills.
- · A high level of self-awareness and critical judgement.
- An understanding of technology, its use in the profession and its role as a tool for education, communication and career development.
- · An imaginative and creative approach to problem solving.
- · Sensitivity to the contribution of others and the ability to function as part of a team.
- A clear understanding of the professional world and the standards required for professional work.
- The ability to locate information resources appropriate to independent, life long learning.
- A high level of independence and initiative and a desire for continued improvement in all aspects of professional endeavour.
- · Flexibility to recognise and respond to a wide variety of professional opportunities and challenges.
- · A high level of cultural awareness and sensitivity.
- · Flexibility and agility of musical thought and judgement.
- · Commitment to excellence and the striving towards the highest possible personal and professional standards.
- · Commitment to ethical behaviour.
- · Appreciation and encouragement of artistic and cultural diversity.

# Bachelor of Music Education – Graduate Attributes

The Elder Conservatorium of Music facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the breadth of music and its role as an expressive tool.
- · Knowledge, understanding and mastery of the conceptual and practical components of music.
- · Knowledge of the role of music in education and the principles of music learning and teaching.
- · The ability to analyse and synthesise complex material.
- Proficiency in the use of oral and written communication skills and interpersonal skills, particularly as needed in the teaching profession.
- · A high level of self-awareness and critical judgement.
- · An understanding of technology and its use as a tool in music education.
- · An imaginative and creative approach to problem solving.
- · Leadership ability, sensitivity to others and the ability to function as part of a team.
- · A clear understanding of the teaching profession.
- · The ability to locate information resources relevant to independent, lifelong learning.
- A high level of independence and initiative and a desire for continued improvement in all aspects of professional endeavour.
- Flexibility to recognise and respond to a wide variety of professional opportunities and challenges.
- · A high level of cultural awareness and sensitivity.
- · Flexibility and agility of musical thought and judgement.
- · Commitment to excellence and the striving towards the highest possible personal and professional standards.
- · Commitment to ethical behaviour.
- · Appreciation and encouragement of artistic and cultural diversity.

# Bachelor of Music Studies - Graduate Attributes

The Elder Conservatorium of Music facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Knowledge and understanding of the structure of music and its role as an expressive tool.
- Knowledge, understanding and mastery of the elements of musical performance or composition or music technology.
- · Knowledge, understanding and mastery of the conceptual and practical components of music.
- · The ability to analyse and synthesise complex material.
- · Confidence in the use of oral and written communication skills.
- · A high level of self-awareness and critical judgement.
- An understanding of technology, its use in the profession and its role as a tool for education, communication and career development.
- · An imaginative and creative approach to problem solving.
- Sensitivity to the contribution of others and the ability to function as part of a team.
- A clear understanding of the professional world and the standards required for professional work.
- The ability to locate information resources appropriate to independent, life long learning.
- A high level of independence and initiative and a desire for continued improvement in all aspects of professional endeavour.
- Flexibility to recognise and respond to a wide variety of professional opportunities and challenges.
- · A high level of cultural awareness and sensitivity.
- · Flexibility and agility of musical thought and judgement.
- · Commitment to excellence and the striving towards the highest possible personal and professional standards.
- · Commitment to ethical behaviour.
- · Appreciation and encouragement of artistic and cultural diversity.



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# Undergraduate Awards in the Faculty of Sciences

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- · Diploma in Wine Marketing
- Degree of Bachelor of Agriculture
- Degree of Bachelor of Food Science and Technology
- Degree of Bachelor of Oenology
- Degree of Bachelor of Rural Enterprise Management
- Degree of Bachelor of Science
- Degree of Bachelor of Science (Agricultural Science)
- Degree of Bachelor of Science (Animal Science)
- Degree of Bachelor of Science (Biomedical Science)
- Degree of Bachelor of Science (Biotechnology)
- Degree of Bachelor of Science (Ecochemistry)
- Degree of Bachelor of Science (Evolutionary Biology)
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- Degree of Bachelor of Science (Jurisprudence)
- Degree of Bachelor of Science (Marine Biology)
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- Degree of Bachelor of Science (Nanoscience and Materials)
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- Degree of Bachelor of Science (Optics & Photonics)
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- Degree of Bachelor of Science (Space Science & Astrophysics)
- Degree of Bachelor of Science (Sustainable Environments)
- Degree of Bachelor of Science (Viticulture)
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- · Honours degree of Bachelor of Agriculture
- · Honours degree of Bachelor of Environmental Science
- · Honours degree of Bachelor of Natural Resource Management

- Honours degree of Bachelor of Science
- · Honours degree of Bachelor of Wine Marketing

#### Notes on Delegated Authority

- 1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
- 2 Council has delegated the power to specify syllabuses to the Head of each department, discipline or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of school or centre may approve minor changes to any previously approved syllabus.

# Bachelor of Science Degrees – Graduate Attributes

### Knowledge

- A broad scientific knowledge with a deep understanding of one or more science disciplines, commensurate with the highest international standards in science education.
- To understand the observational and experimental character of science and to have skills in field and laboratory techniques and experimental design.

### Intellectual and social capabilities

- The skills of inquiry, objective criticism, logical thought and problem solving that are considered to be the foundations of the scientific method.
- · The ability to communicate scientific information effectively, both orally and in writing.
- To have a high order of numerical and analytical skills.
- To possess scientific curiosity and the attitudes, knowledge and skills necessary for a commitment to life long learning.
- To have experience with learning opportunities made available by new technologies and to be equipped with computing and information technology skills.
- To have the skills required to tackle scientific problems as a member of a team.

### Attitudes and values

- · To appreciate the central role of science in society.
- · An enthusiasm for, and enjoyment of, the ethos of science and the process of scientific investigation.
- To value the close relationship between scientific research and the development of new knowledge.

# Further Programs in the Faculty of Sciences – Graduate Attributes

These graduate attributes apply to the following Academic Programs:

- All Diplomas
- Bachelor of Agricultural Science (including all specialisations)
- Bachelor of Agriculture
- Bachelor of Environmental Science
- Bachelor of Food Science and Technology
- Bachelor of Natural Resource Management
- Bachelor of Rural Enterprise Management
- Bachelor of Science (Agricultural Science)
- Bachelor of Science (Animal Science)
- Bachelor of Science (Natural Resource Management)
- Bachelor of Science (Sustainable Environments)
- Bachelor of Science (Viticulture)
- Bachelor of Wine Marketing.
- Knowledge and understanding of the content of their chosen discipline at levels that are internationally recognised and at the higher level of industry requirement.
- The ability to analyse, evaluate and synthesise information from a wide variety of sources and experiences, and apply
  creative and innovative solutions to problems within changing contexts.
- · Numeracy and literacy skills of a high order.
- Acquisition of the capacity to learn and maintain intellectual curiosity and a commitment to continuous learning throughout their lives.
- An awareness of ethical, social and cultural contexts and their importance in the exercise of professional skills and responsibilities.
- · The capacity to communicate effectively and to work both independently and cooperatively.
- The ability to take up a leadership role in the community and a commitment to the highest standards of professional endeavour.
- · Proficiency in the appropriate use of modern technologies within a socially responsible context.

## Academic Program Rules

### 1 Duration of program

The program of study for the diploma shall extend over two years of full-time study or the part-time equivalent

### 2 Admission

2.1 Particular requirements

For admission to the Diploma of Agricultural Production an applicant must hold a South Australian Class 1 Drivers Licence or interstate equivalent.

- 2.2 Status, exemption and credit transfer
- 2.2.1 Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the program for the degree of Diploma of Agricultural Production as the Faculty in each case may determine.

Proficiency status may be granted where the student demonstrates proficiency in the course matter of a course to the satisfaction of the Head of a School, who shall decide the method of assessment after consultation with the Course Coordinator.

Where a student has failed a course at the University of Adelaide or at the former Roseworthy Agricultural College he/she may not apply for proficiency status in the course in lieu of repeating it.

Where status has not been granted a student may request exemption from part of the course. The course coordinator will make all decisions on the granting of exemption.

2.2.2 Limits on the granting of status

Normally status will only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses which meet the academic requirements of the award towards which credit is sought.

Students must complete a minimum of 24 units towards the award, as defined in 4.1, at the University of Adelaide.

### 3 Assessment and examinations

3.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned

- (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass up to a maximum value of 4 units provided such courses shall not satisfy prerequisite requirements.
- 3.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

### 4 Qualification requirements

### 4.1 Academic program

For the award of Diploma in Agricultural Production a student shall complete all courses listed in the program of study for Level I and Level II of the Bachelor of Agriculture as specified under Academic Program Rule 5.2 for that program.

4.2 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 5 Special Circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Diploma in Wine Marketing

### Academic Program Rules

### 1 Duration of program

The program of study for the diploma, which is offered externally only, shall extend over four years of part-time study.

### 2 Admission

- 2.1 Status, exemption and credit transfer
- 2.1.1 Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the program for the degree of Diploma in Wine Marketing as the Faculty in each case may determine.

#### 2.1.2 Limits on the granting of status

Normally status will only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses which meet the academic requirements of the award towards which credit is sought.

Students must complete a minimum of 24 units towards the award, as defined in 4.1, at the University of Adelaide.

### 3 Assessment and examinations

- 3.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 3.2 There shall be four classifications of pass in any course for the degree as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass up to a maximum value of 4 units, provided such courses shall not satisfy prerequisite requirements.

- 3.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material. except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it shall be deemed to have failed to pass the course.

### 4 Qualification requirements

### 4.1 Academic program

For the award Diploma in Wine Marketing a student shall complete all courses listed in the program of study for level I and level II of the Bachelor of Wine Marketing as specified under Academic Program Rule 5.2 for that program.

The program of study for students commencing the program prior to 2004 is set out in the Calendar, Handbook of Undergraduate Programs, 2003.

The program of study for students commencing the program prior to 1996 is set out in the Calendar, Volume 2: Handbook of Courses, 1998.

4.2 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material. and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special Circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

### 1 General

There shall be a degree and an Honours degree of Bachelor of Agriculture.

### 2 Duration of program

The program of study for the Bachelor degree shall extend over three years of full-time study or the parttime equivalent and that for the Honours degree over one additional year of full-time study, or, in exceptional circumstances, over two years of part-time study.

### 3 Admission

### 3.1 Particular requirement For admission to the Bachelor of Agriculture an applicant must hold a South Australian Class 1 Drivers Licence or interstate equivalent.

- 3.2 Status, exemption and credit transfer
- 3.2.1 Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the program for the degree of Bachelor of Agriculture as the Faculty in each case may determine.

Proficiency status may be granted where the student demonstrates proficiency in the course matter of a course to the satisfaction of the Head of School, who shall decide the method of assessment after consultation with the Course Coordinator.

Where a student has failed a course at the University of Adelaide or at the former Roseworthy Agricultural College he/she may not apply for proficiency status in the course in lieu of repeating it.

Where status has not been granted a student may request exemption from part of the course. The course coordinator will make all decisions on the granting of exemption.

### 3.2.2 Limits on the granting of status

Normally status will only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses which meet the academic requirements of the award towards which credit is sought.

Students must complete a minimum of 24 units towards the award, as defined in 5.2, at the University of Adelaide.

### 4 Assessment and examinations

- 4.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned.
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 7 units. Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.
- 4.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended

substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

### 5 Qualification requirements

5.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

### 5.2 Bachelor of Agriculture

For the degree of Bachelor of Agriculture a student shall pass courses to the value of 72 units as listed for Level I, II and III of the program of study:

### Level I

semester 1	
AGRIC 1000RW Perspectives on Modern Agriculture	3
BIOLOGY 1103RW Cell Biology and Genetics	3
PLANT SC 1001RW Chemistry and Introductory Biochemistry A	3
semester 2	
AGRIBUS 1009RW Rural Business Planning A	3
BIOLOGY 1203RW Biology of Plants and Animals	3
SOIL&WAT 1000RW Soils and Land Management Systems	3
STATS 1002RW Data Management & Interpretation	3
<i>full year</i> AGRONOMY 1006ARW/BRW Agricultural Experience I	3
Level II	
semester 1	
AGRIBUS 2033RW Rural Finance and Marketing	4
AGRONOMY 2120RW Introduction to Engineering	2
in Agriculture SOIL&WAT 2012WT Soil and Water Resources	_
	4
semester 2	_
AGRONOMY 2008RW Agricultural Experience II	2
AGRONOMY 2013RW Production Agronomy	4
ANIML SC 2030RW Livestock Production Science	4
PLANT SC 2003RW Microbiology and Invertebrate Biology	4

### Level III

semester 1
AGRIBUS 3012RW Rural Business Management
AGRONOMY 3020RW Principles and Practice of Communications
Plus electives to the value of 6 units chosen from:
AGRONOMY 3012RW Advanced Agronomy
ANIML SC 3017RW Comparative Animal Physiology
ANIML SC 3045RW Animal Breeding and Genetics
HORTICUL 3000WT Production Horticulture
HORTICUL 3001WT Horticultural Systems

PLANT SC 3131WT Integrated Pest Management A	3
SOIL&WAT 3002WT Soil Management	
and Conservation	3
SOIL&WAT 3016WT Soil Ecology	~
and Nutrient Cycling	3
semester 2	
AGRONOMY 3004RW Land Management Systems for the Future	3
Plus electives to the value of 9 units chosen from:	
AGRIBUS 2009WT Issues in Australian Agribusiness	3
AGRIBUS 3010WT International Agribusiness	
Environment	3
AGRONOMY 3016RW Crop and Pasture Ecology	3
ANIML SC 3015RW Animal Nutrition & Metabolism	3
ANIML SC 3016RW Animal Health	3
GEOLOGY 3010 Remote Sensing (S)	3
PLANT SC 3004WT Mineral Nutrition of Plants	3
PLANT SC 3200WT Plant Breeding	3
SOIL&WAT 3012WT Soil Water Management	3
Alternative electives are listed below:	
semester 1 or 2	
AGRONOMY 3008RW Individual Studies (Ag)	3
full year	
PLANT SC 3030AEX/BEX Integrated Weed	_
Management	3
Summer semester/other vacation periods	
AGRONOMY 3026RW Ecology and Management of Rangelands (a)	3
ANIML SC 3018RW Pig Production -	
Science into Management (c)	3
ANIML SC 3019RW Ecology and Management	~
of Vertebrate Pests (c)	3

ANIML SC 3043RW Biotechnology in the Animal Industries (c)

HORTICUL 3004WT Olive Production and Marketing (a) 3

3

3

SOIL&WAT 3014WT GIS for Agricultural Science (b)

Students may apply to the Program Coordinator to take courses from other programs in the Faculty provided that prerequisites have been satisfied.

(a) July (b) September (c) Summer

- 5.3 Honours degree of Bachelor of Agriculture
- 5.3.1 To be eligible to be admitted to the Honours degree program, a candidate shall complete the requirements for the degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.
- 5.3.2 A candidate may, subject to the approval of the Head of Discipline concerned, proceed to the Honours degree in one of the following courses:

ANIML SC 4000ARW/BRW Honours Animal Science (B.Ag.)

HORTICUL 4006AWT/BWT Honours Wine and Horticulture (B.Ag.)

PLANT SC 4014AWT/BWT Honours Plant Science (B.Ag.)

SOIL&WAT 4002AWT/BWT Honours Soil and Land Systems (B.Ag.)

or

with the approval of the Faculty in each case, in a course taught by another Discipline or School of the University.

5.3.3 The work of the Honours year will normally be completed in one year of full-time study. The Faculty may permit a candidate to take two years, but no more, under such conditions as it may determine.

5.3.4 A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

- 1 First Class
- 2A Second Class div A
- 2B Second Class div B
- 3 Third Class
- NAH Not awarded.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose. 6 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Food Science and Technology

Students who commenced their program of study in 2003, 2004, 2005, 2006 or earlier will normally complete their course of study under the provision of the specific program rules current at the time of commencement. Students should consult the University of Adelaide Calendar - Handbook of Undergraduate Programs, for the year of starting.

On application to the Faculty, continuing students may be permitted to complete their studies under the current academic program rules, with such modifications and stipulations as the Faculty may deem necessary.

# Academic Program Rules

### 1 General

- 1.1 There shall be a Bachelor of Food Science and Technology and an Honours degree of Bachelor of Food Science and Technology.
- A candidate may obtain a Bachelor degree, an Honours degree, or both.
- 1.3 A graduate who has obtained the Honours degree of Bachelor of Arts, or the Honours degree of the Bachelor of Science, may not proceed to the Honours degree of Bachelor of Food Science and Technology in the Faculty of Sciences in the same course.

### 2 Duration of program

The program for the degree shall extend over three years of full-time study or the part-time equivalent, and that for the Honours degree over one additional year of full-time study or, in exceptional circumstances, over two years of part-time study.

### 3 Admission

3.1 Status, exemption and credit transfer Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty be granted such status in appropriate courses in the program for the degree of Bachelor of Food Science and Technology as the Faculty in each case may determine.

### 4 Assessment and examinations

- 4.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written,

practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

- 4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 7 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.
- 4.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

### 5 Qualification requirements

5.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

#### 5.2 Industry experience

Candidates are expected to gain practical experience in the food or beverage industry during the duration of the program.

5.3 Academic program

> To qualify for the degree a candidate shall satisfactorily present passes in the courses listed below for the four years of the program to a value of not less than 72 units.

### 5.3.1 Level I

5.3.2

semester 1	
BIOLOGY 1101 Biology I:	
Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes and Cells B	3
CHEM 1100 Chemistry IA	3
or	
CHEM 1101 Foundations of Chemistry IA	3
PHYSICS 1008 Physics Principles & Applications I	3
FOOD SC 1001 Consumer Food and Health	3
semester 2	
BIOLOGY 1202 Biology I:Organisms	3
CHEM 1200 Chemistry IB	3
or	
CHEM 1201 Foundations of Chemistry IB	3
FOOD SC 1000RG Introduction to Food Technology	3
STATS 1004 Statistical Practice I (Life Sciences)	3
	U
Level II semester 1	
BIOCHEM 2106WT Biochemistry II (Agriculture) A	4
,	4
FOOD SC 2001RG Food Engineering Principles	_
FOOD SC 2105RG Food Preservation & Packaging A	4
PLANT SC 2004WT General Microbiology II	2
semester 2	
FOOD SC2002WT Nutrition II	4
FOOD SC 2003RG Food Microbiology II	4
FOOD SC 2205RG Plant Food Processing A	4

5.3.3 Level III

	semes	ter 1	
	FOOD	SC 3011RG Food Chemistry	3
	FOOD	SC 3021RG Food Product Development	3
		SC 3002WT Biotechnology in the Food	
		ine Industry	2
	WINE	/IKTG 3014WT/EX Food Marketing	4
	semes	ter 2	
		COL 3017WT Communication	_
		Agri-food Industry	3
		SC 3014RG Food Quality and Regulation	3
		SC 3025RG Animal Food Processing	3
	FOOD	SC 3027RG Sensory Evaluation of Foods	3
5.4	The H	Honours degree	
5.4.1	and Te	lates completing the Bachelor of Food Science chnology to a standard which is acceptable to culty may proceed to the Honours degree.	
5.4.2	School	lidate, subject to the approval of the Head of I, will proceed to the Honours degree in the ng course:	
		SC 40000AWT/BWT Honours Food Science chnology	24
5.4.3	in one recom may co	ork of the Honours program must be completed year of full-time study, except where, on the mendation of the Head of School, a candidate pomplete the work for the Honours degree over posecutive years, but no more.	
5.4.4		nours grade may be awarded in one of the ng classifications:	
	1	First Class	
	2A	Second Class div A	
	2B	Second Class div B	
	3	Third Class	
	NAH	Not Awarded.	
5.5	Grad	uation	
	have s Univer	It to Chapter 89 of the Statutes, candidates will atisfied the requirements for any award of the sity shall be admitted to that award at a tion ceremony for the purpose.	10
6	Spec	cial circumstances	

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

### Academic Program Rules

### 1 General

There shall be a degree of Bachelor of Oenology.

### 2 Duration of program

The program for the degree shall extend over four years of full-time study or the part-time equivalent. The first two years of the program shall follow the program of study for Level I and II of the Bachelor of Science (Viticulture) program as specified under the Academic Program Rule 2.4 of that program.

### 3 Admission

3.1 Status, exemption and credit transfer Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty be granted such status in appropriate courses in the program for the degree of Bachelor of Oenology as the Faculty in each case may determine.

### 4 Assessment and examinations

- 4.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 9 units.

Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

- 4.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

### 5 Qualification requirements

- 5.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.
- 5.2 It is not necessary for a candidate to take all the courses of any one level simultaneously or to complete all the course set out for one level before enrolling for any courses at the following level, provided that the prerequisite courses have been passed. However, a candidate who desires to take a Level III course before completing all compulsory Level I and II courses must obtain the permission of the Faculty.

### 5.3 Academic program

To qualify for the degree a candidate shall pass courses, listed below, to the value of 96 units, which satisfy the following requirements:

- (a) Level I courses to the value of 24 units and
- (b) Level II courses to the value of 24 units in accordance with the rules of the Bachelor of Science (Viticulture)
- (c) Level III and IV courses as listed.

531	Level III	

	semester 1	
	CHEM ENG 3007WT Winery Engineering	3
	OENOLOGY 3007WT Stabilisation and Clarification	3
	OENOLOGY 3016WT Cellar and Winery Waste Management	3
	OENOLOGY 3047WT Winemaking at Vintage	3
	semester 2	
	AGRIBUS 3017WT Business Management for Applied Sciences	3
	OENOLOGY 3037WT Distillation, Fortified and Sparklin Winemaking	ig 3
	OENOLOGY 3046WT Fermentation Technology	3
	VITICULT 3012WT Viticultural Production	3
522	Level IV	-
0.3.Z	semester 1	
	OENOLOGY 3033WT Industry Experience (Oenology)	4
	VITICULT 3005WT Grape Industry Practice, Policy	
	and Communication	2
	semester 2	
	OENOLOGY 3003WT Wine Packaging	
	and Quality Management	3
	OENOLOGY 3045WT Advances in Oenology	3
	And a further 12 units of electives chosen from cours offered by the Faculty of Sciences, with approval of the B.Oenol. program coordinator, or from the following recommended courses:	
	FREN 3013WT Technical French (Oenology)	3
	HORTICUL 3004WT Olive Production & Marketing (a)	3
	PLANT SC 3002WT Biotechnology in the Food and Wine Industries	2
	SOIL&WAT 3014WT GIS for Agricultural Sciences (b)	3
	Or	
	OENOLOGY 4002WT Honours Oenology (B.Oenol.) (a) July (b) Sept	12
5.4	Graduation	
	Subject to Chapter 89 of the Statutes, candidates wh have satisfied the requirements for any award of the	10

University shall be admitted to that award at a graduation ceremony for the purpose.

#### Special circumstances 6

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

### 1 Duration of program

The program for the degree shall extend over one year of full-time study or the part-time equivalent.

### 2 Admission

- 2.1 Except as provided in 2.2 below, an applicant for admission to the program of study for the Bachelor of Rural Enterprise Management shall have qualified for the Diploma of Agricultural Production or for the South Australian TAFE Advanced Diploma in Rural Enterprise Management or for an award accepted by the Faculty of Sciences as equivalent to those qualifications for the purpose of this rule.
- 2.2 The Faculty may, subject to such conditions (if any) as it may wish to impose, accept as a candidate for the Bachelor of Rural Enterprise Management a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake the academic program.
- 2.3 Status, exemption and credit transfer Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the academic program for the degree of Bachelor of Rural Enterprise Management as the Faculty in each case may determine.

### 3 Assessment and examinations

- 3.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass

However, a candidate may only present a maximum of one course at the Conceded Pass level towards this award.

Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

- 3.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of Department concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

### 4 Qualification requirements

4.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

### 4.2 Academic program

Candidates must pass courses to the value of not less than 24 units including a minimum of 20 units at Level III.

4.2.1 All candidates shall complete the compulsory courses: AGRIBUS 3046 ARW/BRW Leadership in Agri-industries 3 AGRIBUS 3047RW Organisational Management for Rural Enterprises 3 AGRIBUS 3048RW Quality Management for Rural Enterprises 3 4.2.2 Candidates who have not previously completed the following courses or courses deemed by Faculty to be equivalent to those courses shall complete the following:

AGRIBUS 3049RW Marketing of Rural Commodities 3 WINEMKTG 1015EX Data Analysis for Wine and Food Business 3

4.2.3 Students must complete sufficient electives from the courses listed below to bring to a total value of 24 units the courses presented for the degree. To qualify for the Bachelor of Rural Enterprise Management students must have completed three courses from ONE of the production areas listed below. Choice of electives must be approved by the Program Coordinator.

### Electives

AGRIBUS 2009WT Issues in Australian Agribusiness	3
AGRIBUS 3010WT International Agribusiness	
Environment	3
AGRIBUS 3012RW Rural Business Management	3
AGRIBUS 3044RW Individual Studies	
in Rural Enterprise Management	3
SOIL&WAT 3014WT GIS for Agricultural Sciences (b)	3
WINEMKTG 3014WT/EX Food Marketing	3
WINEMKTG 3047EX Internet Marketing	
and E-Commerce	4

### **Production Electives**

Agronomy	
AGRONOMY 2013RW Production Agronomy	4
AGRONOMY 3000RW Agroforestry	3
AGRONOMY 3004RW Land Management Systems	0
for the Future	3
AGRONOMY 3012RW Advanced Agronomy	3
PLANT SC 3200WT Plant Breeding	3
Animal Production	
ANIML SC 2030RW Livestock Production Science	4
ANIML SC 3015RW Animal Nutrition & Metabolism	3
ANIML SC 3016RW Animal Health	3
ANIML SC 3018RW Pig Production - Science	
into Management (c)	3
ANIML SC 3045RW Animal Breeding and Genetics	3
Horticulture	
HORTICUL 3000WT Production Horticulture	3
HORTICUL 3001WT Horticulture Systems	3
HORTICUL 3004WT Olive Production	
and Marketing (MY)*	3
* These courses offered at specified times: MY - mid-year break (b) Sept (c) Summer	

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 5 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Science

Students who commenced their program of study in 2003 and earlier will normally complete their course of study under the provision of the specific program rules current at the time of commencement. Student should consult the *University of Adelaide Calendar* - *Handbook of Undergraduate Programs 2003*.

On application to the Faculty, continuing students may be permitted to complete their studies under the current academic program rules, with such modifications and stipulations as the Faculty may deem necessary.

# Academic Program Rules

### 1 General

- 1.1 There shall be a Bachelor of Science and an Honours Degree of Bachelor of Science.
- 1.2 A candidate may obtain a Bachelor degree, an Honours degree or both.
- 1.3 A graduate who has obtained the Honours degree of Bachelor of Arts, or the Honours degree of Bachelor of Science in the School of Mathematical and Computer Sciences, may not proceed to the Honours degree of Bachelor of Science in the Faculty of Sciences in the same course.

### 2 Duration of programs

The program of study for the degrees shall extend over three years of full-time study or the part-time equivalent and that for the Honours degree over one additional year of full-time study or, in exceptional circumstances, over two years of part-time study.

### 3 Admission

- 3.1 Status, exemption and credit transfer all programs
- 3.1.1 Exemption from any part of the program on the first occasion on which a candidate takes a course will be granted only in special cases and on grounds approved by the Faculty.
- 3.1.2 Candidates who have previously passed courses offered in other programs at the University of Adelaide or other recognised tertiary institutions and who wish to count such courses towards their degree may, on written application to the Faculty, be granted status towards such specific degree requirements as the Faculty shall determine, subject to the following conditions:
  - the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules and

(b) the candidate shall present courses which satisfy the Level three course requirements and the major in a science discipline requirements of the relevant Academic Program Rules and which have not been presented for any other degree.

### 4 Assessment and examinations

- 4.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned.
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 4.2 There shall be four classifications of pass in any courses offered by the Faculty of Sciences, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 7 units, or to an aggregate value of 3 units for the Bachelor of Science (Jurisprudence).

Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

4.3 (a) A candidate who fails to pass in a course or who obtains a conceded pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of School concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned. (b) A candidate who has twice failed to obtain a Pass in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

### 5 Qualification requirements

5.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 5.2 To qualify for the degree a candidate shall, subject to the conditions and modifications specified under 5.3 and 5.4 below, pass courses from 5.6 below to the value of 72 units which satisfy the following requirements:
  - (a) a candidate shall present passes in Level I courses to the value of not more than 30 units
  - (b) a candidate shall present passes in Level III courses to the value of at least 24 units
  - (c) a candidate shall complete a major in a science discipline as set out in 5.4 below.

In all cases, a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.

5.3 As part of the requirements of 5.2 above, a candidate may, in lieu of Level I or II courses, present passes to the value of 8 units in courses offered by the Faculty of Humanities and Social Sciences, the Faculty of Engineering, Computer and Mathematical Sciences, and the School of Architecture, Landscape Architecture and Urban Design. Passes in courses offered by other Faculties may also be presented, provided the enrolment is approved both by the Faculty of Sciences and the other School or Faculty \*.

\* For entry to Law courses see Notes to the B.Sc. (Jur.)

5.4 To complete a major in a Science discipline a candidate shall present Level III courses, for which a result of Pass, Pass with Credit, Pass with Distinction or Pass with High Distinction has been obtained. No candidate may present the same course towards more than one major. A major must satisfy one of the following criteria:

### Science Discipline - major requirements

#### Anatomical Sciences

Courses offered by the Department of Anatomical Sciences to the value of at least 9 units.

*Biochemistry* Courses to the value of at least 9 units.

#### Botany

Courses to the value of at least 9 units, which include:

ENV BIOL 3002 Australian Biota:	
Past, Present and Future	

#### and

ENV BIOL 3009 Ecophysiology of Plants III 3

and an additional Environmental Biology course to the value of 3 units.

#### Chemistry

Courses offered in Chemistry to the value of at least 9 units, which include:

CHEM 3111 Chemistry III	6
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Chemistry - Double Major

Courses offered in Chemistry to the value of at least 18 units, which include:

CHEM 3111 Chemistry III

6

3

### Ecology

Courses to the value of at least 9 units which include:

ENV BIOL 3121 Concepts in Ecology	3
and at least two of	
ENV BIOL 3004 Freshwater Ecology	3
ENV BIOL 3008 Conservation and Restoration	3
ENV BIOL 3010 Marine Ecology	3
PLANT SC 3231WT Insect Ecology	3
SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling	3
Entomology ENV BIOL 3011 Evolution and Diversity of Insects and	3
PLANT SC 3231WT Insect Ecology	3
and either	

ENV BIOL 3002 Australian Biota: Past, Present and Future	3
or	0
ENV BIOL 3008 Conservation and Restoration	3
or	0
ENV BIOL 3122 Evolution and Palaeobiology III	3
Environmental Geoscience	
Courses to the value of at least 9 units, which include	:
GEOLOGY 3010 Remote Sensing (S)	3
GEOLOGY 3014 Environmental Geoscience	
Applications III	3
GEOLOGY 3015 Environmental Geoscience Processes III	3
	3
Geology Courses to the value of at least 9 units, which include	
GEOLOGY 3013 Tectonics III	3
GEOLOGY 3016 Igneous & Metamorphic Geology III	3 3
GEOLOGY 3019 Field Geoscience Program III	3
Geophysics	
Courses to the value of at least 9 units:	•
GEOLOGY 3008 Theoretical Geophysics III	3
GEOLOGY 3017 Petroleum Exploration III	3
GEOLOGY 3018 Mineral Exploration III	3
Genetics	
Courses to the value of at least 9 units.	
Marine Biology	
Courses to the value of at least 9 units, which include	:
ENV BIOL 3006 Research Methods in Environmental Biology III	3
and	
ENV BIOL 3010 Marine Ecology	3
and either	
ENV BIOL 3121 Concepts in Ecology	3
Or	
ENV BIOL 3122 Evolution and Palaeobiology III	3
Microbiology and Immunology	
Courses to the value of 9 units which include:	
MICRO 3000 Infection and Immunity A	6
MICRO 3001 Infection and Immunity B	6
Molecular Biomedical Science	
Courses to the value of I2 units taken from the course offered by the disciplines of Biochemistry, Genetics,	S

offered by the disciplines of Biochemistry, Genetics, Microbiology & Immunology, and Physiology. (This major

is only available to student wishing to undertake study overseas. Students wishing to take out this major must apply in writing to the Faculty and have their program of study approved prior to commencing study overseas).		
Pharmacology Courses offered in Clinical & Experimental Pharmacolo to the value of at least 9 units.	рgy	
<i>Physics</i> Courses offered in Physics to the value of at least 9 units, which include:		
PHYSICS 3002 Experimental Physics III and at least two of	3	
PHYSICS 3001 Electromagnetism & Optics III	3	
PHYSICS 3004 Quantum Mechanics IIIA	3	
PHYSICS 3009 Statistical Mechanics III	2	
	2	
Theoretical Physics Courses offered in Physics to the value of at least 9 units, which include:		
PHYSICS 3004 Quantum Mechanics IIIA	3	
PHYSICS 3006 Advanced Dynamics and Relativity	3	
PHYSICS 3009 Statistical Mechanics III	2	
and at least one of		
PHYSICS 3000 Computational Physics III	2	
PHYSICS 3022 Quantum Mechanics IIIB	2	
Physics and Theoretical Physics		
A major in Physics and Theoretical Physics may be obtained by presenting courses offered in Physics to t value of at least 18 units, which include:	the	
PHYSICS 3002 Experimental Physics III	3	
PHYSICS 3004 Quantum Mechanics IIIA	3	
PHYSICS 3006 Advanced Dynamics and Relativity	3	
PHYSICS 3009 Statistical Mechanics III	2	
Candidates who do not otherwise qualify for a major in Physics and who have successfully completed Level III courses offered in Physics to the value of at least 12 units may, at the discretion of the Head of School, be recommended to Faculty for the award of a major in Physics or Theoretical Physics.		
<i>Physiology</i> Courses offered in Physiology to the value of at least 9 units.		
Psychology	0	

Courses offered in Psychology to the value of at least 9 units which include:

4		comp Progr	natively, cand olete their prog am Rules, wi
			am Rules, wi
		Program Rules, w may deem necess passed under prev be counted under	
3 3 3		passe of a c Facul	re the syllabu ed prior to 20 course to be u ty of Science rements of th
	Notes		
3	1	Patter	n of study nencing studer
		recommended found developed to ensure III studies. However, prerequisites for eac combinations of cou Full- time students n value of 24 units at foundation packages Office.	
5			
3			
3	2	Work	required to control to
3 I 3		(a) Graduates in the degree of towards that presented for the courses p and 5.3 abovy discipline and 24 units whic degree.	
3		(b)	Students com obtain a Unive a minimum to an aggregate science discip
3		(c)	With special p has complete Adelaide inclu value of 12 ur
3			may be permi the degree at be made in w
1 S	3	from t units towar cours AGRO PATHO PLAN Stude	r certain circun the Faculty, cou selected from 'ds the degree es: INOMY 3026R\ DL 3003 Gener T SC 3030AEX, nt wishing to p must apply in
		3       Notes         3       1         3       1         3       2         3       2         3       2         3       3         3       2         3       3         3       2         3       3         <	3     When pass of a constraint of a

Alternatively, candidates enrolled prior to 2004 may complete their program of study under present Academic program Rules, with such modifications as the Faculty nay deem necessary to ensure that courses validly bassed under previous regulations and schedules may be counted under the present Academic Program Rules.

Where the syllabus of a unit or option which was passed prior to 2004 significantly overlaps the syllabus of a course to be undertaken in 2004 or a later year, the Faculty of Sciences shall grant such exemption from the requirements of the latter course as is practicable.

#### lotes (not forming part of the Academic Program Rules)

ommencing students are encouraged to enrol in one of the ecommended foundation packages which have been eveloped to ensure appropriate preparation for Level II and I studies. However, provided that they comply with the rerequisites for each course, students may select their own ombinations of courses at first and subsequent year levels.

Full- time students normally take courses with an aggregate value of 24 units at each of levels I, II and III. Information on foundation packages is available from the Faculty of Sciences Office.

- Work required to complete an Adelaide degree (policy of the Faculty of Sciences)
  - (a) Graduates in another Faculty who wish to qualify for the degree of Bachelor of Science and to count towards that degree courses which have already been presented for another degree may do so, provided that the courses presented fulfil the requirements of 5.2 and 5.3 above, and include a major in a science discipline and Level III courses to the value of at least 24 units which have not been presented for any other degree.
  - (b) Students coming from other institutions and wishing to obtain a University of Adelaide degree, are required as a minimum to complete Level III courses from 5.6 with an aggregate units value of 24 including a major in a science discipline.
  - (c) With special permission of the Faculty, a student who has completed most of the degree at the University of Adelaide including Level III courses with an aggregate value of 12 units and a major in a science discipline may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- Under certain circumstances, and only with prior approval from the Faculty, courses to the value of not more than 6 units selected from the following list may be presented towards the degree of Bachelor of Science in lieu of Level III courses:

AGRONOMY 3026RW Ecology & Management of Rangelands PATHOL 3003 General Pathology IIIHS

PLANT SC 3030AEX/BEX Integrated Weed Management.

Student wishing to present any of these courses towards the B.Sc. must apply in writing to the Faculty Office prior to enrolling in these courses.

5.6	Academic program Level I	
5.6.1	Sciences semester 1	
	BIOLOGY 1101 Biology I: Molecules, Genes & Cells A	3
	BIOLOGY 1102 Biology I: Molecules, Genes & Cells B	3
	CHEM 1100 Chemistry IA	3
	CHEM 1101 Foundations of Chemistry IA	3
	GEOLOGY 1103 Earth Systems	3
	PHYSICS 1002 Astronomy I	3
	PHYSICS 1008 Physics Principles & Applications I	3
	PHYSICS 1100 Physics IA	3
	PHYSICS 1101 Physics for the Life	
	& Earth Sciences IA	3
	PSYCHOL 1000 Psychology IA	3
	STATS 1000 Statistical Practice I	3
	semester 2	
	BIOLOGY 1201 Biology I: Human Perspectives	3
	BIOLOGY 1202 Biology I: Organisms	3
	CHEM 1200 Chemistry IB	3
	CHEM 1201 Foundations of Chemistry IB	3
	GEOLOGY 1100 Earth's Interior I	3
	PHYSICS 1200 Physics IB	3
	PHYSICS 1201 Physics for the Life	
	& Earth Sciences IB	3
	PSYCHOL 1001 Psychology IB	3
5.6.2	Mathematical and Computer Sciences All Level I Mathematical and Computer Sciences courses listed under Academic Program Rule 4.2.1 the degree of Bachelor of Mathematical and Comp Sciences, excluding COMP SCI 1003 Internet Comp	uter
	Level II	
5.6.3	Science	
	semester 1	
	ANAT SC 2104 Cells and Tissues II	4
	BIOCHEM 2100 Biochemistry IIA	4
	CHEM 2003 Environmental Chemistry II	4
	CHEM 2100 Chemistry IIA	4
	ENV BIOL 2001 Evolutionary Biology EBII	4
	ENV BIOL 2006 Botany II	4
	GENETICS 2100 Genetics IIA:	4
	Foundations of Genetics	4

	GEOLOGY 2007 Sedimentary & Structural Geology II	4
	MICRO 2004 Microbiology II	4
	PHYSICS 2001 Classical Mechanics II	2
	PHYSICS 2004 Introductory Quantum Mechanics and	_
	Applications II	2
	PHYSICS 2100 Physics IIA	4
	PHYSIOL 2003 Human Physiology IIA:Heart, Lungs and Circulation	4
	PSYCHOL 2001 Psychological Research	
	Methodology II	4
	PSYCHOL 2002 Psychology IIA	4
	SOIL&WAT 2011RW Spatial Information and Land Evaluation	4
	SOIL&WAT 2012 Soil and Water Resources	4
	semester 2	
	ANAT SC 2105 Comparative Anatomy of Body Systems II	4
	BIOCHEM 2200 Biochemistry IIB	4
	CHEM 2200 Chemistry IIB	4
	CHEM 2207 Analytical Chemistry II	4
	ENV BIOL 2000 Zoology EBII	4
	ENV BIOL 2003 Ecology EBI	4
	GENETICS 2200 Genetics IIB:Function and Diversity	
	of Genomes	4
	GEOLOGY 2006 Igneous & Metamorphic Geology II	4
	GEOLOGY 2008 Landscape Processes	
	and Environments II	4
	MICRO 2005 Immunology and Virology II	4
	PHYSICS 2002 Classical Fields and Mathematical	~
	Methods II	2
	PHYSICS 2009 Photonics II	2
	PHYSICS 2200 Physics IIB	4
	PHYSICS 2201 Astrophysics II	2
	PHYSICS 2211 Electromagnetism II	2
	PHYSIOL 2004 Human Physiology IIB:Homeostasis and Nervous System	4
	PSYCHOL 2003 Psychology IIB	4
<b>F A A</b>	, ,	-
5.6.4	Mathematical and Computer Sciences semester 1	
	APP MTH 2000 Differential Equations	c
	& Fourier Series	2
	APP MTH 2002 Vector Analysis & Complex Analysis *	2
	* also offered in semester 2	۷
	0100 0110100 111 3011103101 Z	

	semester 2		Environmental Biology
	APP MTH 2002 Vector Analysis & Complex Analysis	2	semester 1
	APP MTH 2009 Numerical Analysis and Probability		ENV BIOL 3004 Freshwater Ecology III
	and Statistics STATS 2004 Laplace Transforms and Probability and	2	ENV BIOL 3006 Research Methods in Environmental Biology III
	Statistical Methods	2	ENV BIOL 3011 Evolution and Diversity of Insects
	All Level II Mathematical and Computer Sciences		ENV BIOI 3121 Concepts in Ecology
	courses, listed under Academic Program Rule 4.2.2.1 of the degree of Bachelor of Mathematical and		ENV BIOL 3122 Evolution and Palaeobiology
	Computer Sciences.		semester 2
	The course MATHS 2004 Mathematics IIM may be		ENV BIOL 3002 Australian Biota:
	presented only as four units at Level I except that candidates may not present both MATHS 1101		Past, Present & Future
	Mathematics IA with MATHS 1012 Mathematics IB a	nd	ENV BIOL 3003 Ecophysiology of Animals III
	MATHS 2004 Mathematics IIM for the degree.		ENV BIOL 3008 Conservation and Restoration
	Level III		ENV BIOL 3009 Ecophysiology of Plants III
5.6.5	Science		ENV BIOL 3010 Marine Ecology III
	Agronomy		ENV BIOL 3012WT Integrated Catchment Management III
	semester 2		Geology and Geophysics
	AGRONOMY 3000RW Agroforestry	3	semester 1
	Anatomical Sciences		GEOLOGY 3013 Tectonics III
	semester 1		GEOLOGY 3016 Igneous & Metamorphic Geology III
	ANAT SC 3102 Comparative Reproductive Biology of Mammals	3	GEOLOGY 3017 Petroleum Exploration III
	ANAT SC 3103 Integrative and Comparative	5	GEOLOGY 3018 Mineral Exploration III
	Neuroanatomy	3	semester 2
	semester 2		GEOLOGY 3008 Theoretical Geophysics III
	ANAT SC 3101 Biological Anthropology	3	GEOLOGY 3010 Remote Sensing (S)
	ANAT SC 3104 Structural Cell Biology	3	GEOLOGY 3014 Environmental Geoscience Applications III
	Chemistry semester 1		GEOLOGY 3015 Environmental Geoscience
	CHEM 3111 Chemistry III	3	Processes III GEOLOGY 3019 Field Geoscience Program III
	CHEM 3112 Chemistry Applications III	3	Ŭ
	semester 2		Molecular Biosciences
	CHEM 3211 Heterocyclic Chemistry and Molecular		semester 1 BIOCHEM 3000 Molecular and Structural Biology III
	Devices III	3	GENETICS 3111 Genes, Genomes
	CHEM 3212 Materials Chemistry III	3	and Molecular Evolution
	CHEM 3213 Advanced Synthetic Methods III	3	MICRO 3000 Infection and Immunity A
	CHEM 3214 Medicinal and Biological Chemistry III	3	semester 2
	Clinical and Experimental Pharmacology		BIOCHEM 3001 Cell and Developmental Biology III
	semester 1	6	GENETICS 3211 Gene Expression and Human
	PHARM 3010 Pharmacology A III	6	and Developmental Genetics
	semester 2 PHARM 3011 Pharmacology B III	6	MICRO 3001 Infection and Immunity B
	PHARM 3011 Pharmacology B III	U	
		I	

Physics	
semester 1	
PHYSICS 3000 Computational Physics III	2
PHYSICS 3001 Electromagnetism & Optics III	3
PHYSICS 3004 Quantum Mechanics IIIA	3
PHYSICS 3009 Statistical Mechanics III	2
PHYSICS 3013 Astrophysics III	2
PHYSICS 3018 Electromagnetism III	2
PHYSICS 3019 Physical Optics III	2
semester 2	
PHYSICS 3002 Experimental Physics III	3
PHYSICS 3006 Advanced Dynamics and Relativity	3
PHYSICS 3014 Atmospheric and Environmental Physics III	2
PHYSICS 3020 Photonics III	2
PHYSICS 3022 Quantum Mechanics IIIB	2
Physiology	
semester 1	
PHYSIOL 3001 Neurobiology III	6
semester 2	
PHYSIOL 3000 Advanced Systems Physiology	6
Plant and Pest Science	
Plant and Pest Science semester 2	
	3
semester 2	3 6
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants	-
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology	6
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology	6
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research	6
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III	6
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III	6 3
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III	6 3 4 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III	6 3 4 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III	6 3 4 2 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III	6 3 4 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III PSYCHOL 3019 Perception III semester 2	6 3 4 2 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III PSYCHOL 3019 Perception III semester 2 PSYCHOL 3003 Developmental Psychology III	6 3 4 2 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III PSYCHOL 3019 Perception III semester 2 PSYCHOL 3003 Developmental Psychology III PSYCHOL 3006 Psychology, Physiology	6 3 4 2 2 2 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III PSYCHOL 3019 Perception III semester 2 PSYCHOL 3003 Developmental Psychology III PSYCHOL 3006 Psychology, Physiology & Behaviour III	6 3 4 2 2 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III PSYCHOL 3019 Perception III semester 2 PSYCHOL 3003 Developmental Psychology III PSYCHOL 3006 Psychology, Physiology	6 3 4 2 2 2 2 2 2
semester 2 PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3231WT Insect Ecology Psychology semester 1 PSYCHOL 3000 Psychological Research Methodology III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3013 Learning and Behaviour III PSYCHOL 3014 Individual Differences III PSYCHOL 3016 Language Processes III PSYCHOL 3017 Health Psychology III PSYCHOL 3019 Perception III semester 2 PSYCHOL 3003 Developmental Psychology III PSYCHOL 3006 Psychology, Physiology & Behaviour III PSYCHOL 3009 Metapsychology: Psychology,	6 3 4 2 2 2 2 2 2 2 2 2

	PSYCHOL 3015 Human Relations III	2
	PSYCHOL 3018 Cognition III	2
	Soil and Land Systems	
	summer semester	
	SOIL&WAT 3004WT Environmental Toxicology and Remediation	3
	SOIL&WAT 3007WT GIS	J
	for Environmental Management	3
	SOIL&WAT 3008WT Remote Sensing for Environmenta	al
	and Agricultural Sciences	3
	semester 1	
	SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling	3
	SOIL&WAT 3022WT Soil Management & Conservation	3
	semester 2	
	SOIL&WAT 3012WT Soil Water Management	3
	SOIL&WAT 3014WT GIS for Agricultural Sciences	3
5.6.6	Mathematical and Computer Sciences	
	All Level III Mathematical and Computer Sciences	
	courses listed under the Academic Program Rule 4.2.3.1 of the degree of Bachelor of Mathematical and	4
	Computer Sciences.	
5.7	The Honours degree	
5.7.1	To be eligible to be admitted to the Honours degree	
	program, a candidate shall complete the requirements	
	for the degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission	
	to the Honours degree.	
5.7.2	A candidate may, subject to the approval by the Head	
	of the School concerned, proceed to the Honours	
	degree in one of the following courses	
	ANIML SC 4004RW Honours Animal Science	
	BIOCHEM 4000 Honours Biochemistry	
	CHEM 4000 Honours Chemistry	
	ENV BIOL 4000 Honours Environmental Biology	
	ENV BIOL 4002 Honours Botany and Geology	
	ENV BIOL 4003 Honours Rangeland Science and Management S	
	GENETICS 4000 Honours Genetics	
	GEOLOGY 4000 Honours Geology	
	GEOLOGY 4001 Honours Geophysics	
	GEOLOGY 4002 Honours Geology and Botany	
	HORTICUL 4003WT Honours Wine & Horticulture	
	MICRO 4000 Honours Microbiology and Immunology	
	PETROL 4000TB Honours Petroleum Geology	
	and Geophysics	

PHYSICS 4000 Honours Physics PHYSICS 4001 Honours Mathematical Physics PHYSIOL 4000 Honours Physiology PLANT SC 4012WT Honours Plant and Pest Science SOIL&WAT 4001WT Honours Soil and Land Systems VITICULT 4005WT Honours Wine & Horticulture.

- 5.7.3 A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a course taught in another Faculty. Such candidates must consult the Head of the School concerned and apply, in writing, to the Faculty, before 30 November in the preceding year for admission to the Honours program.
- 5.7.4 The work of the Honours program must be completed in one year of full-time study, except where, on the recommendation of the Head/s of the School/s concerned, the Faculty may permit a candidate to complete the work for the Honours degree over two consecutive years, but no more, under such conditions as it may determine.
- 5.7.5. A candidate who satisfies the requirements for Honours shall be awarded the Honours degree, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 5.8 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 6 Special circumstances

# Bachelor of Science (Agricultural Science)

# Academic Program Rules

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Agricultural Science)

### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed in 2.3 below, to the value of 72 units, which satisfy the following requirements:
  - (a) a candidate shall present passes in courses to the value of 24 units at each of level I, II and III.
  - (b) a candidate shall complete a major in a discipline as set out in 2.3 below.

#### 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses which shall include:	
semester 1	
AGRIC 1000RW Perspectives on Modern Agriculture	3
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B	3
CHEM 1101 Foundations of Chemistry IA	3
or	
CHEM 1100 Chemistry IA	3

	semester 2	
<ul> <li>BIOLOGY 1202 Biology I: Organisms</li> <li>CHEM 1201 Foundations of Chemistry IB</li> <li>or</li> <li>CHEM 1200 Chemistry IB</li> <li>GEOLOGY 1200 Earth's Environment</li> <li>STATS 1004 Statistical Practice 1 (Life Scient together with an additional Level I course to of 3 units chosen from:</li> <li>AGRIBUS 1009RW Rural Business Planning A</li> <li>FOOD SC 1000RG Introduction to Food Techn</li> <li>FOOD SC 1001 Consumers Food and Health</li> <li>MATHS 1013 Mathematics 1MA</li> <li>PHYSICS 1008 Physics Principles and Applications I</li> <li>PHYSICS 1101 Physics for Life and Earth Scie</li> <li>WINEMKTG 1026EX Microeconomic Principles</li> <li>or from level 1 courses offered in the Faculty</li> <li>Sciences, or in other departments and school</li> <li>University.</li> <li>* Statistical Practice I offered in Semester 1 can I substituted if required.</li> </ul> 2.3.2 Level II Passes in Level II courses which shall include semester 1 BIOCHEM 2106WT Biochemistry II (Agricultu ENV BIOL 2006 Botany II SOIL&WAT 2012WT Soil and Water Resource semester 2 ANIML SC 2029WT Genes and Inheritance	BIOLOGY 1202 Biology I: Organisms	3
	CHEM 1201 Foundations of Chemistry IB	3
	Or	
	CHEM 1200 Chemistry IB	3
	GEOLOGY 1200 Earth's Environment	3
	STATS 1004 Statistical Practice 1 (Life Sciences)*	3
	together with an additional Level I course to the value of 3 units chosen from:	
	AGRIBUS 1009RW Rural Business Planning A	3
	FOOD SC 1000RG Introduction to Food Technology	3
	FOOD SC 1001 Consumers Food and Health	3
	MATHS 1013 Mathematics 1MA	3
	PHYSICS 1008 Physics Principles	
	and Applications I	3
	PHYSICS 1101 Physics for Life and Earth Sciences IA	3
	WINEMKTG 1013WT/EX Wine and Food Marketing Principles	3
	WINEMKTG 1026EX Microeconomic Principles	3
	or from level 1 courses offered in the Faculty of Sciences, or in other departments and schools in the University.	
	* Statistical Practice I offered in Semester 1 can be substituted if required.	
2.3.2	Level II	
	Passes in Level II courses which shall include:	
	semester 1	
	BIOCHEM 2106WT Biochemistry II (Agriculture) A	4
	ENV BIOL 2006 Botany II	4
	SOIL&WAT 2012WT Soil and Water Resources	4
	semester 2	
	ANIML SC 2029WT Genes and Inheritance	4
	ANIML SC 2030RW Livestock Production Science	4
	PLANT SC 2003RW Microbiology	
		4

2.3.3		rel III ses in Level III courses selected as follows:	
	Grou (a)	1	3 3
	Grou (b)	up 2 passes in Level III courses to the value of 9 units one of the following areas:	in
		Crop and Pasture Science AGRONOMY 2013RW Production Agronomy AGRONOMY 3012RW Advanced Agronomy AGRONOMY 3016RW Crop & Pasture Ecology PLANT SC 3004WT Mineral Nutrition of Plants PLANT SC 3009WT Plant Molecular Biology PLANT SC 3200WT Plant Breeding	3 3 3 3 6 3
		Horticulture Science HORTICUL 3000WT Production Horticulture HORTICUL 3001WT Horticulture Systems	3 3
		HORTICUL 3004WT Olive Production and Marketing (a)	3
		Land Management and Soil Conservation AGRONOMY 3026RW Ecology and Management of Rangelands GEOLOGY 3010 Remote Sensing (S)	3 3
		SOIL&WAT 3002WT Soil Management & Conservation	3
		SOIL&WAT 3012WT Soil Water Management SOIL&WAT 3014WT GIS for Agricultural Science (c)	3 3
		SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling	3
		Livestock Science ANIML SC 3015RW Animal Nutrition and Metabolism	3
		ANIML SC 3016RW Animal Health ANIML SC 3017RW Comparative Animal Physiology	3 3
		ANIML SC 3018RW Pig Production – Science into Management (b) ANIML SC 3043RW Biotechnology in the	3
		ANIML SC 3043HW Biotechnology in the Animal Industries (b) ANIML SC 3045RW Animal Breeding	3
		and Genetics	3

	Pest Science	
	ANIML SC 3019RW Ecology and Management of Vertebrate Pests	3
	PLANT SC 3030AEX/BEX Integrated Weed	-
	Management	3
	PLANT SC 3130WT Plant Pathology	3
	PLANT SC 3131WT Integrated Pest Management	3
	PLANT SC 3231WT Insect Ecology	3
Grou	3 קו	
(c)	passes in a further Level II courses to the value or 9 units chosen from the other discipline majors or from other courses offered by the Faculty of Sciences, with the approval of the BSc (Ag.Sc.) program coordinator, or from the following recommended courses:	
	AGRIBUS 3010WT International Agribusiness Environment	3
	AGRIBUS 3012RW Rural Business Management	3
	AGRIBUS 3017WT Business Management	
	for Applied Science	3
	AGRONOMY 3005WT Irrigation Science	3
	VITICULT 3020WT Table and Drying Grape	
	Production	3
	(a) July (b) Summer (c) Sept.	
The	e Honours degree	
Refe	r to Academic Program Rule 5.7 of the degree of	

## 2.4

Bachelor of Science.

#### 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 3 Special circumstances

# Bachelor of Science (Animal Science)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Animal Science)

### 2 Qualification requirements

# 2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a

substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed in 2.3 below, to the value of 72 units, which satisfy the following requirement:
  - (a) a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III.

# 2.3 Academic program

## 2.3.1 Level I

Passes in Level I courses which shall include: semester 1

AGRIC 1000RW Perspectives on Modern Agriculture	3
BIOLOGY 1101 Biology I:	
Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes and Cells B	3
CHEM 1100 Chemistry IA	3
or	
CHEM 1101 Foundations of Chemistry IA	3
PHYSICS 1101 Physics for the Life and Earth	
Sciences IA	3
Or	
PHYSICS 1008 Physics Principles and Applications	3

### or

2.3

2.3

	ENV BIOL 1002 Ecological Issues	3
	semester 2	
	ANIML SC 1014RW Fauna Management I	3
	BIOLOGY 1202 Biology I : Organisms	3
	CHEM 1200 Chemistry IB	3
	Or	
	CHEM 1201 Foundations of Chemistry IB	3
	PHYSICS 1201 Physics for the Life and Earth Sciences IB	3
	Or	
	STATS 1004 Statistical Practice 1 (Life Sciences)	3
.2	Level II	
	Passes in Level II courses which shall include:	
	semester 1	
	ANIML SC 2031RW Companion Animal	
	& Equine Studies	4
	BIOCHEM 2106WT Biochemistry II (Agriculture) A	4
	ENV BIOL 2001 Evolutionary Biology EBII	4
	semester 2	
	ANIML SC 2029WT Genes and Inheritance	4
	ANIML SC 2030RW Livestock Production Science	4
	PLANT SC 2003RW Microbiology and Invertebrate Biology	4
3	Level III	
	Passes in Level III courses which shall include:	
	semester 1	
	ANIML SC 3017RW Comparative Animal Physiology	3
	ANIML SC 3045RW Animal Breeding & Genetics	3
	ANIML SC 3100RW Laboratory Animal Experience	3
	semester 2	
	ANIML SC 3015RW Animal Nutrition & Metabolism	3
	ANIML SC 3016RW Animal Health	3
	ANIML SC 3230RW Animal Behaviour, Welfare & Ethics	2
		3
	and electives to the value of 6 units chosen from:	
	AGRIBUS 3017WT Business Management for Applied Science	3
	· · · · · · · · · · · · · · · · · · ·	

AGRONOMY 3020RW Principles and Practice of Communications	3
AGRONOMY 3026RW Ecology and Management of Rangelands (b)	3
ANIML SC 3018RW Pig Production - Science into Management (a)	3
ANIML SC 3019RW Ecology and Management of Vertebrate Pests (a)	3
ANIML SC 3043RW Biotechnology in the Animal Industries (a)	3
BIOMET 3000WT Agricultural Experimentation	3
ENV BIOL 3008 Conservation and Restoration	3
(a) Summer (b) July.	

## 2.4 The Honours program

Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.

## 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 3 Special circumstances

# Bachelor of Science (Biomedical Science)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

General 1

> There shall be a degree of Bachelor of Science (Biomedical Science)

#### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an

award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed in 2.3 below, to the value of 72 units, which satisfy the following requirements:
  - (a) a candidate shall present passes in level 1 courses to the value of not more than 24 units
  - (b) a candidate shall present passes in level 2 courses to the value of not less than 20 units
  - (c) a candidate shall present passes in level 3 courses to the value of not less than 24 units

#### 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses which shall include:

Either		
	Riology	Ŀ

Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B	3
and	
BIOLOGY 1201 Biology I: Human Perspectives	3
CHEM 1100 Chemistry IA	3

#### and

#### CHEM 1200 Chemistry IB

3

together with additional level I courses to the value of 12 units selected in accordance with Academic Program Rules 5.3 and 5.6 for the degree of Bachelor of Science.

#### 2.3.2 Level II

Passes in Level II courses to the value of not less than 20 units selected as follows:

#### Group 1

Biomedical Science courses to the value of 8 units comprising:

#### either

GENET and	TCS 2106 Genetics IIA (Biomedical Science)	4
GENET	TCS 2206 Genetics IIB (Biomedical Science)	4
or		
MICRO	2101 Microbiology II (Biomedical Science)	4
and		
	) 2201 Immunology and Virology II edical Science)	4
or		
	OL 2101 Human Physiology IIA edical Science)	4
and		
PHYSIOL 2201 Human Physiology IIB (Biomedical Science)		4
Group	2	
.,	evel II courses to the value of not less than 8 nits from the following:	
A	NAT SC 2104 Cells and Tissues II	4
ar	nd	
	NAT SC 2105 Comparative Anatomy f Body Systems II	4
BI	IOCHEM 2100 Biochemistry IIA	4
ar	nd	
BI	IOCHEM 2200 Biochemistry IIB	4
	ENETICS 2100 Genetics IIA: oundations of Genetics	4

		and	
		GENETICS 2200 Genetics IIB:	
		Function and Diversity of Genomes	4
		MICRO 2004 Microbiology II	4
		and MICPO 2005 Immunology and Virology II	4
		MICRO 2005 Immunology and Virology II PHYSIOL 2003 Human Physiology IIA:	4
		Heart, Lungs and Circulation	4
		and	
		PHYSIOL 2004 Human Physiology IIB: Homeostasis and Nervous System	4
	(ii)	additional level II courses selected from those offered for the degree of Bachelor of Science, listed in 5.6.3 and 5.6.4, chosen with the approv of the program coordinator	al
2.3.3	Lev	el III	
		ses in Level III courses to the value of not less tha units selected as follows:	n
	(i)	12 units from the following which shall constitute a major in Biomedical Science:	Э
		MICRO 3102 Infection and Immunity A	
		(Biomedical Science)	6
		and	
		MICRO 3202 Infection and Immunity B (Biomedical Science)	6
		GENETICS 3111 Genes, Genomes and Molecular Evolution	6
		and	
		GENETICS 3212 Gene Expression and Human and Developmental Genetics (Biomedical Sclence)	1 6
		PHYSIOL 3102 Human Physiology IIIA (Biomedical Science)	6
		and	
		PHYSIOL 3202 Human Physiology IIIB (Biomedical Science)	6
	(ii)	Level III courses to the value of not less than 12 units selected from courses listed in Academic Program Rule 5.6.5 of the Bachelor of Science in Anatomical Sciences, Biochemistry, Chemistry, Clinical and Experimental Pharmacology, Genetics Microbiology or Physiology.	
2.4		e Honours program er to Academic Program rule 5.7 for the degree of	

Bachelor of Science.

#### 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 3 Special circumstances

# Bachelor of Science (Biotechnology)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Biotechnology)

#### 2 Qualification requirements

2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

> Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed in 2.3 below, to the value of at least 72 units, which satisfy the following requirements:
  - (a) a candidate shall present passes in Level I courses to the value of not less than 21 units
  - (b) a candidate shall present passes in Level II courses to the value of not less than 22 units
  - (c) a candidate shall present passes in Level III courses to the value of not less than 24 units as follows
- 2.3 Academic program
- 2.3.1 Level I

Passes in Level I courses which shall include:

BIOLOGY 1101 Biology I: Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B	3
and	
BIOLOGY 1201 Biology I: Human Perspectives	3
and/or	
BIOLOGY 1202 Biology I: Organisms	3

BIOTECH 1000 Introduction to Biotechnology	3
CHEM 1100 Chemistry IA	3
and	
CHEM 1200 Chemistry IB	3
CHEM ENG 1004 Introduction to Bio-processing	3

together with additional Level I courses selected in accordance with Specific Academic Program Rules 5.3 and 5.6 for the degree of Bachelor of Science.

#### 2.3.2 Level II

(a)	Passes in the compulsory courses:	
	BIOCHEM 2205 Biochemistry II	
	(Biotechnology) B	4
	BIOTECH 2005 Principles of Biotechnology II	4
	MICRO 2002 Microbiology II (Biotechnology)	4
(b)	Passes in Level II courses to the value of not less than 10 units, selected from:	8
	BIOCHEM 2105 Biochemistry II	
	(Biotechnology) A	4
	MICRO 2203 Immunology and Virology II	
	(Biotechnology)	4
	or in accordance with Academic Program Rule 5.	

for the degree of Bachelor of Science, or selected courses listed for the Bachelor degree of Engineering (Chemical), or courses selected in consultation with and subject to the approval of the program coordinator.

2.3.3 Level III

(a)	Passes in the compulsory courses:	
	BIOCHEM 3000 Molecular	
	and Structural Biology III	6
	BIOTECH 3000 Biotechnology Practice III	6

(b) Passes in additional Level III courses to the value of not less than 12 units selected in accordance with Specific Academic Program Rule 5.6 for the degree of Bachelor of Science, or selected courses listed for the Bachelor degree of Engineering (Chemical), or courses selected in consultation with and subject to the approval of the program coordinator.

# 2.4 The Honours program

Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.

### 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 3 Special circumstances

# Bachelor of Science (Ecochemistry)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Ecochemistry).

### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course

award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units pass, which satisfy the following
  - (a) a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III

#### 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses to the value of 24 units which shall include:

BIOLOGY 1101 Biology I: Molecules, Genes and Cells A	3
	0
Or	
BIOLOGY 1102 Biology I:	
Molecules, Genes and Cells B	3
BIOLOGY 1202 Biology I: Organisms	3
or	
ENV BIOL 1002 Ecological Issues	3
CHEM 1100 Chemistry IA	3
or	
CHEM 1101 Foundations of Chemistry IA	3
CHEM 1200 Chemistry IB	3
or	

CHEM 1201 Foundations of Chemistry IB	3
GEOLOGY 1100 Earth's Interior I	3
GEOLOGY 1103 Earth Systems	3

together with additional Level I courses to the value of 6 units selected in accordance with Academic Program Rules 5.3, 5.6.1 and 5.6.2 for the degree of Bachelor of Science but not including BIOLOGY 1201 Biology I: Human Perspectives.

Note: Students may be permitted to enrol in both BIOLOGY 1202 Biology I: Organism and ENV BIOL 1002 Ecological Issues, but only with prior approval from the Program Coordinator.

#### 2.3.2 Level II

Passes in Level II courses which include:

	(i)	passes in core courses	
		semester 1	
		CHEM 2003 Environmental Chemistry II	4
		CHEM 2105 Chemistry IIA (Ecochemistry)	4
		semester 2	
		CHEM 2205 Chemistry IIB (Ecochemistry)	4
		CHEM 2208 Analytical Chemistry II (Ecochemistry)	4
	(ii)	passes in Level II courses to the value of 8 units from the list below	
		ENV BIOL 2001 Evolutionary Biology EBII	4
		ENV BIOL 2003 Ecology EBII	4
		GEOLOGY 2007 Sedimentary	
		& Structural Geology II	4
		GEOLOGY 2008 Landscape Processes	
		and Environments II	4
		SOIL&WAT 2012WT Soil & Water Resources	4
		or selected in accordance with Academic Program Rule 5.6.3 for the degree of Bachelor of Science, consultation with and subject to the approval of the program coordinator.	
2.3.3 l	eve	el III	
	Pass	es in Level III courses which shall include:	
	(1)		

(i) passes in core courses
 CHEM 3111 Chemistry III
 CHEM 3112 Chemical Applications III
 6

	CHEM 3211 Heterocyclic Chemistry & Molecular Devices III	3
	CHEM 3212 Materials Chemistry III	3
(ii)	passes in Level III courses to the value of 6 units taken from the list below:	
	ENV BIOL 3008 Conservation and Restoration	3
	ENV BIOL 3010 Marine Ecology III	3
	ENV BIOL 3012WT Integrated Catchment	
	Management III	3
	GEOLOGY 3014 Environmental Geoscience Applications III	3
	GEOLOGY 3015 Environmental Geoscience Processes III	3
	SOIL&WAT 3004WT Environmental Toxicology and Remediation	3
	SOIL&WAT 3012WT Soil Water Management	3

or selected in accordance with Academic Program Rule 5.6.5 for the degree of Bachelor of Science, in consultation with and subject to the approval of the program coordinator.

A candidate shall complete a major in chemistry, comprising passes (not conceded passes) in any course to the value of 9 units selected from Level III courses taught by Chemistry, as defined in Academic Program Rule 5.4 of the degree of Bachelor of Science.

#### 2.4 The Honours program

Refer to Academic Program Rule 5.7 for the degree of Bachelor of Science.

#### 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 3 Special circumstances

# Bachelor of Science (Evolutionary Biology)

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# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

General 1

> There shall be a degree of Bachelor of Science (Evolutionary Biology).

#### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units pass, which satisfy the following:
  - (a) a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
  - (b) a candidate shall complete a major by completing prescribed courses at Level II and III as set out in 2.3.2 and 2.3.3 below.

#### 2.3 Academic program

2.3.1 Level 1 Passes in Level 1 courses to the value of 24 units which shall include: semester 1 BIOLOGY 1101 Biology I: Molecules, Genes & Cells A or BIOLOGY 1102 Biology I: Molecules, Genes & Cells B GEOLOGY 1103 Earth Systems together with an additional 6 units of Level I courses chosen from the following electives: CHEM 1100 Chemistry IA or

330	Sciences — B.Sc. (Evol.Biol.

	CHEM 1101 Foundations of Chemistry IA	3
	ENV BIOL Ecological Issues	3
	MATHS 1011 Mathematics IA*	3
	MATHS 1013 Mathematics IMA	3
	PHYSICS 1101 Physics for the Life	
	& Earth Sciences IA	3
	STATS 1000 Statistical Practice I*	3
	Or .	
	other courses offered by the Faculty of Sciences. A maximum of 3 units may be taken from courses offere by the Faculty of Humanities and Social Sciences, the Faculty of Engineering, Computer and Mathematical Sciences and the School of Architecture, Landscape Architecture and Urban Design.	:d
	semester 2	
	BIOLOGY 1202 Biology I:Organisms	3
	GEOLOGY 1100 Earth's Interior	3
	together with an additional 6 units of Level I courses chosen from the following electives:	
	CHEM 1200 Chemistry IB	3
	Or	
	CHEM 1201 Foundations of Chemistry IB	3
	MATHS 1011 Mathematics IA	3
	MATHS 1012 Mathematics IB*	3
	PHYSICS 1201 Physics for the Life	2
	& Earth Sciences IB	3
	STATS 1004 Statistical Practice I (Life Sciences)	3
	or other courses offered by the Faculty of Sciences. A maximum of 3 units may be taken from courses offere by the Faculty of Humanities and Social Sciences, the Faculty of Engineering, Computer and Mathematical Sciences and the School of Architecture, Landscape Architecture and Urban Design.	۰d
	* may be taken in either semester 1 or 2	
2.3.2	Level II	
	Passes in Level 2 courses as follows.	
	for a major in Palaeontology, 12 units from:	
	ENV BIOL 2000 Zoology EB II	4
	Or	

ENV BIOL 2002 Botany II	4
ENV BIOL 2001 Evolutionary Biology EBII	4
GEOLOGY 2007 Sedimentary and Structural Geology II	4
with electives to the value of 12 units chosen from:	
CHEM 2003 Environmental Chemistry II	4
ENV BIOL 2000 Zoology EBII	4
ENV BIOL 2002 Botany EBII	4
ENV BIOL 2003 Ecology EBII	4
GENETICS 2100 Genetics IIA: Foundations of Genetics*	4
GENETICS 2200 Genetics IIB: Function & Diversity Genomes*	4
GEOLOGY 2008 Landscape Processes and Environments II	4
* Students wishing to enrol in GENETICS 3111 Genes, Genomes & Molecular Evolution as part of the Level III Palaeontology major must enrol in both GENETICS 2100 Genetics IIA: Foundations of Genetics and GENETICS 2200 Genetics IIB: Function & Diversity Genomes.	
For a major in Systematics and Molecular Evolution, 16 units from:	
ENV BIOL 2000 Zoology EBII	4
or	
ENV BIOL 2002 Botany II	4
ENV BIOL 2001 Evolutionary Biology EBII	4
GENETICS 2100 Genetics IIA:	
Foundations of Genetics	4
GENETICS 2200 Genetics IIB: Function & Diversity Genomes	4
with electives to the value of 8 units chosen from:	4
CHEM 2003 Environmental Chemistry II	4
ENV BIOL 2000 Zoology EBII	4
ENV BIOL 2002 Botany II	4
ENV BIOL 2003 Ecology EBII GEOLOGY 2007 Sedimentary	4
and Structural Geology II	4
GEOLOGY 2008 Landscape Processes	
and Environments II	4
* Students wishing to enrol in GENETICS 3111 Genes,	

\* Students wishing to enrol in GENETICS 3111 Genes, Genomes & Molecular Evolution as part of the Level III Systematics and Molecular Evolution major must enrol in both GENETICS 2100 Genetics IIA: Foundations of Genetics and GENETICS 2200 Genetics IIB: Function & Diversity Genomes.

#### 2.3.3 Level III

3	Level III	
	Passes in Level 3 courses as follows:	
	for a major in Palaeontology:	
	semester 1	
	ENV BIOL 3122 Evolution and Palaeobiology	3
	semester 2	
	ENV BIOL 3002 Australian Biota: Past, Present & Future	3
	ENV BIOL 3123 Issues in Evolutionary Biology	3
	GEOLOGY 3014 Environmental Geoscience Applications III	3
	with electives to the value of 12 units taken from courses listed in Program Rule 2.3.3 for this degree, of courses listed under Academic Program Rule 5.6.5 for the degree of Bachelor of Science. Recommended offerings include:	
	ENV BIOL 3006 Research Methods in Environmental Biology	3
	ENV BIOL 3011 Evolution and Diversity	Ŭ
	of Insects	3
	ENV BIOL 3121 Concepts in Ecology	3
	GENETICS 3111 Genes, Genomes	Ũ
	& Molecular Evolution	6
	GEOLOGY 3010 Remote Sensing (S)	3
	GEOLOGY 3013 Tectonics III	3
	GEOLOGY 3015 Environmental Geoscience Processes III	3
	For a major in Systematics and Molecular Evolution:	
	semester 1	
	ENV BIOL 3122 Evolution and Palaeobiology	3
	GENETICS 3111 Genes, Genomes and	
	Molecular Evolution	6
	semester 2	
	ENV BIOL 3002 Australian Biota:	
	Past, Present & Future	3
	ENV BIOL 3123 Issues in Evolutionary Biology	3
	with electives to the value of 9 units taken from courses listed under Academic Program Rule 5.6.5 for the degree of Bachelor of Science. Recommended electives include:	
	semester 1	
	ENV BIOL 3006 Research Methods in Environmental Biology	3
	ENV BIOL 3011WT Evolution and Diversity	
	of Insects	3

	ENV BIOL 3121 Concepts in Ecology	3
	GEOLOGY 3013 Tectonics III	3
	semester 2	
	ENV BIOL 3003 Ecophysiology of Animals	3
	ENV BIOL 3008 Conservation and Restoration	3
	ENV BIOL 3009 Ecophysiology of Plants	3
	ENV BIOL 3010 Marine Ecology	3
	GENETICS 3121 Gene Expression & Human Developmental Genetics	6
	GEOLOGY 3014 Environmental Geoscience Applications	3
2.4	The Honours Program	
	Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.	
~		

# 3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 4 Special Circumstances

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# Bachelor of Science (High Performance and Computational Physics)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 3 and 4 of the Bachelor of Science

### 1 General

There shall be a degree of Bachelor of Science (High Performance Computational Physics) (Honours).

### 2 Duration of program

The program of study for the degree shall extend over four years of full-time study or the part-time equivalent.

# 3 Qualification requirements

3.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 3.2 To qualify for the degree a candidate shall pass courses, listed in 2.3 below, to the value of 96 units, which satisfy the following requirements:
  - (a) a candidate shall present passes in Level I courses to the value of not more than 24 units
  - (b) a candidate shall present passes in Level II courses to the value of not less than 24 units
  - (c) a candidate shall present passes in Level III courses to the value of not less than 24 units
  - (d) a candidate shall present passes in Level IV courses to the value of not less than 24 units.

In all cases, a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II.

### 3.3 Academic program

3.3.1 Level I

Passes in Level I courses which shall include:	
semester 1	
COMP SCI 1008 Computer Science IA	3
MATHS 1011 Mathematics IA	3
PHYSICS 1100 Physics IA	3
semester 2	
COMP SCI 1009 Computer Science IB	3
MATHS 1012 Mathematics IB	3
PHYSICS 1200 Physics IB	3

together with additional level I courses to the value of 6 units, selected in consultation with the program coordinator and in accordance with the Academic Program Rules 5.3 and 5.6 for the degree of Bachelor of Science. A selection from the following courses is recommended:

APP MTH 1000 Scientific Computing I	3
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
ELEC ENG 1006 Electrical Engineering I	3

## 3.3.2 Level II

Passes in Level II courses to the value of not less than 24 units which shall include :

2

semester 1
APP MATH 2000 Differential Equations
and Fourier Series
APP MATH 2002 Vector Analysis

APP MATH 2002 Vector Analysis	
and Complex Analysis	2
PHYSICS 2001 Classical Mechanics II	2
PHYSICS 2100 Physics IIA	4
semester 2	
PHYSICS 2002 Classical Fields	
and Mathematical Methods II	2
PHYSICS 2200 Physics IIB	4

	and at least one of			
	APP MTH 2003 Modelling			
	with	Differential Equations II	2	
	CON	IP SCI 2003 Numerical Methods	3	
	0	other with additional level II courses, selected in sultation with the program coordinator from:		
	CON	/IP SCI 2000 Computer Systems	3	
	COMP SCI 2005 Systems Programming in C and C+ $+$		3	
	PURE MATH 2002 Algebra II		2	
	PUR	E MATH 2005 Multivariable Calculus II	2	
		other Level II courses in Computer Science, Appli Pure Mathematics, and Physics.	ed	
3.3.3	Lev	rel III		
	(i)	Passes (not conceded passes) in Level III course	S:	
		PHYSICS 3000 Computational Physics III	2	
		PHYSICS 3004 Quantum Mechanics IIIA	3	
		PHYSICS 3006 Advanced Dynamics & Relativity	3	
		PHYSICS 3022 Quantum Mechanics IIIB	2	
	(ii)	Pass in:		
		PHYSICS 3009 Statistical Mechanics III	2	
	(iii)	Additional level III courses to the value of at least 12 units selected in consultation with the program coordinator from:		
		APP MTH 3000 Computational Mathematics	3	
		PHYSICS 3001 Electromagnetism & Optics III	3	
		other level III courses in Computer Science, sics, and Applied and Pure Mathematics.		
3.3.4	3.4 Level IV			
		acceptable standard, in accordance with the demic Program Rule 5.7 for the Bachelor of Scien lonours degrees, in	се	
	PHY	SICS 4000 A/B Honours Physics	24	
	0ľ			
	PHY	SICS 4001 A/B Honours Mathematical Physics	24	
		luding some lecture content from COMP SCI 4999 Honours Computer Science)	9	
3.4	Gra	aduation		
have satisfied the requirements for any awar University shall be admitted to that award at		ect to Chapter 89 of the Statutes, candidates wh e satisfied the requirements for any award of the rersity shall be admitted to that award at a luation ceremony for the purpose.	10	
	2			

# 4 Special circumstances

# Bachelor of Science (Jurisprudence)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Jurisprudence)

#### 2 Qualification requirements

2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.2 To qualify for the degree a candidate shall pass courses to the value of 72 units pass, which satisfy the requirements of 2.3 and 2.4 below.

#### 2.3 Academic program

A candidate shall pass courses to the value of at least 52 units from those listed in 5.6 under the Bachelor of Science which shall include:

- (a) Level I courses to the value of not more than 24 units
- (b) Level III courses to the value of not less than 12 units
- (c) A major in a Science discipline as set out in 5.4
- 2.4 (a) A candidate shall present the Law course LAW 1001 Introduction to Australian Law
  - (b) A candidate shall present the Law course LAW 1003 Law of Contract
  - (c) A candidate shall present Law courses to the value of at least 12 units chosen from the following: LAW 1002 Law of Torts, LAW 1004 Law of Crime, LAW 1005 Property Law, and a 4 unit Law Elective
- 2.5 Credit towards the degree of Bachelor of Science (Jurisprudence) on account of previous studies in Law will be determined by the Faculty of Sciences in accordance with Faculty policy, subject to the

requirements of these Academic Program Rules and to the following provisions:

- (a) Law courses presented for 2.4(a) will count as 4 units at Level II
- (b) Law courses presented for 2.4(b) will count as 4 units at Level II
- (c) Law courses presented for 2.4(c) will count as 12 units at Level III.
- 2.6 Persons who have completed other qualifications, and graduates in other Faculties who wish to proceed to the degree of Bachelor of Science (Jurisprudence) and to count towards that degree appropriate courses which they have already presented for another qualification may do so subject to the following conditions:

They shall present a range of courses which fulfils the requirements of 2.3 above and which have not been presented for any other degree and which, in the opinion of the Faculty, do not contain a substantial amount of the same material as courses which have been presented for any degree.

2.7 There may be a classification of 'Conceded Pass' but a candidate may only present courses for which this result has been obtained up to a value of 4 units.

### Notes (not forming part of the Academic Program Rules) B.Sc.(Jur.)

- The B.Sc. (Jurisprudence) is designed to serve two purposes:
  - (a) it allows students to incorporate in a Science degree a range of law studies including courses at third year level
  - (b) it is the route for students to take if they wish to obtain Science and Law degrees in a minimum time of five and a half years.
- 2 Students remain enrolled for the B.Sc. degree while taking Law courses. Students must complete all the requirements for the B.Sc.(Jur.) before they can obtain their LL.B. degree.
- 4 For students wishing to take the Degree of Bachelor of Science (Jurisprudence), the change of enrolment from Bachelor of Science to Bachelor of Science (Jurisprudence) normally takes place in the year following completion of the course LAW1001 Introduction to Australian Law. The transfer of enrolment must be approved by a Program Adviser for the Faculty of Sciences and by a Program Adviser for the School of Law.

#### 5 Pattern of Study

1

Full-time students will normally take their courses according to the following scheme, which involves some overload in first year and possibly in third year:

#### First year

Level I courses to the value of 21 units, from those listed in Bachelor of Science Academic Program Rule 5.6.1 and 5.6.2 plus LAW 1001 Introduction to Australian Law.

#### Second year

Level II courses to the value of 16 units from those listed in Bachelor of Science Academic Program Rule 5.6.3 and 5.6.6 plus LAW 1002 Law of Torts and LAW1003 Law of Contract.

#### Third year

Level I courses to the value of 3 units from those listed in Bachelor of Science Academic Program Rule 5.6 plus Level III courses to the value of 12 units from those listed in Academic Program Rule 5.6 including a major in a Science discipline plus Law courses to the value of 8 units from those listed in 2.4 above with the advice of the Law Program Adviser.

#### 6 Advice from the School of Law

Before enrolment in the Law courses in the third year of the above scheme, students should consult the Law Program Adviser. This is particularly important for students who wish to proceed to the LL.B. degree. Although Law courses in the third year as above to the value of 12 units are sufficient for the purposes of the degree of B.Sc. (Jurisprudence), completion of the LL.B. degree in minimum time involves some additional overload in the third year.

#### 7 Credit on account of previous studies in the University of Adelaide (Policy of the Faculty of Sciences)

- (a) Candidates who hold an LL.B. degree and hold no other degree will be given status for 2.4(a) and 2.4(b).
- (b) Candidates who hold an LL.B. degree and also a degree in a Faculty other than Law will be given status for 2.4(a) and 2.4(b) and may, in addition, be granted credit for the purposes of 2.4 on account of appropriate studies for a non-Law degree. Such candidates will be required as a minimum to complete Level III courses from Bachelor of Science Academic Program Rule 5.6 to the value of 12 units including a major in a Science discipline.
- (c) Candidates may also be granted credit towards the degree of B.Sc. (Jurisprudence) on account of studies not presented for a degree.

#### 8 Credit on account of studies in other Institutions (Policy of the Faculty of Sciences)

With special permission of the Faculty, candidates may be permitted to take equivalent courses at another institution for credit to the Adelaide degree of B.Sc. (Jurisprudence). Candidates may also be granted credit towards the Adelaide degree on account of work already completed at another institution but not presented for another degree or award. The minimum requirements for such candidates is that all Level III courses required by 2.3 and 2.4 (that is, Level III Science courses to the value of 12 units, and the Law courses indicated in 2.4(b) to the value of 12 units) should have been completed after candidates have gained admission to the program for the Bachelor of Science and to the program for the Bachelor of Law at the University of Adelaide. Approval of credit as above for the purposes of the degree of B.Sc. (Jurisprudence) does not imply acceptability

for the later purposes of the LL.B. degree, and candidates wishing to proceed to the LL.B. degree should therefore consult the Law Program Adviser.

#### 2.8 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 3 Special circumstances

# Bachelor of Science (Marine Biology)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Marine Biology).

#### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units, which satisfy the following:

A candidate shall present passes in courses to the value of 24 units at each of Level I, II and III.

### 2.3 Academic program

#### 2.3.1 Level 1

Passes in Level 1 courses to the value of 24 units which shall include:

semester 1 BIOLOGY 1101 Biology I: Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes and Cells B	3
GEOLOGY 1103 Earth Systems	3
together with an additional 6 units of Level I courses chosen from the following electives:	
CHEM 1100 Chemistry IA	3
or	
CHEM 1101 Foundations of Chemistry IA	3

# or

ENV BIOL 1002 Ecological Issues

3

or other courses offered by the Faculty of Sciences. A maximum of 3 units may be taken from courses offered by the Faculty of Humanities and Social Sciences, The Faculty of Engineering, Computer and Mathematical Sciences, and the School of Architecture, Landscape Architecture and Urban Design.

#### semester 2

BIOLOGY 1202 Biology 1:Organisms	3
STATS 1004 Statistical Practice 1 (Life Sciences)	3
together with an additional 6 units of Level I courses chosen from the following electives:	
CHEM 1200 Chemistry IB	3

#### or

CHEM 1201 Foundations of Chemistry IB 3

or other courses offered by the Faculty of Sciences. A maximum of 3 units may be taken from courses offered by the Faculty of Humanities and Social Sciences, The Faculty of Engineering, Computer and Mathematical Sciences, and the School of Architecture, Landscape Architecture and Urban Design.

#### 2.3.2 Level II

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Passes in Level 2 courses to the value of 24 units as follows:

semester 1		
ENV BIOL 2001 Evolutionary Biology EBII	4	
ENV BIOL 2002 Botany II	4	
semester 2		
ENV BIOL 2000 Zoology EBII	4	
ENV BIOL 2003 Ecology EBII	4	
together with an additional 8 units of Level II courses chosen from the following electives:		
GEST 2001 Managing Coastal Environments*	3	
Or		
courses listed under Academic Program Rules 5.6.3 ar 5.6.4 for the degree of Bachelor of Science.	٦d	
* Note: This course is only offered in 'even' years. Alternatively		

\* Note: This course is only offered in 'even' years. Alternatively, the course may be taken at Level III (GEST 3001 Managing Coastal Environments,),

2.3.3	Level II	

2.4

2.5

4

Passes in Level III courses to the value of 24 units as follows:	
semester 1 ENV BIOL 3006 Research Methods in	
Environmental Biology	3
ENV BIOL 3121 Concepts in Ecology	3
ENV BIOL 3124 Frontiers in Marine Biology	3
semester 2	-
ENV BIOL 3010 Marine Ecology III	3
ENV BIOL 3221 Research Methods in Marine Biology	3
together with an additional 9 units of Level III courses chosen from the following electives:	
GEST 3001 Managing Coastal Environments	6
SOIL&WAT 3007WT GIS	
for Environmental Management	3
or	
courses listed under Academic Program Rules 5.6.5 an 5.6.6 for the degree of Bachelor of Science.	nd
* Summer semester	
The Honours program	
Students who successfully complete the Bachelor of Science (Marine Biology) at a standard which is acceptable to the Faculty, will be eligible for admissior to the Honours Degree of Bachelor of Science. Refer t Academic Program Rule 5.7 for the degree of Bachelo of Science.	0
Graduation	
Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.	D
Special circumstances	
When in the opinion of the Faculty special circumstances exist, the Council, on the	

circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Science (Molecular and Drug Design)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Molecular and Drug Design)

#### 2 Qualification requirements

2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.2 To qualify for the degree a candidate shall pass courses listed in 2.3 below, to the value of 72 units, which satisfy the following requirement:

A candidate shall present passes in courses to the value of 24 units at each of Level I, II and III.

#### 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses to the value of 24 units, which shall include:

semester 1	
BIOLOGY 1101 Biology I:	
Molecules, Genes & Cells A	3
Or	
BIOLOGY 1102 Biology I:	
Molecules, Genes & Cells B	3
CHEM 1100 Chemistry IA	3
semester 2	
BIOLOGY 1201 Biology I: Human Perspectives	3
CHEM 1200 Chemistry IB	3
STATS 1000 Statistical Practice I*	3
0r	
STATS 1004 Statistical Practice I (Life Sciences)	3
together with additional level I courses to the value of units selected in accordance with the Academic	f 9

Program Rules 5.3, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

\*STATS 1000 Statistical Practice 1 may be taken in either semester 1 or 2

#### 2.3.2 Level II

Passes in Level II courses which shall include:

(i) passes in core courses:

semester 1	
BIOCHEM 2100 Biochemistry IIA	4
CHEM 2106 Chemistry IIA (Mol. Drug Des.)	4
semester 2	

4

4

- BIOCHEM 2200 Biochemistry IIB
- CHEM 2206 Chemistry IIB (Mol. Drug Des.)
- (ii) passes in Level II courses to the value of 8 units selected in accordance with Academic Program Rules 5.6.3 and 5.6.4 for the degree of Bachelor of Science, in consultation with and subject to the approval of the program coordinator.

#### 2.3.3 Level III

Passes in Level III courses which shall include:

(i)	passes in the core courses:		
	semester 1		
	BIOCHEM 3000 Molecular & Structural Biology III	6	
	CHEM 3111 Chemistry III	6	
	semester 2		
	CHEM 3213 Advanced Synthetic Methods III	3	
	CHEM 3214 Medicinal & Biological Chemistry III	3	
(ii)	passes in level III courses to the value of 6 units selected in accordance with Academic Program Rule 5.6.5 for the degree of Bachelor of Science, in consultation with and subject to the approval o the program coordinator.	f	
A candidate shall complete a major in Chemistry,			
	comprising passes (not conceded passes) in any courses to the value of 9 units selected from Level III courses		
	taught by Chemistry as defined in Academic Program		
Rule	Rule 5.4 of the degree of Bachelor of Science.		

2.4 The Honours program Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.

## 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 3 Special circumstances

# Bachelor of Science (Molecular Biology)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Molecular Biology)

#### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree of Bachelor of Science (Molecular Biology) a candidate shall pass courses listed in 2.3 below to the value of at least 72 units which satisfy the following requirements:
  - (a) a candidate shall present passes in Level I courses to the value of not more than 24 units
  - (b) a candidate shall present passes in Level II courses to the value of not less than 20 units
  - (c) a candidate shall present passes in Level III courses to the value of not less than 24 units.

#### 2.3 Academic program

2.3.1 Level I

Passes in Level I courses which shall include:

BIOLOGY 1101 Biology I: Molecules, Genes & Cells A	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes & Cells B	3
BIOLOGY 1201 Biology I: Human Perspectives	3
CHEM 1100 Chemistry IA	3
CHEM 1200 Chemistry IB	3
together with additional level I courses to the value of	

12 units selected in accordance with the Academic

Program Rules 5.3 and 5.6 for the degree of Bachelor of Science.

2.3.2 Level II

Passes in Level II courses to the value of 24 units selected as follows:

#### Group I

(i) pass in the core courses:

BIOCHEM 2102 Advanced Molecular Biology A 2 and BIOCHEM 2202 Advanced Molecular Biology B 2

(ii) passes in additional Level II Molecular Biology courses to the value of 12 units selected from those below:

BIOCHEM 2101 Biochemistry II (Molecular Biology) A	3
and	
BIOCHEM 2201 Biochemistry II	
(Molecular Biology) B	3
CHEM 2101 Chemistry IIA (Mol. Biol.)	3
and	
CHEM 2201 Chemistry IIB (Mol. Biol.)	3
GENETICS 2102 Genetics IIA (Molecular Biology)	3
and	

GENETICS 2202 Genetics IIB (Molecular Biology) 3

#### Group II

- passes in Level II courses to a minimum value of 8 units from those listed in 5.6.3 Sciences courses, or 5.6.4 Mathematical and Computer Sciences courses
- (iv) Group II courses shall be selected in consultation with and subject to the approval of the program coordinator.

#### 2.3.3 Level III

Passes in Level III courses to the value of 24 units which shall include:

#### Group I

BIOCHEM 3125 Advanced Molecular Biology IIIA (Biochemistry) BIOCHEM 3225 Advanced Molecular Biology IIIB (Biochemistry)

6

6

or

GENETICS 3110 Advanced Molecular Biology IIIA (Genetics) GENETICS 3210 Advanced Molecular Biology IIIB

6 6

GENETICS 3210 Advanced Molecular Biolo (Genetics)

### Group II

- passes in courses to the value of not less than 12 units chosen from those listed in 5.6.5 Sciences courses, or level III courses offered by the School of Mathematical and Computer Sciences
- (ii) Group II courses shall be selected in consultation with and subject to the approval of the program coordinator.

## 2.4 The Honours program

Refer to Academic Program rule 5.7 for the degree of Bachelor of Science

# 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 3 Special circumstances

# Bachelor of Science (Nanoscience and Materials)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Nanoscience & Materials).

#### 2 Qualification requirements

2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units pass, which satisfy the following :

A candidate shall present passes in courses to the value of 24 units at each of Level I, II and III.

#### 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses to the value of 24 units which shall include:

semester 1	
CHEM 1100 Chemistry IA	3
PHYSICS 1100 Physics IA *	3
Or	
PHYSICS 1008 Physics Principles & Applications I	3
Or	
PHYSICS 1101 Physics for the Life	
& Earth Sciences IA	3
semester 2	
CHEM 1200 Chemistry IB	3
PHYSICS 1200 Physics IB **	3
Or	
PHYSICS 1201 Physics for the Life	
& Earth Sciences IB	3

together with additional Level I courses selected in accordance with Academic Program Rules in 5.6.1 and 5.6.2 for the degree of Bachelor of Science

- \* requires MATHS 1011 Mathematics IA as a corequisite
- \*\* requires MATHS 1012 Mathematics IB as a corequisite

#### 2.3.2 Level II

Passes in Level II courses which shall include:

(i) passes in core courses: semester 1

(Nanoscience & Materials)	4
semester 2	
CHEM 2210 Chemistry IIB	
(Nanoscience & Materials)	4
CHEM 2209 Analytical Chemistry II	

(Nanoscience & Materials)

4

(ii) passes in Level II courses to the value of 12 units selected in accordance with Academic Program Rules in 5.6.3 and 5.6.4 for the degree of Bachelor of Science, in consultation with and subject to the approval of the program coordinator.

#### 2.3.3 Level III

Passes in Level III courses which shall include

(i) passes in core courses:

CHEM 3111 Chemistry III	6
CHEM 3211 Heterocyclic Chemistry & Molecular	
Devices III	3
CHEM 3212 Materials Chemistry III	3
CHEM 3213 Advanced Synthetic Methods III	3
CHEM 3214 Medicinal	
& Biological Chemistry III	3

(ii) passes in Level III courses to the value of 6 units selected in accordance with Academic Program Rules in 5.6.5 and 5.6.6 for the degree of Bachelor of Science, in consultation with and subject to the approval of the program coordinator.

A candidate shall complete a major in Chemistry, comprising passes (not conceded passes) in any course to the value of 9 units selected from Level III courses taught by Chemistry as defined in Academic Program Rule 5.4 of the degree of Bachelor of Science. 2.4 The Honours program Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.

## 3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

# 4 Special circumstances

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# Bachelor of Science (Natural Resource Management)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

### 1 General

There shall be a degree of Bachelor of Science (Natural Resource Management).

# 2 Qualification requirements

### 2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units pass, which satisfy the following :

A candidate shall present passes in courses to the value of 24 units at each of Level I, II and III.

## 2.3 Academic program

## 2.3.1 Level I

Passes in Level 1 courses to the value of 24 units which shall include:

semester 1	
BIOLOGY 1101 Biology I:	
Molecules, Genes & Cells A	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes & Cells B	3
CHEM 1100 Chemistry IA	3
or	
CHEM 1101 Foundations of Chemistry IA	3
ENV BIOL 1002 Ecological Issues	3

	PHYSICS 1101 Physics for the Life & Earth Sciences IA	3
	or	
	PHYSICS 1008 Physics Principles and Applications I	3
	semester 2	
	BIOLOGY 1202 Biology I: Organisms	3
	CHEM 1200 Chemistry IB	3
	or	
	CHEM 1201 Foundations of Chemistry IB	3
	GEOLOGY 1200 Earth's Environment	3
	STATS 1004 Statistical Practice I (Life Sciences)	3
	Or	
	STATS 1002RW Data Management & Interpretation	3
2.3.2	Level II	
	Passes in Level II courses to the value of 24 units which must include:	
	semester 1	
	ENV BIOL 2001 Evolutionary Biology	4
	SOIL&WAT 2011 Spatial Information	
	& Land Evaluation	4
	SOIL&WAT 2012WT Soil and Water Resources	4
	semester 2	
	ANIML SC 2014RW Wildlife Management	4
	0r	
	PLANT SC 2003WT Microbiology & Invertebrate Biology	4
	or	
	GEOLOGY 2008 Landscape Processes and Environments II	4
	ENV BIOL 2003 Ecology EBII	4
	together with 4 units from any Level II Geographical and Environmental Studies (GEST) course	4

2.3.3	Level III Passes in Level III courses to the value of 24 units which must include:	
	semester 1 AGRIBUS 3001RW Economics of Resource Management	3
	AGRONOMY 3020RW Principles and Practice of Communication	3
	semester 2 Natural Resource Management course Plus elective courses selected from at least two thematic groupings:	3
	Soil and Water Management	
	GEOLOGY 3014 Environmental Geoscience Applications III	3
	GEOLOGY 3015 Environmental Geoscience Processes III	3
	SOIL&WAT 3002WT Soil Management and Conservation	3
	SOIL&WAT 3004WT Environmental Toxicology & Remediation	3
	SOIL&WAT 3012WT Soil Water Management	3
	Pest, Animal and Plant Management AGRONOMY 3016WT Crop Pasture Ecology ANIML SC 3019RW Ecology & Management of	3
	Vertebrate Pests	3
	PLANT SC 3030AEX/BEX Integrated Weed Management	3
	PLANT SC 3131WT Integrated Pest Management A	3
	PLANT SC 3231WT Insect Ecology	3
	Spatial Information and Research Methodology ENV BIOL 3006 Research Methods in Environmental Biology III	3
	SOIL&WAT 3007WT GIS for Environmental Management or	3
	SOIL&WAT 3014WT GIS for Agricultural Sciences	3
	SOIL&WAT 3008WT Remote Sensing for Environment and Agricultural Sciences	al 3
	or GEOLOGY 3010 Remote Sensing (S)	3

Biodiversity and Ecology	0
AGRONOMY 3000RW Agroforestry	3
AGRONOMY 3026RW Ecology & Management of Rangelands	3
5	3
ENV BIOL 3004 Freshwater Ecology III ENV BIOL 3008 Conservation and Restoration	3
	-
ENV BIOL 3010 Marine Ecology III	3
SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling	3
, .	5
Students may apply to take up to 6 units of courses from other programs in the Faculty, chosen in	
consultation with the program coordinator.	
Honours program	
Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.	
Graduation	
Subject to Chapter 89 of the Statutes, candidates wh	10
have satisfied the requirements for any award of the University shall be admitted to that award at a	
graduation ceremony for the purpose.	
Special circumstances	
When in the opinion of the Faculty special	
circumstances exist, the Council, on the	
recommendation of the Faculty in each case, may var any of the provisions of the Academic Program Rules	Ŷ
for any particular award	

2.4

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3

# Bachelor of Science (Optics and Photonics)

2.3.2

2.3.3

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Optics and Photonics)

#### 2 Qualification requirements

2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree of Bachelor of Science (Optics & Photonics) a candidate shall pass courses listed in 2.3 below to the value of at least 72 units which satisfy the following requirements:
  - (a) A candidate shall present passes in Level I courses to the value of not more than 24 units
  - (b) A candidate shall present passes in Level III courses to the value of not less than 24 units.

#### 2.3 Academic program

2.3.1 Level I

Passes in Level I courses which shall include:

semester	1

MATHS 1011 Mathematics IA	3
PHYSICS 1100 Physics IA	3
semester 2	
MATHS 1012 Mathematics IB	3
PHYSICS 1200 Physics IB	3
together with additional level I courses to the value of	

not more than 12 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.3 and 5.6 for the degree of Bachelor of Science. A selection from the following courses is recommended:

semester i	1	
APP MTH	1000 Scientific Computing I	3
CHEM 110	IO Chemistry IA	3
COMP SCI	1008 Computer Science IA	3
ELEC ENG	1006 Electrical Engineering I	3
semester 2	2	
COMP SCI	1009 Computer Science IB	3
CHEM 120	0 Chemistry IB	3
Level II		
Passes in I	Level II courses which shall include:	
(i) APP N	ATH 2000 Differential Equations and Fourier	
Series	5	2
	MTH 2002 Vector Analysis and Complex	~
Analy		2
	ICS 2009 Photonics II	2
	ICS 2100 Physics IIA	4
	ICS 2200 Physics IIB	4
	4 units from the following:	
	ATH 2003 Modelling with Differential ions II	2
	P SCI 2003 Numerical Methods	2
	ENG 2007 Signals and Systems	3
	ENG 2007 Signals and Systems	з З
	C ENG 2000 A/B Practical Electronic Design	3
	ICS 2001 Classical Mechanics II	2
	MTH 2002 Algebra II S 2002 Introduction to Mathematical	2
	itics II	2
STATS	S 2004 Laplace Transforms and Probability	
and S	tatistical Methods	2
with A Bache	onal Level III courses selected in accordance Academic Program Rule 5.3 for the degree of elor of Science, chosen in consultation with rogram Coordinator.	
Level III		
(:) D	- (	

(i)	Passes (not Conceded Passes):	
	PHYSICS 3001 Electromagnetism & Optics III	3
	PHYSICS 3002 Experimental Physics III	3

	PHYSICS 3004 Quantum Mechanics IIIA	3
	PHYSICS 3230 Photonics IIIP	3
(ii)	Pass in:	
	PHYSICS 3022 Quantum Mechanics IIIB	2
(iii)	Passes in at least 6 units from the following:	
	APP MTH 3013 Differential Equations	3
	APP MTH 3016 Telecommunications Systems Modelling III	3
	APP MTH 3017 Waves	3
	COMP SCI 3002 Programming Techniques	3
	ELEC ENG 3015 Communications, Signals	
	and Systems	3
	ELEC ENG 3016 Control III	3
	ELEC ENG 3019 A/B Practical Electrical and Electronic Design III	3
	MECH ENG 3028 Dynamics and Control II	3
	PHYSICS 3000 Computational Physics III	2
	PHYSICS 3009 Statistical Mechanics III	2
	STATS 3005 Time Series III	3
(iv)	Passes in additional Level III courses, if required, selected in consultation with the program coordinator and in accordance with Academic Program Rule 5.6 for the degree of Bachelor of Science.	
The	e Honours program	
	er to Academic Program rule 5.7 for the degree of helor of Science	
Gra	aduation	
Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a		

# 3 Special circumstances

graduation ceremony for the purpose.

2.4

2.5

# Bachelor of Science (Petroleum Geoscience)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Petroleum Geoscience)

#### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units pass, which satisfy the following:
  - (a) a candidate shall present passes in courses to the value of no more than 26 units at Level I
  - (b) a candidate shall present passes in courses to the value of no more than 22 units at Level II
  - (c) a candidate shall present passes in courses to the value of 24 units at Level III.

#### 2.3 Academic program

2.3.1 Level I

Passes to the value of 24 units, which shall include:

semester l	
GEOLOGY 1103 Earth Systems	3
MATHS 1011 Mathematics IA	3
or	
MATHS 1013 Mathematics IMA	3
To shall be used at the set of the set of the second set when used up a	r

Together with additional Level I courses to the value of 6 units selected from those available under Academic Program Rules 5.3 and 5.6 for the degree of Bachelor of Science, which must include at least one of the following:

	CHEM 1100 Chemistry IA	3
	CHEM 1101 Foundations of Chemistry IA	3
	PHYSICS 1008 Physics Principles & Applications	3
	PHYSICS 1100 Physics IA	3
	PHYSICS 1101 Physics for the Life	
	& Earth Sciences IA	3
	semester 2	
	GEOLOGY 1100 Earth's Interior	3
	MATHS 1011 Mathematics IA	3
	or	
	MATHS 1012 Mathematics IB	3
	Together with additional Level I courses to the value o 6 units, selected from those available under Academic Program Rules 5.3 and 5.6 for the degree of Bachelor of Science, which must include at least one of the following:	
	semester l	
	CHEM 1102 Foundations of Chemistry IB	3
	CHEM 1200 Chemistry IB	3
	PHYSICS 1102 Physics for the Life	
	& Earth Sciences IB	3
	PHYSICS 1200 Physics IB	3
2.3.2	Level II	
	Passes to the value of 24 units, as follows:	
	semester l	
	GEOLOGY 2007 Sedimentary & Structural Geology II	4
	PETROENG 1000 Introduction	4
	to the Petroleum Industry	2
	PETROENG 2010 Drilling Engineering	3
	semester 2	
	GEOLOGY 2006 Igneous & Metamorphic Geology II	4
	GEOLOGY 2008 Land Processes	
	and Environments II	4
	PETROENG 2009 Formation Evolution, Petrophysics	
	& Rock Properties	3
	together with additional courses to the value of 4 units chosen from the following:	s,

	APP MTH 2000 Differential Equations & Fourier Series	2
	APP MTH 2002 Vector Analysis	
	& Complex Analysis	2
	CHEM 2003 Environmental Chemistry	4
	CHEM 2100 Chemistry IIA	4
	MATHS 2004 Mathematics IIM	4
	PHYSICS 2100 Physics IIA	4
2.3.3	Level III	
	Passes to the value of 24 units, which shall include:	
	semester l	
	GEOLOGY 3013 Tectonics III	3
	GEOLOGY 3017 Petroleum Exploration III	3
	PETROENG 3002 Economic Valuation	3
	An additional Reservoir Geoscience Project course	3
	semester 2	
	PETROENG 3005 Reservoir Characterisation	
	& Modelling	3
	GEOLOGY 3010 Remote Sensing III	3
	GEOLOGY 3019 Field Geoscience Program III	3
	PETROENG 3019 Structural Geology	
	& Seismic Methods	3
2.4	The Honours program	
	Refer to Academic program rule 5.7 for the degree of Bachelor of Science.	
2.5	Graduation	
	Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.	D
3	Special circumstances	
	When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules	ý

for any particular award.

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# Bachelor of Science (Space Science and Astrophysics)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Space Science and Astrophysics)

# 2 Qualification requirements

2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree of Bachelor of Science (Space Science and Astrophysics) a candidate shall pass courses listed in 2.3 below to the value of 72 units which satisfy the following requirements:
  - (a) a candidate shall present passes in level 1 courses to the value of not more than 30 units
  - (b) a candidate shall present passes in level 3 courses to the value of not less than 24 units.

## 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses which shall include:

MATHS 1011 Mathematics IA	3
MATHS 1012 Mathematics IB	3
PHYSICS 1007 Space Science and Astrophysics I	3
PHYSICS 1100 Physics IA	3
PHYSICS 1200 Physics IB	3
together with additional level I courses selected in consultation with the program coordinator and in accordance with the Academic Program Rules 5.3, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.	

2.3.2 Level II

Passes in Level II courses selected as follows:

(i) passes in the following core courses : semester 1 APP MTH 2000 Differential Equations and Fourier Series 2 APP MTH 2002 Vector Analysis 2 and Complex Analysis PHYSICS 2100 Physics IIA 4 semester 2 PHYSICS 2200 Physics IIB 4 PHYSICS 2010 Space Science and Astrophysics II Λ (ii) additional level II courses, selected in consultation with the program coordinator and in accordance with the Academic Program Rules 5.6.3 and 5.6.4 for the degree of Bachelor of Science. The following courses are highly recommended: PHYSICS 2001 Classical Mechanics II 2 PHYSICS 2002 Classical Fields and Mathematical Methods II 2 2.3.3 Level III (i) Passes (not Conceded Passes): PHYSICS 3002 Experimental Physics III 3 and at least two of: PHYSICS 3001 Electromagnetism and Optics III 3 PHYSICS 3004 Quantum Mechanics IIIA 3 PHYSICS 3009 Statistical Mechanics III 2 (ii) Passes in: PHYSICS 3013 Astrophysics III 2 PHYSICS 3014 Atmospheric & Environmental Physics III 2 (iii) Passes in additional level III courses selected in consultation with the program coordinator and in accordance with the Academic Program Rules 5.6

and 5.6.6 for the degree of Bachelor of Science.

2.4 The Honours program

Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.

## 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 3 Special circumstances

# Bachelor of Science (Sustainable Environments)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Sustainable Environments).

#### 2 Qualification requirements

#### 2.1 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units pass, which satisfy the following requirements:
  - (a) A candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
  - (b) A candidate shall complete a major by completing prescribed courses to the value of 16 units at Level II and 12 units at Level III as set out in 2.3.2. and 2.3.3 below.

#### 2.3 Academic program

#### 2.3.1 Level I

Passes in Level I courses to the value of 24 units which shall include:

semester 1	
BIOLOGY 1101 Biology I:	
Molecules, Genes and Cells A	3
or	
BIOLOGY 1102 Biology I:	
Molecules, Genes and Cells B	3
ENV BIOL 1002 Ecological Issues	3
GEOLOGY 1103 Earth Systems	3
together with an additional 3 units of Level I courses chosen from the following electives:	

CHEM 1100 Chemistry IA	3
or	
CHEM 1101 Foundations of Chemistry IA	3

#### or

other courses offered by the Faculty of Sciences, Faculty of Humanities and Social Sciences, Faculty of Engineering, Computer and Mathematical Sciences, and the School of Architecture, Landscape Architecture and Urban Design. Level I Chemistry will be a necessary course if students intend to take any Level II Chemistry course.

#### semester 2

BIOLOGY 1202 Biology I: Organisms	3
GEOLOGY 1100 Earth's Interior	3
STATS 1004 Statistical Practice 1 (Life Sciences)	3
together with an additional 3 units of Level I courses chosen from the following electives:	
CHEM 1200 Chemistry IB	3
or	
CHEM 1201 Foundations of Chemistry IB	3
or	
other courses offered by the Faculty of Sciences, Faculty of Humanities and Social Sciences, Faculty of Engineering, Computer and Mathematical Sciences at	nd

Faculty of Humanities and Social Sciences, Faculty of Engineering, Computer and Mathematical Sciences, and the School of Architecture, Landscape Architecture and Urban Design. Level I Chemistry will be a necessary course if students intend to take any Level II Chemistry course.

#### 2.3.2 Level II

Passes in Level II courses as follows:	
Conservation & Wildlife Ecology major	
ENV BIOL 2000 Zoology EB II	4
or	
ENV BIOL 2006 Botany II	4
plus one of	
ENV BIOL 2001 Evolutionary Biology EBII	4
ENV BIOL 2003 Ecology EBII	4

with additional courses to the value of 8 units chosen from:

CHEM 2003 Environmental Chemistry II	4
ENV BIOL 2000 Zoology EB II	4
ENV BIOL 2001 Evolutionary Biology EBII	4
ENV BIOL 2003 Ecology EB II	4
ENV BIOL 2006 Botany II	4
SOIL&WAT 2011RW Spatial Information	
and Land Evaluation	4

plus elective courses to the value of 8 units taken from all courses listed under Program Rule 2.3.2 for this degree; or courses listed under Specific Academic Program Rule 5.6.3 for the degree of Bachelor of Science; or a maximum of 4 units chosen from any Level II Geographical & Environmental Studies (GEST) course.

Land & Water Management major

CHEM 2003 Environmental Chemistry II	4
GEOLOGY 2008 Landscape Processes and Environments II	4
SOIL&WAT 2011RW Spatial Information	
and Land Evaluation	4
SOIL&WAT 2012WT Soil & Water Resources	4

plus elective courses to the value of 8 units taken from all courses listed under Program Rule 2.3.2 for this degree; or courses listed under Specific Academic Program Rule 5.6.3 for the degree of Bachelor of Science, or a maximum of 4 units chosen from any Level II Geographical and Environmental Studies (GEST) course.

#### Deep Earth Resources major

GEOL 2006 Igneous & Metamorphic Geology II	4
GEOL 2007 Sedimentary & Structural Geology II	4
GEOLOGY 2008 Landscape Processes	
and Environments II	4

plus elective courses to the value of 12 units taken from all courses listed under Program Rule 2.3.2 for this degree; or courses listed under Specific Academic Program Rule 5.6.3 for the degree of Bachelor of Science, or a maximum of 4 units chosen from any Level II Geographical and Environmental Studies (GEST) course.

### 2.3.3 Level III

Passes in Level III courses as follows:

Conservation & Wildlife Ecology major

ENV BIOL 3008 Conservation and Restoration	3
ENV BIOL 3220 Issues in Sustainable Environments	3

with additional courses to the value of 6 units chosen from:

ENV BIOL 3004 Freshwater Ecology III	3
ENV BIOL 3006 Research Methods in Environmental Biology III	3
ENV BIOL 3010 Marine Ecology III	3
ENV BIOL 3121 Concepts in Ecology	3
SOIL&WAT 3007WT GIS for Environmental Management	3

plus elective courses to the value of 12 units taken from all courses listed under Program Rule 2.3.3 for this degree; or courses listed under Specific Academic Program Rule 5.6.5 for the degree of Bachelor of Science, or a maximum of 6 units chosen from any Level II Geographical and Environmental Studies (GEST) course.

# Land & Water Management major

 ENV BIOL 3220 Issues in Sustainable Environments
 3

 SOIL&WAT 3002WT Soil Management & Conservation
 3

 with additional courses to the value of 6 units chosen from:
 6

ENV BIOL 3009 Ecophysiology of Plants III	3
ENV BIOL 3012WT Integrated Catchment	
Management	3
GEOLOGY 3010 Remote Sensing (S)	3
SOIL&WAT 3004WT Environmental Toxicology & Remediation	3
SOIL&WAT 3007WT GIS	
for Environmental Management	3
SOIL&WAT 3012WT Soil Water Management	3
SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling	3

plus elective courses to the value of 12 units taken from all courses listed under Program Rule 2.3.3 for this degree; or courses listed under Specific Academic Program Rule 5.6.5 for the degree of Bachelor of Science, or a maximum of 6 units chosen from any Level III Geographical and Environmental Studies (GEST) course.

# Deep Earth Resources major

ENV BIOL 3220 Issues in Sustainable Environments	3
GEOLOGY 3013 Tectonics III	3
GEOLOGY 3016 Igneous and Metamorphic Geology III	3
GEOLOGY 3019 Field Geoscience Program III	3
and one of:	
GEOLOGY 3017 Petroleum Exploration III	3
GEOLOGY 3018 Mineral Exploration III	3

plus elective courses to the value of 6 units taken from all courses listed under Program Rule 2.3.3 for this degree; or courses listed under Specific Academic Program Rule 5.6.5 for the degree of Bachelor of Science, a maximum of 6 units chosen from any Level II Geographical and Environmental Studies (GEST) course

2.4 The Honours program

Refer to Academic Program rule 5.7 for the degree of Bachelor of Science.

# 2.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

#### 3 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Science (Viticulture)

# Academic Program Rules

These rules should be read in conjunction with Academic Program rules parts 2, 3 and 4 of the Bachelor of Science

1 General

There shall be a degree of Bachelor of Science (Viticulture)

### 2 Qualification requirements

2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

- 2.2 It is not necessary for a candidate to take all the courses of any one level simultaneously or to complete all the course set out for one level before enrolling for any courses at the following level, provided that the prerequisite courses have been passed. However, a candidate who desires to take a Level III course before completing all compulsory Level I and II courses must obtain the permission of the Faculty.
- 2.3 To qualify for the degree a candidate shall pass courses, listed below, to the value of 72 units, which satisfy the following requirements:
  - (a) a candidate shall present passes in courses to the value of 24 units at each of level I, II and III.

### 2.4 Academic program

2.4.1 Level I

Passes in Level I courses which shall include:

semester 1
BIOLOGY 1101 Biology I:
Molecules, Genes and Cells A
or
BIOLOGY 1102 Biology I:
Molecules, Genes and Cells B
CHEM 1100 Chemistry IA

3

3 3

#### or

	CHEM 1101 Foundations of Chemistry IA	3
	OENOLOGY 1018NW Foundations in Wine Science PHYSICS 1008 Physics Principles and Applications I	3
	semester 2	
	BIOLOGY 1202 Biology I: Organisms	3
	CHEM 1200 Chemistry IB	3
	Or	
	CHEM 1201 Foundations of Chemistry IB	3
	GEOLOGY 1200 Earth's Environment	3
	STATS 1004 Statistical Practice I (Life Sciences)	3
2.4.2	Level II	
	Passes in Level II courses which shall include:	
	semester 1	
	BIOCHEM 2106WT Biochemistry II (Agriculture) A	4
	OENOLOGY 2025WT Microbiology for Viticulture and Oenology	4
	VITICULT 2002WT Viticultural Science	4
	semester 2	
	ANIML SC 2029WT Genes and Inheritance	4
	OENOLOGY 2022WT Sensory Studies	4
	OENOLOGY 2024WT Introductory Winemaking	4
2.4.3	Level III	
	semester 1	
	Passes in Level III which shall include:	
	AGRONOMY 3130WT Viticultural Engineering and Irrigation	3
	PLANT SC 3131WT Integrated Pest Management A	3
	SOIL&WAT 2012RW Soil and Water Resources	4
	semester 2	
	AGRIBUS 3017WT Business Management	
	for Applied Science	3
	VITICULT 3021WT Viticultural Production	3
	VITICULT 3043WT Industry Experience (Viticulture) A	3
	VITICULT 3044WT Viticultural Methods & Procedures	3
	and one elective to the value of at least 2 units, chose from the following recommended courses:	en

ENV BIOL 3009 Ecophysiology of Plants III	3
FREN 3103WT Technical French (Oenology)	3
HORTICUL 3004WT Olive Production & Marketing (a)	3
OENOLOGY 3016WT Cellar & Winery Waste	
Management	3
OENOLOGY 3047WT Winemaking at Vintage	3
OENOLOGY 3307WT Stabilisation & Clarification	3
PLANT SC 3002WT Biotechnology in the Food	
and Wine Industries	2
PLANT SC 3004WT Mineral Nutrition of Plants	3
PLANT SC 3030AEX/BEX Integrated Weed	
Management	3
PLANT SC 3130WT Plant Pathology	3
SOIL&WAT 3002WT Soil Management	
& Conservation	3
SOIL&WAT 3012WT Soil Water Management	3
SOIL&WAT 3014WT GIS for Agricultural Science (b)	3
SOIL&WAT 3016WT Soil Ecology	5
& Nutrient Cycling	3
VITICULT 3005WT Grape Industry Practice, Policy	-
and Communication	2
VITICULT 3020WT Table	
& Drying Grape Production	2
or from other courses offered by the Faculty of	
Sciences, with the approval of the B.Sc.(Viticult.)	
program coordinator.	
(a) July (b) Sept.	
The Honours degree	
Refer to Academic Program Rule 5.7 for the degree of	of
Bachelor of Science.	
Graduation	
Subject to Chapter 89 of the Statutes, candidates w	ho
have satisfied the requirements for any award of the	
University shall be admitted to that award at a	
graduation ceremony for the purpose.	
Special circumstances	
When in the opinion of the Faculty special	
circumstances exist, the Council, on the	
recommendation of the Faculty in each case, may va any of the provisions of the Academic Program Rules	

for any particular award.

2.5

2.6

3

# Bachelor of Wine Marketing

Students who commenced their program of study in 2003 and earlier will normally complete their course of study under the provision of the specific program rules current at the time of commencement. Student should consult the *University of Adelaide Calendar* - *Handbook of Undergraduate Programs 2003*.

On application to the Faculty, continuing students may be permitted to complete their studies under the current academic program rules, with such modifications and stipulations as the Faculty may deem necessary.

# Academic Program Rules

#### 1 General

There shall be a degree and an Honours degree of Bachelor of Wine Marketing. A candidate may obtain either degree or both.

### 2 Duration of program

The program for the degree shall extend over three years of full-time study or the part-time equivalent, and that for the Honours degree over one additional year of full-time study or the part-time equivalent.

# 3 Admission

- 3.1 Status, exemption and credit transfer
- 3.1.1 Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the program for the degree of Bachelor of Wine Marketing as the Faculty in each case may determine.

#### 3.1.2 Limits on the granting of status

Normally status will only be considered for courses passed within the previous ten years. Status may be granted on a course for course basis or on the basis of course for group of courses. Status will be granted only for courses which meet the academic requirements of the award towards which credit is sought.

Students must complete a minimum of 24 units towards the award, as defined in 5.2, at the University of Adelaide.

- 3.2 Articulation with other awards
- 3.2.1 A candidate for the Bachelor of Wine Marketing who does not complete the requirements for the Degree but satisfies the requirements for the Diploma in Wine Marketing may be admitted to the Diploma, subject to the student discontinuing candidature for the Degree.

- 3.2.2 A candidate who has been admitted to the Diploma in Wine Marketing and who subsequently satisfies the requirements for the Bachelor of Wine Marketing must surrender the Diploma before being admitted to the Degree.
- 4 Assessment and examinations
- 4.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned
  - (b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 4.2 There shall be four classifications of pass in any course for the degree as follows: Pass with High Distinction, Pass with Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 7 units. Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.
- 4.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned
  - (b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty

and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

# 5 Qualification requirements

5.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

#### 5.2 Academic program

To qualify for the degree of Bachelor in Wine Marketing a candidate shall present passes in courses to a minimum value of 72 units which satisfy the following requirements

#### 5.2.1 Level I

semester 1	
ECON 1004 Principles of Microeconomics I	3
0ľ	
WINEMKTG 1026EX Microeconomic Principles	3
ECON 1008 Business Data Analysis I	3
0r	
WINEMKTG 1015EX Data Analysis for Food and Wine Business	3
OENOLOGY 1000NW/1000EX Introductory Grape and Wine Knowledge	3
WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles	3
semester 2	
ACCTING 1002 Accounting for Decision Makers	3
or	
WINEMKTG 1008EX Introduction to Managerial	3
and Financial Accounting	-
COMMLAW 1004 Commercial Law I(S)	3
or	
WINEMKTG 1003EX Legal Issues in Wine Marketing	3
ECON 1000 Principles of Macroeconomics I	3
or	
WINEMKTG 1063WT Macroeconomic Essentials for Wine and Food Business	3

OENOLOGY 1001NW/1001EX Vineyard and Winery Operations I

3

5.2.2 Level II

5.2.3

Lovor II	
Core courses	
semester 1	
AGRIBUS 2016EX Introduction to Business Management	4
or	
······································	4
OENOLOGY 20004NW Vineyard and Winery Operations II	4
semester 2	
WINEMKTG 2011WT/2011EX Applied Marketing Research	4
WINEMKTG 2014WT/2014EX International Marketing of Wine and Agricultural Products	4
plus electives chosen in consultation with the Program Coordinator.	
Level III	
Core courses	
semester 1	
WINEMKTG 3006WT/3006EX Global Wine Market	4
semester 2	
WINEMKTG 3028WT/3028EX Winery Business Management III	4
Electives	
Candidates must complete electives to a minimum value of 24 units at least 12 units of which must be at level III and at least 16 units of which must be WINEMKTG courses.	
Electives chosen may be from other programs in the Faculty of Sciences or any courses in the Bachelor of Commerce or Bachelor of Economics for which the student is eligible to enrol.	
Courses from within the Faculty of Sciences of particular relevance to the program are:	
AGRIBUS 2004WT Issues in Australian Agribusiness II	4
AGRIBUS 3041WT International Agribusiness Environment III	4
WINEMKTG 2002WT/2002EX Wine and Society	4
WINEMKTG 2003WT/2003EX International Wine Law	4
WINEMKTG 2010WT/2010EX Strategic Marketing	
Management	4
WINEMKTG 3014WT/3014EX Food Marketing	4

WINEMKTG 3040WT/3040EX Wine Retail and Distribution Management	4
WINEMKTG 3047WT/3047EX Internet Marketing and E-Commerce	4
WINEMKTG 3049EX Wine & Food Tourism & Festivals	4
WINEMKTG 3065WT/3065EX Database Marketing for Food and Wine Business	4
It is recommended that students wishing to specialise in marketing include the following courses amongst their electives:	
MARKETNG 2011 Consumer Behaviour II	4
or	
WINEMKTG 2033EX Consumer Behavioural Analysis	4
WINEMKTG 3034WT/3034EX Advertising and Promotion III	4
It is recommended that students wishing to specialise in finance, economics and trade include the following courses amongst their electives:	
ECON 2000 International Trade & Investment Policy II	4
ECON 2009 Consumers, Firms and Markets II	4
ECON 3021 International Trade III	4
Note: students without SACE Stage 2 Mathematical Studie must take ECON 1005 Mathematics for Economists I before ECON 2009 Consumers, Firms and Markets II.	

### 5.3 The Honours program

- 5.3.1 To be eligible to be admitted to the Honours degree program, a candidate shall complete the requirements for the Bachelor degree or equivalent to a standard which is acceptable to the Faculty for the purpose of admission to the Honours degree.
- 5.3.2 Subject to the approval of the Head of the School, the candidate will proceed to the Honours degree in the following course:

WINEMKTG 4007AWT/BWT Honours Wine Marketing

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- 5.3.3 A candidate may, subject to the approval of the Heads of the Schools concerned, proceed to the Honours degree taught jointly by the School of Agriculture, Food and Wine and another school. The candidate must apply in writing for the proposed program to be approved in advance by the Faculty.
- 5.3.4 A candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of these Academic Program Rules.

- 5.3.5 The work of the Honours year will normally be completed in one year of full-time study. The Faculty may permit a candidate to take two years, but no more, under such conditions as it may determine.
- 5.3.6 A candidate who is unable to complete .the program for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the program, of who withdraws from the program shall be reported to the Faculty, which may permit re-enrolment for an Honours degree under such conditions (if any) as it may determine
- 5.3.7 There shall be three classifications for the Honours degree, as follows:
  - 1 First Class
  - 2A Second Class div A
  - 2B Second Class div B
  - 3 Third Class
  - NAH Not awarded.
- 5.3.8 Candidates may not enrol for a second time for the Honours program if they:
  - (i) have already qualified for Honours or
  - (ii) have attended for examination but failed to obtain Honours *or*
  - (iii) have withdrawn from the Honours program unless the Faculty on such conditions as it may determine permits re-enrolment.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 6 Special circumstances

When in the opinion of the Faculty special circumstances exist. the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Bachelor of Arts and Bachelor of Science

# Academic Program Rules

These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science and Academic Program Rule 5.5.4 of the Bachelor of Arts.

#### 1 General

There shall be a degree of Bachelor of Arts and Bachelor of Science.

Students may enrol directly in a program of study leading, after four years of full-time study (or par-time equivalent thereof), to the award of both the degree of Bachelor of Arts and the degree of Bachelor of Science.

# 2 Qualification requirements

2.1 Unacceptable combinations of courses No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

#### 2.2 Science Component

To qualify for the award of the degree of B.Sc. students must pass courses listed in Academic Program Rule 5.6 of the Rules for the degree of Bachelor of Science in the Faculty of Sciences to a minimum units value of 52, as follows:

- (a) Level I courses to the value of not less than 12 units
- (b) Level II courses to the value of not less than 16 units
  - being prerequisites for courses at Level III
- (c) Level III courses to the value of not less than 24 units
- (d) courses comprising a major in a science discipline, as defined in the Academic Program Rule 5.4 for the degree of B.Sc. in the Faculty of Sciences
- (e) a student must concurrently qualify for both awards.

Students who commence this program but who subsequently decide that they do not wish to proceed with both areas of study may transfer to enrolment in a program for the degree of Bachelor of Science in the Faculty of Sciences where credit of courses completed will be considered on a case by case basis.

# Courses are listed in alphabetical order under the following disciplines:

Syllabuses

Aboriginal Studies in Music	5
Accounting	1
Agricultural Business	2
Agriculture	5
Agronomy	5
Anatomical Science	9
Ancient Greek	3
Animal Science	6
Anthropology	1
Applied Ecology	7
Architecture	8
Arts40	1
Asian Studies40	1
Biochemistry40	5
Biology40	9
Biometry41	1
Biotechnology41	2
Chemistry41	3
Chinese42	1
Classical Studies42	4
Commerce42	8
Commercial Law42	9
Computer Science43	0
Corporate Finance43	7
Dentistry43	8
Design Studies44	5
Development Studies45	4

Economics	455
Education	463
Engineering	468
English	521
Environmental Biology	528
European Studies	535
Finance	537
Food Science & Technology	537
French Studies	540
Gender, work & Social Inquiry	544
General Practice	548
Genetics	549
Geographical & Environmental Studies	553
Geology	562
German Studies	569
History	574
Horticulture	580
Indonesian	582
Information Systems	584
International Studies	585
Italian	586
Japanese	587
Landscape Architecture	590
Latin	592
Law	594
Linguistics	619
Management	622

Marketing624	
Mathematics625	
Media643	
Medicine647	
Microbiology654	
Modern Greek659	
Music	
Music -VET696	
Nursing705	
Obstetrics & Gynaecology707	
Oenology708	
Oral Health712	
Pathology715	
Pharmacology717	
Philosophy718	
Physics725	
Physiology734	
Plant Science738	
Politics742	
Psychiatry751	
Psychology752	
Public Health758	
Social Sciences763	
Soil & Water763	
Spanish768	
Statistics	
Viticulture776	
Wine Marketing778	

# ABORIGINAL STUDIES IN MUSIC

# Level I

# MUSIC 1001A/B

# **Style Studies I CM**

- 2 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: continuous 60%, major assignments 40%

Historical, theoretical and practical study of the following musical styles: African–American music (blues, soul, reggae etc), folk, country, rock; inma studies.

# MUSIC 1002A/B

# **Practical Music Study I CM**

- 4 units full year
- 1 hour individual lesson per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development, musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (voice).

# MUSIC 1007A/B

# Studies in Community and Culture I

- · 3 units full year
- 1 lecture, 1 tutorial per week.
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: attendance, participation 10%, assignments 60%, end of semester exams 20%, field studies workbook 10%

An exploration of the arts in society drawing on examples from a variety of indigenous and nonindigenous communities and cultures in Australia and elsewhere. Themes include: the social, political, religious and educational roles of art, artists and arts institutions; cultural identity, cultural maintenance and development; aesthetics, technology and the arts, commercialism, culture contact and culture change.

The course includes classes presented by Visiting Lecturers from the Pitjantjatjara communities, and a field studies visit to the Anangu Pitjantjatjara Lands.

# MUSIC 1009A/B

### Practical Music Study I MS

- 4 units full year
- 1 hour individual lesson per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: continuous progress 60%, semester exams 40%

# MUSIC 1010A/B

### Theory of Music I MS

- 3 units full year
- 3 x 1 hour lectures or equivalent per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Assessment: continuous assessment 60%, semester exams 40%

Consolidation and extension of the basic concepts and structures underlying Western music and Western music theory, including the application of the Western music notation system. Introduction to analysis and composition in a range of stylistic contexts.

# MUSIC 1011A/B

### **Research Studies (CASM) I MS**

- 3 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: attendance participation 10%, assignments 32.5%, Field Studies Workbook 10%, research journal 10%, class report 12.5%, research proposal 25%

This course introduces students to the scientific study of music as a socio-cultural phenomenon and provides an opportunity for students to gain experience in designing and conducting their own research projects. The course also explores major directions, themes and paradigms in the research of music and society, whilst also focussing on the development of student research skills and the completion of research proposals reflecting students' musical, cultural and academic interests.

In addition the Field Studies trip to the Anangu Pitjantjatjara lands provides an opportunity for students to critically explore and reflect on the possible applications for their research skills. The course includes classes presented by visiting Lecturers from the Anangu Pitjantjatjara communities and may also include visits to prominent Kaurna events and places.

# MUSIC 1013A/B

### Performance I MS

- 4 units full year
- 2 x 2 hour rehearsals per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: attendance, participation 20%, rehearsals 30%, in-house performance workshops/public performances/school or community workshops determined and approved by department 20%, recording project 10%, field studies trip 10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshops/tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate.

# MUSIC 1014A/B

### **Performance I CM**

- 4 units full year
- 2 x 2 hour rehearsals per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: attendance, participation 20%, rehearsals 30%, in-house performance workshops/public performances/school or community workshops determined and approved by department 20%, recording project 10%, field studies trip 10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshops/tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate.

# MUSIC 1015A/B

### General Studies (New) I

- 2 units full year
- Contact hours vary according to the topic/s chosen
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: determined by the lecturer in charge, in consultation with the academic coordinator

A range of elective topics such as Vocal group; Torres Strait Islander dancing; computing for musicians - an introduction to the use of synthesisers, MIDI, sequencers; computer notation and educational software; studio techniques - an introduction to the function and use of equipment used in the live performance and recording of music; songwriting - an introduction to the various techniques used in developing ideas and turning them into songs. All topics will not necessarily be offered in any one year and others may be offered from time to time. At the discretion of the Academic Coordinator a student may be credited with external units; in such cases the Academic Coordinator will also determine the appropriate weighting. Students will be encouraged to undertake projects which relate to their areas of special interest, where possible.

### MUSIC 1016A/B

### **Research Studies (CASM) I**

- 3 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal & Torres Strait Islander students only

Students to undertake supervised research projects of personal cultural significance in relation to music. The specific learning expectations and assessment requirements will be determined through consultation between the individual student, the course lecturer and the academic coordinator, and formalised through individual learning contracts. The course also requires participation in the field studies trip to the Anangu Pitjantjatjara Lands

# MUSIC 1018A/B

### **Practical Extension I**

- 2 units full year
- 1 hour lecture per week or equivalent
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: attendance, participation 20%, assignments 80%

An introduction to practical aspects related to music-making. Topics are acoustics and audio engineering techniques; computers and music; introduction to principles of teaching; principles of music marketing and promotion.

### MUSIC 1020A/B

#### **Theory of Music I CM**

- 3 units full year
- 3 x 1 hour lectures or equivalent per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: continuous 60%, semester exams 40%

Consolidation and extension of the basic concepts and structures underlying Western music and Western music theory, particularly through practical application on the student's selected instrument and/or keyboard. Includes application of the Western music notation system.

### MUSIC 1021A/B

#### **Style Studies I MS**

- 2 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: continuous 60%, major assignments 40%

Historical, theoretical and practical study of the following musical styles: African-American music

(blues, soul, reggae etc), folk, country, rock; inma studies.

### MUSIC 1024A/B

#### Aural Development (New) I

- 1 unit full year
- 1 hour lecture per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Assessment: attendance, participation 20%, continuous 40%, semester exams 40%

The development of musical literacy through practical application, and the development of aural awareness and analytical listening skills. Includes the recognition and reproduction of rhythmic, melodic and harmonic structures.

### Level II

# MUSIC 2000A/B Theory of Music II CM

- 4 units full year
- 3 x 1 hour lectures or equivalent per week
- Eligibility: Aboriginal & Torres Strait Islander students only
- Prerequisite: MUSIC 1020 A/B Theory of Music ICM or MUSIC 1010 A/B Theory of Music IMS
- Assessment: continuous 60%, semester exams 40%

Consolidation and application of theoretical knowledge learned in Level I of the Associate Diploma in Aboriginal Studies in Music (New), and extension of this knowledge primarily through arranging and composing in the context of the student's stylistic interests.

# MUSIC 2001A/B

#### Style Studies II CM

- 2 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: Prerequisite: MUSIC 1001 A/B Style Studies ICM or MUSIC 1021 A/B Style Studies IMS, and MUSIC 1020 A/B Theory of Music ICM or MUSIC 1010 A/B Theory of Music IMS

 Assessment: Topic I - attendance and participation 30%, major assignment 20%; Topic II attendance and participation 15%, assignments 20%, concert report 15%

Topic I - historical, theoretical and practical study of the stylistic characteristics of Jazz; inma studies.Topic II - a survey of the main stylistic characteristics of Western 'art' music in historical and cultural context, including particular reference to contemporary Australian music; inma studies.

# MUSIC 2002A/B

# Style Studies II MS

- 2 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1021 A/B or Distinction in MUSIC 1001 A/B & MUSIC 1010 A/B or Distinction in MUSIC 1020 A/B
- Assessment: Topic I attendance and participation 30%, major assignment 20%; Topic II attendance and participation 15%, assignments 20%, concert report 15%

Topic I - historical, theoretical and practical study of the stylistic characteristics of Jazz; inma studies. Topic II - a survey of the main stylistic characteristics of Western 'art' music in historical and cultural context, including particular reference to contemporary Australian music; inma studies.

# MUSIC 2003A/B

# Theory of Music II MS

- 4 units full year
- 3 x 1 hour lectures or equivalent per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1010 A/B Theory of Music IMS or, in exceptional circumstance, Distinction [or higher] in MUSIC 1020 A/B Theory of Music ICM
- Assessment: continuous 60%, semester exams 40%

Consolidation and application of theoretical knowledge learned in Level I of the Associate Diploma in Aboriginal Studies in Music (New), and extension of this knowledge primarily through analysis and composition in the context of style.

# MUSIC 2004A/B Performance II MS

- 4 units full year
- 2 x 2 hour rehearsals per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1013 A/B Performance IMS or, in exceptional circumstances, a Distinction (or higher) in MUSIC 1014 A/B Performance ICM
- Assessment: attendance, participation 20%, rehearsals 30%, in-house performance workshop /public performances/school or community workshops, determined and approved by department 20%, recording project 10%, field studies trip10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshop/tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate

# MUSIC 2005A/B

### **Practical Extension II**

- 2 units full year
- 1 hour lecture or equivalent per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1018 A/B Practical Extension I
- Assessment: attendance, participation 20%, assignments 80%

Further development of practical aspects related to music-making. Topics are music business and management skills; introduction to recording techniques; music networks and organisations; music industry skills - publishing, copyright, funding.

# MUSIC 2006A/B

### **Practical Music Study II CM**

- 4 units full year
- 1 hour individual lesson per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Study ICM or MUSIC 1009 A/B Practical Music Study IMS
- Assessment: continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development, musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (or voice).

# MUSIC 2009A/B

### **Performance II CM**

- 4 units full year
- 2 x 2 hour rehearsals per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1014 A/B Performance ICM or MUSIC 1013 A/B Performance I MS
- Assessment: attendance, participation 20%, rehearsals 30%, in-house performance workshops/public performances/school or community workshops, determined and approved by department 20%, recording project 10%, field studies trip10%, performance workbook 10%

The development of ensemble and performance skills through group rehearsals, in-house performance workshops, performance activities which may include public performances/school or community workshops/tours as determined and approved by the Department, a recording project and a field studies trip to the Anangu Pitjantjatjara Lands. Includes the application of learning skills/behaviours; the development of repertoire, arranging skills and rehearsal techniques; and the application of music literacy as appropriate.

### MUSIC 2011A/B

#### Aural Development (New) II

- 1 unit full year
- 1 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1024 A/B Aural Development (New) I
- Assessment: attendance, participation 20%, continuous 40%, semester exams 40%

The continued development of musical literacy, aural awareness and analytical listening skills through practical application. Includes the recognition and reproduction of rhythmic, melodic and harmonic structures.

# MUSIC 2016A/B

### Studies in Community and Culture II

- 3 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1007 A/B Studies in Community and Culture I
- Assessment: continuous 25%, assignments 15%, verbal report 20%, written report 30%, field studies workbook 10%

During this course students will undertake a project to be negotiated with the course lecturer and Academic Coordinator. Projects will revolve around the issues of the arts and society and should involve degrees of direct engagement with the community. Continuous project development by the student with assistance from the course lecturer as required, as well as written and verbal reportage will form important parts of the course. This course also requires participation in the field studies trip to the Anangu Pitjantjatjara Lands.

# MUSIC 2017A/B

### General Studies (New) II

- 3 units full year
- Contact hours vary according to the topic/s chosen
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1015 A/B General Studies
   (New) I

• Assessment: determined by the lecturer in charge, in consultation with the academic coordinator

A range of elective topics such as Vocal group; Torres Strait Islander dancing; computing for musicians - an introduction to the use of synthesisers, MIDI, sequencers; computer notation and educational software; studio techniques - an introduction to the function and use of equipment used in the live performance and recording of music; songwriting - an introduction to the various techniques used in developing ideas and turning them into songs. All topics will not necessarily be offered in any one year and others may be offered from time to time. At the discretion of the Academic Coordinator a student may be credited with external units; in such cases the Academic Coordinator will also determine the appropriate weighting. Students will be encouraged to undertake projects which relate to their areas of special interest, where possible.

# MUSIC 2019A/B

### **Research Studies (CASM) II MS**

- 4 units full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1011 A/B Research Studies (CASM) IMS or, in exceptional circumstances, a Distinction (or higher) in MUSIC 1016 A/B Research Studies (CASM) ICM
- Assessment: attendance, participation 10%, assignments 25%, Field Studies Workbook 10%, research journal 15%, class report 15%, final report 25%

Students will conduct supervised research projects based upon research proposal completed in MUSIC 1011 A/B Research Studies(CASM) IMS. The course also explores present and future issues, directions and applications for research in music and society. The Field Studies trip to the Anangu Pitjantjatjara lands also provides an opportunity for students to further their critical exploration and reflection on the uses of research.

The course also includes classes presented by Visiting Lecturers from the Pitjantjatjara communities and may include some visits to prominent Kaurna events and places.

# MUSIC 2020A/B Practical Music Study II MS

- 4 units full year
- 1 hour individual lesson per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1009 A/B Practical Music Study IMS or, in exceptional circumstances, a Distinction (or higher) in MUSIC 1002 A/B Practical Music Study ICM
- Assessment: continuous progress 60%, semester exams 40%

One to one individual tuition on the student's selected instrument (or voice). Includes technical development, musical literacy, musicianship, repertoire and the use, care and maintenance of the instrument (or voice).

# MUSIC 2023A/B

### **Research Studies (CASM) II CM**

- 4 units full year
- 1.5 lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Prerequisite: MUSIC 1016 A/B Research Studies (CASM) ICM or MUSIC 1011 A/B Research Studies (CASM) IMS

Students to undertake supervised research projects of personal cultural significance in relation to music. The specific learning expectations and assessment requirements will be determined through consultation between the individual student, the course lecturer and the Academic Coordinator, and formalised through Individual Learning Contracts. In addition the Field Studies trip to the Anangu Pitjantjatjara Lands provides an opportunity for students to critically explore and reflect on the possible applications for their research.

# ACCOUNTING

# Level I

### ACCTING 1002

### **Accounting for Decision Makers I**

- 3 units semester 1 or 2
- 2 lectures, 1 tutorial, 6 hours self-directed study per week
- Eligibility: B.Com. students only in semester 1
- Available for non-award study semester 2 only
- Quota applies for semester 1
- Restriction: not to be counted with 3086 Financial Accounting IB

Assessment: written exam 50% - 80%, assignments as determined at preliminary lecture

This course considers the use of accounting information by external users and management. Topics include: accounting information in its decision making context; external financial reports; financing and business structures; financial statement analysis; the time value of money; capital budgeting; cost-volume-profit analysis; management accounting tools of analysis; and budgeting.

# ACCTING 1005

### Accounting Method I

- 3 units semester 1 or 2
- 2 lectures, 1 tutorial, 1 workshop, 6 hours selfdirected study per week
- Eligibility: B.Com. students only in semester 1, all students in semester 2
- · Quota will apply
- Restriction: not to be counted with 4359 Financial Accounting IA
- Assessment: exam, assignments as determined at preliminary lecture

Introduction to financial accounting including the principles of double-entry accounting and preparation of financial statements. Topics include worksheets, perpetual and periodic inventory systems, LIFO and FIFO, specialised journals and ledgers, subsidiary ledgers, bills receivable and payable, bad debts, and non-current assets.

# Level II

# ACCTING 2001

### Management Accounting II

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for non-award study
- Prerequisite: ACCTING 1002 Accounting for Decision Makers I
- Assessment: exam 50-80%, assignment & tutorial work as agreed in first lecture

This course provides an introduction to contemporary management accounting concepts and techniques. The topic addresses the role accountants play as providers of information for internal decision making purposes. Particular areas of emphasis could include: the tools used in the design and development of costing systems; preparation of budgets and their role as a planning and control tool; and other specific decision making tools, identifying relevant information, pricing decisions, inventory, and quality issues.

# ACCTING 2010

### Financial Accounting II

- 4 units semester 1
- 2 lectures, 1 workshop, 8 hours per week selfdirected study per week
- Available for non-award study
- Prerequisite: ACCTING 1005 Accounting Method I (at least 45%)
- Assessment: exam, assignments as determined at preliminary lecture

The aim of this course is to guide students in their acquisition of technical and problem solving skills in the area of corporate external financial reporting. Corporate external financial reporting comprises financial reporting by reporting entities to external stakeholders. It is mandatory for reporting entities to report in accordance with Australian accounting standards. Students in this course will gain skills in reading, interpreting and applying accounting standards. This course builds on introductory financial accounting. The course is essential for all individuals exposed to financial information in the workplace including accountants, auditors, financial analysts, managers, bankers and oversight bodies involved in the preparation or use of company financial statements. It would also be useful for those not wishing to become accountants but who plan to specialise in areas where accounting knowledge would be an advantage such as bankers and finance professionals, journalists, lawyers, and those interested in management positions including engineers and scientists.

# Level III

# ACCTING 3006

### Accounting Theory III

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for non-award study
- Prerequisite: ACCTING 2010 Financial Accounting II
- Assessment: 3 hour exam, assignments as determined at preliminary lecture

Topics may include accounting history, theory development in accounting, normative accounting theories, positive accounting theory, standard setting in a theoretical and political framework, ethics in accounting, behavioural accounting, and social and environmental accounting issues.

# ACCTING 3011

### **Corporate Accounting III**

- 4 units semester 1
- 2 lectures, 2-hour workshop, 8 hours per week self-directed study per week
- Available for non-award study
- Prerequisite: ACCTING 1005 Accounting Method I
- Assumed Knowledge: CORPFIN 2006 Business Finance II, ECOMMRCE 1000 Information Systems I and ACCTING 2010 Financial Accounting II - or similar syllabus content
- Assessment: 3 hour exam, work completed during course, as determined at preliminary lecture

Topics may include issue of shares, debentures, company reconstructions, accounts of liquidators and receivers; amalgamations and takeovers; inter-corporate investments and consolidated accounts; and joint ventures, foreign currency transactions and translation.

# ACCTING 3012

# Auditing III

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- · Available for non-award study
- Prerequisite: ACCTING 2010 Financial Accounting II
- Assumed Knowledge: Level I & II courses in relevant degree program
- Assessment: exam, assignments as determined at first lecture

Audit comprises a fundamental component of the recurrent and strategic activities of nearly all professional occupations. While a small group of jobs focus exclusively on internal and external audit tasks, the majority of commerce graduates will utilise the principles and practices of risk assessment, internal control, systems evaluation and forensic accountability in their professional lives. This course thus aims to provide an introduction to the principles and practices of auditing. In this context, it will also outline and critically examine contemporary audit issues and challenges.

# AGRICULTURAL BUSINESS

# Level I

# AGRIBUS 1009RW

### **Rural Business Planning A**

- 3 units semester 2
- 5 hours lecture/tutorial per week
- Assessment: Weekly tutorial exercises, case study, exam

The concepts involved in planning a farm business and determining options for land use and enterprise selection are presented and the financial tools for measuring farm performance including gross margins and cash flow budgets introduced. Topics include the farm as a system, perspectives of agriculture, management and business planning, options for land use, enterprise selection, production management, sustainability and capability of land for production, resource constraints, marketing in the business plan, physical and financial records, farm business administration, ethics and decision-making.

# AGRIBUS 2004WT

# **Issues in Australian Agribusiness II**

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: general marketing concepts
- Assessment: to be advised

This course focuses on current agribusiness issues in Australia. Of particular importance are inter-relationships between businesses and the macro environment. Topics will include world food balances, market failure, WTO, globalisation, value adding, diversification, quality and quality management, value chains and other developments in strategic marketing. Student seminar presentations are a critical component of this course.

# AGRIBUS 2009WT

# **Issues in Australian Agribusiness**

- 3 units semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: general marketing concepts
- Assessment: to be advised

This course focuses on current agribusiness issues in Australia. Of particular importance are inter-relationships between businesses and the macro environment. Topics will include world food balances, market failure, WTO, globalisation, value adding, diversification, quality and quality management, value chains and other developments in strategic marketing. Student seminar presentations are a critical component of this course.

# AGRIBUS 2016EX

# **Introduction to Business Management**

- 4 units semester 1
- External only
- Assessment: assignments, final exam

Introduction to management, evolution of management, management environments, decision making, planning, strategic management, organising, organisational structure, human resource management, managing change and innovation, behaviour, motivation, leadership, communication, control, operations management, international management.

# AGRIBUS 2033RW

### **Rural Finance and Marketing**

- 4 units semester 1
- 6 hours lecture/tutorial per week
- Assumed Knowledge: AGRIBUS 1009RW Rural Business Planning A
- Assessment: exam, assignments

Financial decision making: measuring business growth, assets, liabilities and equity, financial tools including profit and loss statements and balance sheets; comparative analysis and benchmarking; investment appraisal tools and investment decisionmaking including machinery; taxation and tax management; legal issues including land purchase and succession planning. Marketing: market analysis, targeting of products, pricing, promotion and distribution strategies, current developments.

# Level III

# AGRIBUS 3001RW

### **Economics of Resource Management III**

- 3 units semester 1
- 3 lectures, 1 tutorial/seminar per week
- Assessment: assignments, seminar presentation, exam

Principles of micro-economics as they relate to the allocation, use, and management of natural resources. Causes of market failure; and opportunities and scope for intervention and control. Introduction to some (alternative) paradigms of environmental management in development, including ecological economics. Developments re business and the natural environment.

# AGRIBUS 3010WT

# **International Agri-Business Environment**

- 3 units semester 2
- 3 hours lectures/seminars per week
- Assessment: to be advised

This course provides an overview of the international business environment within which agribusinesses function. Topics include Australian trade and investment policies, international

cooperation arrangements, legal and political issues, cross-cultural issues, strategies for entering foreign markets, strategic alliance issues, logistics, international human resource management issues, regional case studies. Student seminar presentations are a critical component of this course.

# AGRIBUS 3012RW

### **Rural Business Management**

- 3 units semester 1
- 5 hours lectures/tutorial per week
- Assumed Knowledge: AGRIBUS 2033RW Rural Finance and Marketing
- Assessment: case studies, tutorial exercises, exam

A case study approach incorporating financial, marketing and production and human resource management tools will be used and emphasis given to decision making techniques, technology adoption and management of risk, along with monitoring and evaluating the farm business. Topics include: agriculture in the economy, introduction to production economics, forward selling, futures and options, alternative enterprises/new industries and management of human capital.

# AGRIBUS 3015WT

# Special Project (Research Paper) B

- 3 units -
- Students work independently with supervisor/co-supervisor
- Assessment: seminar presentation, dissertation

Each student is to undertake an individual project of significant size which exhibits original investigation, analysis and interpretation, and which results in the production of a well-written and wellpresented report. The project may comprise a major literature review (at least 10000 words), research project, case study of a business or related enterprise, or some other approved study.

# AGRIBUS 3017WT

### **Business Management for Applied Sciences**

- 3 units semester 2
- 5 lectures/student centred learning per week
- Assessment: assignments, tutorial exercises, business plan, exam

The aim of this course is to provide perspective and understanding of the overall role of business and its place in the agricultural industry and the economy and to demonstrate linkages between various management functions. Aspects covered include what is business, business management, business planning, accounting management, marketing management, strategic planning, budgeting, decision making, organisation design, human resources management and monitoring.

# AGRIBUS 3041WT

### International Agribusiness Environment III

- 4 units semester 2
- 3 hours lectures/seminars per week
- Assessment: to be advised

This course provides an overview of the international business environment within which agribusinesses function. Topics include Australian trade and investment policies, international cooperation arrangements, legal and political issues, cross-cultural issues, strategies for entering foreign markets, strategic alliance issues, logistics, international human resource management issues, regional case studies. Student seminar presentations are a critical component of this course.

# AGRIBUS 3044RW

### **Individual Study Rural Enterprise Management**

- 3 units semester 2
- · Assessment: written report, seminar

A guided study program approved by the Course Adviser in an area applicable to the student and on a defined situation or problem.

# AGRIBUS 3047RW

# Organisational Management for Rural Enterprises

- 3 units semester 2
- · Assessment: assignments, exam

Organisational culture and environment, managerial ethics, strategic management and entrepreneurship, managing change and innovation, logistics, control and operations management, performance indicators.

# AGRICULTURE

# Level I

# AGRIC 1000RW

### Perspectives on Modern Agriculture

- 3 units semester 1
- An average of 6 hours per week including lectures, tutorials, &/or practicals
- Restriction: PLANT SC 1000 Environment and Society, PLANT SC 1000RW Environment and Society, AGRONOMY 1010RW Agricultural Production Systems
- · Assessment: assignments, written exam

The course examines important concepts and issues of modern agriculture in Australia and internationally. Perspectives on Modern Agriculture will provide an overview of the development of present-day agricultural systems, the successes and problems associated with this development and examine the opportunities for agricultural science to contribute to sustainable improvements in productivity and quality and to the development of new products and markets. The course will examine technological, economic and social drivers of change in modern agriculture and the response of the agricultural industries to these influences.

# Honours

# AGRIC 4001RW/WT

# **Honours Agricultural Science**

- 24 units full year
- 40 hours per week
- Prerequisite: credit or higher in 2 relevant Level III courses as approved by Head of Discipline

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

# AGRIC 4002RW Honours Agricultural Science

- 24 units full year
- 40 hours per week
- Prerequisite: credit or higher in two relevant Level III courses approved by Head of Discipline
- Assessment: thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises of a substantial research project of the student's choosing on a topic acceptable to the Head of School of Agriculture, Food and Wine, two seminars on that topic, and coursework, essays or other assignments deemed appropriate tot he individual student's honours program.

# AGRONOMY

# Level I

# AGRONOMY 1006ARW/BRW

### Agricultural Experience I

- 3 units full year
- 40 days practical agricultural experience, 5 days agricultural business experience, 12 x 3 hour demonstrations
- Assessment: assignments, practical experience, theory exam

Students are rostered on the agricultural enterprises of the Roseworthy campus farm where skills and knowledge in the practice of agriculture are developed. Practical demonstrations on a broad range of farm enterprise operations are presented and involve students in developing their skills and knowledge. Students are required to negotiate 5 days work experience with an agribusiness company which provides a service to the rural industry.

# Level II

# AGRONOMY 2008RW

### Agricultural Experience II

- 2 units semester 2
- 12 week day agricultural experience, 35 days off-campus farm experience, weekly tutorials
- Assessment: reports, seminars, practical experience

Students are rostered on agricultural enterprises where skills and knowledge in the practice of agriculture are developed. Student involvement on weekends includes taking responsibility for the operation of enterprises. Students are involved in the management of their elective enterprise and are required to undertake a problem solving contract which addresses the issues and provides practical recommendations. Students are required to undertake 35 days off-campus work experience on an approved farm, which will provide them with the opportunity to evaluate forms of agricultural productivity and management practices.

### AGRONOMY 2013RW

#### **Production Agronomy**

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: AGRIC 1000RW
   Perspectives on Modern Agriculture

This course delivers practical understanding of selection, establishment, management and utilisation of crops and pastures in the main rainfall and soil environments encountered in southern Australia. Topics include: weed, pest and disease management; species and cultivar identification, selection and use of crops and pastures; rotations and planning; tillage, nutrition and fertilisers; irrigated agriculture.

# AGRONOMY 2120RW

### Introduction to Engineering in Agriculture

- 2 units semester 1
- Average 4 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: SACE Stage 2 Mathematics 1
- Restriction: CHEM ENG 1001 Engineering Physics
- Assessment: practicals, assignments, project, exam

Engineering has made modern agriculture possible and knowledge of some aspects of this discipline may be used in the improved management of many enterprises. This course uses practical agricultural applications of engineering to illustrate engineering principles and assist managers. Topics in the course include tractor safety and performance, oil hydraulics, pumps, water supply systems, building materials, structural components, surveying, electrical supply systems and equipment and tension and electric fencing to illustrate the basic principles of engineering applied to machinery, fluids, structures and electricity.

# Level III

### AGRONOMY 3000RW

#### Agroforestry

- 3 units not offered in 2007
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assessment: written exam, planning assignment, practical

Topics include: Agroforestry for functional mimicry of natural ecosystems; Landuse systems with balanced water use; Trees for shelter, shade and soil conservation; Biodiversity and habitat management; Farm sawlog, firewood and pulpwood production systems; Trees in grazing and fodder systems; Specialty tree products; Integrated production systems; Design and evaluation of agroforestry; Establishing trees on farms; Socio-economic evaluation of agroforestry for the management of dryland salinity; Adoption of agroforestry in Australia; Institutions supporting the implementation of agroforestry.

# AGRONOMY 3004RW

#### Land Management Systems for the Future

- 3 units semester 2
- 6 hours per week
- Assumed Knowledge: AGRIC 1000RW
   Perspectives on Modern Agriculture
- Assessment: assignments, reports

Australia faces a number of constraints and uncertainties in achieving an effectively integrated approach to agricultural and natural resource management, including the biophysical environment, political/economic pressures, problems of scale and social/cultural factors. This capstone course in integrated, regional, environmental and land-use planning and management allows students to explore these issues, and any others they identify as relevant to their future. Topics include: natural resource accounting and the emergence of ecological economics, land ownership evaluation and legislative influences; current and future options for alternative land management systems; holistic management of on and off site impacts for intensive and extensive agri-industries; environmental management systems; alternative energy sources.

### AGRONOMY 3008RW

### Individual Studies (Ag.)

- 3 units semester 1 or semester 2
- Formal contact between student & supervisor during project by mutual agreement
- Assumed Knowledge: AGRONOMY 1006 ARW/ BRW Agricultural Experience I, AGRONOMY 2008RW Agricultural Experience II (B.Ag.)
- Assessment: contract/project

Either an individual project/case study of significant size which exhibits original investigation, analysis and interpretation, and results in the production of a well-written, wellpresented report. The project may comprise a major literature review, research project or some other approved study; or a self-directed consultancy/contact which involves the identification of a management issue on either a campus or external commercial enterprise.

# AGRONOMY 3012RW

### **Advanced Agronomy**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: AGRONOMY 2013RW Production Agronomy or PLANT SC 2001WT Agricultural Botany or ENV BIOL 2006 Botany II
- Assessment: exam, essays/practical report

This course aims to provide students with an understanding of some of the important physiological principles to crop and pasture production and how these principles can be applied to agricultural systems. The course has three modules: physiological bases of crop and pasture growth and resource utilisation, the use of simulation modelling to understand and explore the function of production systems and a series of case studies on topical issues related to crop and pasture production. Specific topics covered include water use and water use efficiency, dry matter production and partitioning, the dynamics of water and nitrogen balances in agricultural systems, competitive crops, abiotic stress and its management and high performance pastures.

# AGRONOMY 3016RW

#### **Crop and Pasture Ecology**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: PLANT SC 2001WT Agricultural Botany or ENV BIOL 2006 Botany II or AGRONOMY 2004 Land Management Systems for the Future or AGRONOMY 2013RW Production Agronomy
- · Assessment: exam, assignments

Crops and pastures are plant communities that are managed mainly for the production of food and fibre. Those used in agriculture range from natural vegetation to specialised, sown annual monocultures. It is important to understand how these communities function if they are to be productive. This course examines the structure and functioning of agricultural plant communities. Topics that will be covered include an examination of the similarities to, and differences between sown and natural communities, the effects of climate on the distribution and productivity of crops and pastures, interaction between a crop or pasture and its environment, competition, the impact of the grazing animal and the importance of genetic diversity among plants to adaptation to the environment and to agricultural productivity.

# AGRONOMY 3020RW

### **Principles and Practice of Communications**

- 3 units semester 1
- An average of 6 hours per week including lectures, tutorials, &/or practicals
- Assessment: exam, assignments, practical exercises

This course develops the communication skills and knowledge necessary for all levels of professional activity in rural resource management. Communication theory and context is discussed through topics of: extension science and technology transfer; adult and action learning theory; how groups work and facilitating community participation; gender and diversity; community-based natural resource management. Invited speakers from agribusiness, government, rural community and research sectors provide current and practical perspectives to this theory. Specific skills are developed in: oral presentation, selection and preparation of information and its presentation medium for a variety of audiences and purposes; interpersonal communication; conflict resolution and negotiation; leadership; the process of the planning and evaluation of communication programs; and job search and interview techniques.

# AGRONOMY 3026RW

### **Ecology and Management of Rangelands**

- 3 units semester 2
- Part semester, winter vacation includes day field camp
- Assumed Knowledge: APP ECOL 2010WT
   Population Ecology or SOIL&WAT 2001RW
   Community Ecology, or equivalent
- Assessment: project reports 50%, theory exam 50%

A course in ecology emphasising the study of interactions between grazing animals and the vegetation in arid areas, the principles involved and their application to management practices. Particular attention is paid to the impact of domestic, feral and native herbivores on the population dynamics of the dominant woody perennials, and the maintenance of their stabilising influence on the landscape. The bulk of the teaching is done at Middleback, a working sheep station set in the western myall woodlands on the southern margins of the north-west pastoral district of South Australia. The main focus on ecology of these arid woodlands and their highly productive saltbush-bluebush understorey, is taught in the context of the history of land use, subsequent research, the ensuing legislation, and its administration, with input from pastoralists and government officers where appropriate.

# AGRONOMY 3130WT

### Viticultural Engineering and Irrigation

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, practicals &/or field work
- Assumed Knowledge: CHEM ENG 1001 Intro to Process Engineering, SOIL&WAT 2013RW Intro to Engineering in Agriculture or equivalent
- Restriction: AGRONOMY 3005WT Irrigation Science
- Assessment: may include practical reports, assignments, trip reports, individual projects, exam

Students will be introduced to the concepts and techniques used in the engineering aspects of trellis design, tractor operation and maintenance, oil hydraulic systems and irrigation systems.

# Honours

# **AGRONOMY 4001RW**

# Honours Agriculture & Farming Systems (BAg)

- 24 units full year
- Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: research thesis, associated seminars remainder as deemed appropriate to student's program

This course comprises a substantial research project chosen by the student on a topic suitable to the Discipline. The results of the project will be presented in a written thesis and the presentation of a seminar. In addition, coursework, essays or other assignments deemed appropriate will be completed by the student after consultation with the Honours coordinator and approved by the Head of Discipline.

Intending students should consult the Head of Discipline and potential academic supervisors during the final year of their degree.

# AGRONOMY 4002RW

### Honours Agriculture & Farming Systems (BAgSc)

- 12 units full year
- Prerequisite: credit or higher in two level III courses relevant to the research topic and approved by Head of Discipline
- Corequisite: 2 additional level III courses relevant to the proposed research project and approved by Head of Discipline

Students wishing to undertake an Honours degree should consult the Honours Coordinator and the potential supervisors as soon as their intention in known, but no later than the end of semester 2 in the third year of their program. Studies commence at the beginning of February (normal intake) or July, (mid-year intake). A candidate will be required to undertake a research project under one or more members of the academic staff and present seminars and a thesis on their research work. The research project could be undertaken in one of the following areas: crop and pasture agronomy; weed ecology and management; plant ecology and farming systems; soil management; tillage effects and water use efficiency; agricultural engineering; agroforestry; communications and extension.

# AGRONOMY 4003RW

### Honours Agriculture & Farming Systems (BNRM)

- 24 units full year
- Prerequisite: at least credit standard in appropriate level II/III stream courses to the value of 9 units offered by the discipline or special permission of Head of Discipline
- Assessment: research thesis, associated seminar 50% as presented in course description

Candidates are expected to acquire a more detailed knowledge than is required in the degree. They are required to complete successfully 12 units of coursework including Research Methodology (4 units) and two of the following 4unit Level IV courses: Crops and Pastures, Dryland Farming Systems, Extensive Livestock, Rural Sociology, Social Psychology, Communications and Agricultural Extension, Agricultural Engineering. In addition, candidates are expected to study more deeply one branch of Agronomy and Farming Systems, by undertaking research to the value of 12 units in this field and to present the results in a written thesis and through the presentation of a seminar.

# ANATOMICAL SCIENCE

# Level I

# **ANAT SC 1102**

# **Human Biology IA**

- 3 units semester 1
- 3 lectures, 3 hours tutorial/laboratory work per week
- Eligibility: B.Hlth.Sc. & B.Psych (Hons) students only or permission of course coordinator
- · Available for Non-Award Study
- Assessment: competency exercises, laboratory & tutorial tests, written exam

Human Biology is the study of human life. As such, Human Biology incorporates a variety of disciplines and focuses on issues that affect humans at the individual, populations and species levels. As well as introducing students to content, emphasis is placed on developing skills in researching, critically analysing and communicating scientific information relevant to the study of humans. Human Biology IA investigates the relationships between normal structure and function in human cells, tissues and organs, along with mechanisms that maintain homeostasis within an individual.

# ANAT SC 1103

### Human Biology IB

- 3 units semester 2
- 3 lectures, 3 hours tutorial/laboratory work per week
- Eligibility: B.Hlth.Sc., B. Psych.(Hons) students only or permission of course coordinator
- Available for Non-Award Study
- Assumed Knowledge: Human Biology IA
- Assessment: laboratory report, group poster presentation, written exam

Human Biology is the study of human life. As such, Human Biology incorporates a variety of disciplines and focuses on issues that affect humans at the individual, population and species levels. As well as introducing students to content, emphasis is placed on developing skills in researching, critically analysing and communicating scientific information relevant to the study of humans. In Human Biology 1B, the focus is primarily on factors that influence and shape human populations and the human species. Topics include human evolution, genetics and diversity, reproduction, human disease and defence systems, and interactions between humans and their environment.

# Level II

# ANAT SC 2102

# Cells, Tissues & Development II

- 4 units semester 1
- 3 lectures, 2.5 hours tutorial/practical work per week
- Eligibility: B.Hlth.Sc, B.Psych. (Hons) students only
- Assumed Knowledge: ANAT SC 1102A/B Human Biology I or equiv.
- Assessment: final written & practical exams 60%, mid-semester test, tutorial papers, seminars, slide description 40% - details provided at commencement of course

The histology component of the course investigates the light and electron microscopic structure of organs and systems of the human body and their relationships to function and builds upon knowledge of basic tissues gained in Human Biology I. Emphasis is placed on the interrelationships between various tissue types comprising an organ or a system and on structure/function relationships in healthy individuals. Topics investigated include blood and haemopoiesis, the respiratory, cardiovascular, lymphoid, renal, digestive, endocrine and reproductive systems. The embryology component focuses on the morphological development of the early conceptus, including fertilisation, implantation, early differentiation and the structural aspects of maternal-embryonic interactions.

Practical and tutorial sessions provide opportunities for visual investigation of material and expansion of concepts presented in the lectures.

# **ANAT SC 2103**

### **Functional Human Anatomy II**

- 4 units semester 2
- 3 lectures, 3 hours tutorials/practicals per week
- Eligibility: B.Hlth.Sc., B. Psych. (Hons) students only or permission of course coordinator
- Assumed Knowledge: ANAT SC 1102A/B Human Biology I or equiv.
- Restriction: 6498 Human Biology II
- Assessment: written & practical exams, dissection project, continuous assessment

Students will be introduced to the basic principles of anatomy as well as study in detail the clinical and functional anatomy of the human musculoskeletal system. Teaching sessions will include lectures, tutorials, student presentations and practicals, which make use of both prosections and dissection. In addition to formal teaching sessions, students must undertake a research project, the results of which will be reported as a spoken presentation. The content will include detailed information, including that from imaging techniques, on the anatomy of the lower limb, upper limb, vertebral column, pelvis and head with emphasis on the musculoskeletal and nervous system. In addition, students will study the more advanced functional aspects of muscle and joint anatomy.

# ANAT SC 2104 Cells and Tissues II

- 4 units semester 1
- 3 lectures, 1 tutorial, 2 hours practical per week
- Assumed Knowledge: Biology 1101/1102, Biology 1: Molecules, Genes and Cells A/B or Biology 1201 Biology 1: Human Perspectives or Biology 1202 Biology 1: Organisms, or equiv.
- Restriction: 7996 Functional and Comparative Anatomy II
- Assessment: final written & practical exams 60%, mid-semester test, tutorial & practical assignments 40% - details provided at commencement of course

This course considers the structure and function of cells and tissues of the mammalian body. Study of ultrastructural characteristics of the typical mammalian cell is followed by consideration of the structure of tissues, organs and systems. The features of the cells, their arrangement and their intercellular products are considered with emphasis on the relationship between microscopic structure and function. Human examples are mainly used with some material from other mammalian species. Routine techniques used for the study of cells and tissues at the light and electron microscopic levels as well as the principles of microscopy are presented early in the course.

Practicals have a problem-solving approach and illustrate topics covered in lectures. Weekly tutorials form a large component of the continuous assessment and give students regular feedback information on their progress in the course. Students are also given the opportunity to view the transmission and scanning electron microscopes.

# ANAT SC 2105

#### **Comparative Anatomy of Body Systems II**

- 4 units semester 2
- 3 lectures, up to 6 hours of practical per week
- Assumed Knowledge: Biology 1202 Biology 1: Organisms or equiv.
- Restriction: ANAT SC 2008 Functional and Comparative Anatomy II
- Assessment: written exam 60%, continuous assessment 40%

This course studies how body structures relate to the functional needs of different vertebrate

groups. The functional anatomy of human body systems is used as a template to compare these systems in other vertebrate animals, particularly mammals. In practicals systems are examined using human and mammalian prosected body components and skeletons. Some practical sessions include dissection of selected vertebrate groups.

### ANAT SC 2106

#### Ethics, Science and Society II

- 4 units semester 1
- 4 hours lectures, tutorials/PBL sessions per week
- · Available for Non-Award Study
- Prerequisite: Level I courses to value of 12 units
- Assessment: tutorial participation, case presentation/analysis, essay, reports - total approx.6000 words

This course aims to develop students' awareness of the ethical and social challenges in the health sciences. It is suitable for health sciences, science and humanities and social science students. Topic areas may include ethical analysis of the following; research practice; reproduction and reproductive technologies; genetics; animal and human experimentations; death and dying. The focus on these topical issues in modern sciences will be underpinned by an introduction to the philosophy of science and methods in bioethics.

# Level III

### **ANAT SC 3101**

### **Biological Anthropology**

- 3 units semester 2
- Assumed Knowledge: ANAT SC 2105 Comparative Anatomy of Body Systems, ANAT SC 2103 Functional Human Anatomy or equiv. approved by Head of Department
- Assessment: written exam 55%, research project 45%

The objectives of this course are to appreciate the biological nature of humans and to appreciate the biological variability of humans. Our evolutionary origins are discussed as well as place of humans in nature. Students will learn skills in anthropometric examination and in skeletal identification for forensic and archaeological purposes. Aspects of Biological Anthropology such as dental anthropology and paleopathology will also be presented. Students will be required to complete a research project and actively participate in seminars and discussion sessions. Lecture topics include: the place of humans in nature, hominid evolution and its mechanisms, recent human evolution and human evolutionary future, modern human biological variation, primatology, human population dynamics and ecology, human physical growth and development, osteology and forensic applications of anthropology. Research skills are learned in a problem based, self-directed mode.

# ANAT SC 3102

#### **Comparative Reproductive Biology of Mammals**

- 3 units semester 1
- 2 lectures, 4 hours practical/tutorial work per week
- Assumed Knowledge: ANAT SC 2102 Cells, Tissues and Development II or ANAT SC 2104 Cells and Tissues II or ANAT SC 2103 Functional Human Anatomy or ANAT SC 2105 Comparative Anatomy of Body Systems, or equiv.
- Assessment: written exam 80%, project/ essay 20%

This course covers a study of mammalian reproductive biology with emphasis on the cell biology of various reproductive processes. The first few lectures cover sex determination and sex differentiation together with the development of the gonads, gonadal ducts and external genitalia. The differentiation, and dynamics of production, of the male and female gametes are then considered together with changes that occur to the spermatozoon during transit of the male and female genital ducts. The cell and molecular biology of sperm-egg interactions and fertilisation are then given, followed by the processes involved in egg activation and differentiation of the early conceptus. An account of macromorphological and cellular changes associated with implantation, placentation and lactation in various groups of mammals are then covered. The causation of, and ways of overcoming, infertility in the human species and the biological principles underlying contraceptive technology are then detailed. Finally the application of assisted reproductive technology to conservation of rare and endangered species is considered. Students have either to carry out a research project in which experience in the use, and application, of a variety of light and electron microscopical procedures to a study of reproductive biological processes is

obtained, or to write an in depth essay on a specialised topic of reproductive biology.

### **ANAT SC 3103**

#### **Integrative and Comparative Neuroanatomy**

- 3 units semester 1
- 2 lectures, 4 hours practical work a week
- Assumed Knowledge: ANAT SC 2102 Cells, Tissues & Development II or ANAT SC 2104 Cells and Tissues II or ANAT 2103 Functional Human Anatomy II or ANAT SC 2105 Comparative Anatomy of Body Systems II or equiv..
- Restriction: Head and Neck and Neuroanatomy, Neuroanatomy and Neuroendocrinology, Special Sense Organs
- Assessment: project (including seminar) 20%, practical exam 20%, written exam 60%

This course has as its base the functional anatomy of the human nervous system. It also deals with (i) the comparative morphology and evolution of the vertebrate central nervous system and (ii) the structure and function of sense organs and how sensory information is processed and integrated by the central nervous system. The human neuroanatomy component focuses on the main subdivisions of the brain and spinal cord, sensory and motor pathways, pain and thermoregulatory mechanisms and neural degeneration and regeneration. The comparative component will cover the functional morphology and evolution of visual and auditory reception and processing in different environments, extra-retinal photoreceptors and their role in circadian rhythms, and chemo-receptive mechanisms. Some lesser known sensory systems will be examined such as infrared receptors of snakes. Practicals will include a study of human and other vertebrate brains as well as a small dissection or analytical research project.

# **ANAT SC 3104**

### **Structural Cell Biology**

- 3 units semester 2
- 2 lectures, 4 hours tutorial/practical work a week
- Assumed Knowledge: ANAT SC 2104 Cells and Tissues II or ANAT SC 2105 Comparative Anatomy of Body Systems II or ANAT SC 2103 Functional Human Anatomy II or ANAT SC 2102 Cells Tissues & Development or equiv.
- Restriction: 7997 Topics and Techniques in Cytology

 Assessment: written 60%, practical/project/ presentation 40%

This course presents a wide coverage of the techniques used in morphological studies of cells. The course considers how specific techniques and methods such as different types of electron and light microscopy, tissue preparation and (immuno) histochemistry, autoradiography and stereology are used to study structural cell biology. Principles, theory and application are emphasised rather than acquisition of technical expertise. A number of special topics in structural cell biology are studied and used as practical examples of some current research trends in research in structural cell biology.

### **ANAT SC 3105**

#### **Limb Dissection**

- 3 units semester 2
- 3 hour practical session per week
- Eligibility: MBBS level 2 students only
- Assessment: 2x30 min spotter exams 15% each, research project 25%, research project defence 15%, dissection practical 30%

This course will involve a study of the functional anatomy of the limbs through dissection and the study of prosected specimens, radiographs, CT scans and MRI scans. Students will dissect upper and lower limbs as well as complete a research project. The research project will involve the investigation of a clinical problem through dissection. Students will either select a clinical problem from a list provided by staff or they can suggest a problem that is of interest to them. Students will work in groups of 3 and will be expected to undertake appropriate library research prior to beginning the research project. They will also be expected to either (1) prepare and defend a video illustrating their project or (2) prepare and defend a poster illustrating their project.

# **ANAT SC 3106**

### **Ethics, Science and Society III**

- 6 units semester 1
- 4 hours lectures, tutorials/PBL sessions per week
- Eligibility: B.Hlth.Sc, B.Psych (Hons) students only
- Prerequisite: Level II courses to value of 12 units
- Restriction: ANAT SC 2106 Ethical Issues in the Biomedical Sciences II (Pass)

 Assessment: tutorial participation, case presentation/analysis, essay, reports, to total of approx. 9000 words

This course aims to develop students' awareness of the ethical and social challenges in the health sciences. It is suitable for health science, science, and humanities and social science students. The topic areas may include ethical analysis of the following: research practice; reproduction and reproductive technologies; genetics; animal and human experimentation; death and dying. The focus on these topical issues in modern science will be underpinned by an introduction to the philosophy of science and methods in bioethics.

# **ANAT SC 3108**

### Applied Anatomy of Cranial Nerves by Dissection

- 3 units semester 1
- 3 hours
- Eligibility: year 3 MBBS students only
- Prerequisite: Year 1 & 2 MBBS successful completion
- Assessment: monitoring & evaluation of the quality of the dissection 20%, a practical midsemester test 10% & practical 20%, written examat end of semester 50%

The course aims to study the structure and function of the cranial nerves by dissection. It involves the study of the deep cranial nerve nuclei, intracerebral course of the nerves, superficial attachments to the brain surface, intracranial course, relations to the dura and foramina of the skull, extracranial course, distribution of structures in the head and neck, function of each nerve, the basis of clinical examination of various nerves and interpretation of deficits. The principal mode of learning is by dissection of the human body.

# Honours

### **ANAT SC 4000**

### **Honours Anatomical Sciences**

- 24 units full year
- Prerequisite: credit standard in appropriate level III courses in Anatomical Sciences or other comparable biological courses - subject to departmental approval
- Assessment: research project research grant proposal, thesis/journal article, seminar and

thesis defence 65%, components non related to the research project - essay & seminar 35%

The research project will be carried out under the guidance of a mentoring academic staff member, the supervisor. In addition, each student will also have an academic mentor. The Honours program is of 40 weeks duration and enrolments are in December/January for the February program. Prospective candidates should consult the Honours coordinator and the potential supervisor towards the end of their final year of the degree program in order to secure a place in the Honours program. More information can be found at www.adelaide. edu.au/health/anat/students/ honours.html

# ANCIENT GREEK

### Level I

# AGRE 1101 Ancient Greek I

- 3 units semester 2
- 3 contact hours per week
- · Available for Non-Award Study
- Prerequisite: AGRE 1102 Introduction to Latin and Ancient Greek I (or equivalent)
- Restriction: not available to students with satisfactory level of achievement in Year 12 Ancient Greek or equivalent
- Assessment: 4 semester tests 40%, end of semester exam 60%

The course is a continuation of AGRE 1102 Introduction to Latin and Ancient Greek I. It introduces students to some of the more complex grammatical constructions of Ancient Greek with a view to enabling them to read and comprehend (modified) texts in the original language. Students are required to complete a variety of language tasks including translation both into and from Ancient Greek and answering comprehension questions on passages in Ancient Greek. This course develops students' ability to identify and analyse sophisticated grammatical constructions and improves their comprehension skills.

# AGRE 1102

# Introduction to Latin and Ancient Greek I

- 3 units semester 1
- 4 contact hours per week, 4 extra hours per semester for tests
- Available for Non-Award Study
- Restriction: not available to students with satisfactory level of achievement in Year 12 Latin & Ancient Greek (or equivs) - students with only one of these languages may be allowed to enrol (apply to Classics language coordinator)
- Assessment: 4 semester tests 40%, end of semester exam 60%

The course aims to familiarise students with traditional grammatical concepts and parts of speech while helping them to gain mastery over the alphabets and basic vocabulary of both Latin and Ancient Greek. It also introduces the concept of an inflected language, that is, a language that relies on word modification to convey different meanings, unlike English, which relies on word order. This course has value both as a preparation for the study of Latin and/or Ancient Greek in subsequent semesters and as an independent course for deepening understanding of how languages, including English, function. Students are required to complete a variety of tasks, including exercises on English grammar and exercises on translating both from and into Latin and Ancient Greek.

# Level II

# AGRE 2002

# **Ancient Greek IIA**

- 4 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: AGRE 1101 Ancient Greek I (or equiv) or satisfactory achievement in Year 12 Ancient Greek
- Assessment: semester tests 40%, 3 hour exam on translation, grammar & comprehension 60%

This course aims to consolidate students' understanding of the more complex and sophisticated grammatical constructions of the Greek language while introducing them to the reading of (modified) texts written in the original language. Two hours per week will be devoted to the study of grammar and syntax in which students will be required to complete a variety of language tasks including translation both into and from Ancient Greek. One hour per week may be devoted to the reading of (modified) passages from Greek texts, including unseen comprehension.

# AGRE 2003

### **Ancient Greek IIB**

- 4 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: AGRE 2002 Ancient Greek IIA (or equiv)
- Assessment: 2 grammar tests during semester 10%, 2 end-of-semester exams: preparation text & discussion text 50%, ability in unseen translation 40%

The course aims to: 1) consolidate and improve reading skills and understanding of grammatical constructions; 2) enhance ability to comprehend and interpret Greek literature; 3) give students an understanding and appreciation of the literature and culture of Ancient Greek society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation.

# AGRE 2101

# **Ancient Greek IIS**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: acceptance for Honours, AGRE 2102 Introduction to Latin and Ancient Greek IIS (or equiv)
- Restriction: not available to students with a satisfactory level of achievement in Year 12 Ancient Greek (or equiv)
- Assessment: 4 semester tests 40%, end of semester exam 60%

The course is a continuation of AGRE 2102 Introduction to Latin and Ancient Greek IIS. It introduces students to some of the more complex grammatical constructions of the Ancient Greek language and expands their Ancient Greek vocabulary with a view to enabling them to read and comprehend (modified) texts in the original language. Students are required to complete a variety of language tasks including translation both into and from Ancient Greek and answering comprehension questions on passages in Ancient Greek. This course develops students' ability to identify and analyse sophisticated grammatical constructions and improves their comprehension skills.

### **AGRE 2102**

#### Introduction to Latin and Ancient Greek IIS

- 4 units semester 1
- 4 contact hours per week, 4 extra hours per semester for tests
- · Prerequisite: acceptance for Honours
- Restriction: not available to students with satisfactory level of achievement in Year 12 Latin & Ancient Greek (or equiv.) - students with only one of these languages may be allowed to enrol (apply to the Classics language coordinator)
- Assessment: 4 semester tests 40%, end of semester exam 60%

The course aims to familiarise students with traditional grammatical concepts and parts of speech while helping them to gain mastery over the alphabets and basic vocabulary of both Latin and Ancient Greek. It also introduces the concept of an inflected language, that is, a language that relies on word modification to convey different meanings, unlike English, which relies on word order. This course has value both as a preparation for the study of Latin and/or Ancient Greek in subsequent semesters, and as an independent course for deepening understanding of how languages, including English, function, Students are required to complete a variety of tasks, including exercises on English grammar and exercises on translating both from and into Latin and Ancient Greek.

# Level III

### **AGRE 3002**

#### **Ancient Greek IIIA**

- 6 units semester 1
- 3 contact hours per week
- · Available for Non-Award Study
- Prerequisite: AGRE 2003 Ancient Greek IIB or equiv.

 Assessment: sentences/proses during semester 15%, 3 exams: preparation text & discussion text 30%, unseen translation & translation from English 40%, private reading text 15%

The course aims to: 1) enable students to gain complete mastery over the language structure; 2) improve their reading skills over a variety of genres and writing styles; 3) enhance their understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension and translation from English: in this class, students will be expected to hand up work for assessment. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation. In addition, a text is to be read privately during the semester, for examination at the end.

# AGRE 3003

# Ancient Greek IIIB

- · 6 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: AGRE 3002 Ancient Greek IIIA (or equiv)
- Assessment: sentences/proses during semester 15%, 3 exams: preparation text and discussion text 30%, unseen translation & translation from English 40%, private reading text 15%

The course aims to: enable students to gain complete mastery over the language structure; improve their reading skills over a variety of genres and writing styles; enhance their understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension and translation from English: in this class, students will be expected to hand up work for assessment. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation. In addition, a text is to be read privately during the semester, for examination at the end.

# AGRE 3011

# Ancient Greek IIISA

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: acceptance for Honours and AGRE Ancient Greek IIS (or equiv)
- Assessment: semester tests 40%, 3-hour exam on translation, grammar & comprehension 60%

This course aims to consolidate students' understanding of the more complex and sophisticated grammatical constructions of the Greek language while introducing them to the reading of (modified) texts written in the original language. Two hours per week will be devoted to the study of grammar and syntax in which students will be required to complete a variety of language tasks including translation both into and from Ancient Greek. One hour per week may be devoted to the reading of (modified) passages from Greek texts, including unseen comprehension.

# AGRE 3012

# Ancient Greek IIISB

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: acceptance for Honours, AGRE 3011 Ancient Greek IIISA (or equivalent)
- Assessment: 2 grammar tests during semester 10%, 2 end-of-semester exams: preparation text and discussion text 50%, ability in unseen translation 40%

The course aims to: consolidate and improve reading skills and understanding of grammatical constructions; enhance ability to comprehend and interpret Greek literature; give students an understanding and appreciation of the literature and culture of Ancient Greek society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation.

# Honours

# **AGRE 4401**

### **Honours Ancient Greek**

- 24 units full year
- Prerequisite: UG degree, credit average in courses contributing to major in Ancient Greek (or equiv. approved by Head of Discipline)
- Assessment: texts assessed by exams and/or 6000 words of essay writing 33%; contrib. to common course, 3000 word seminar paper 12%; proses, exam on unseen & prose translation 13%; 12500-15000 word dissertation 42%

Students wishing to take Honours Ancient Greek should consult the Honours Coordinator prior to commencing level II to ensure that appropriate course choices are made in preparation for Honours. The exact arrangement of the course may be varied by the Head of the Discipline in accordance with the interests of the students and the availability of specialised teaching. In some circumstances, Honours Ancient Greek can be studied part-time over two years or can be combined with Honours in Latin or courses in another discipline.

# ANIMAL SCIENCE

# Level I

# ANIML SC 1014RW

# Fauna Management

- 3 units semester 2
- Presented online, 5 day field camp in midsemester break
- Restriction: ANIML SC 2014RW Wildlife
   Management
- Assessment: theory examination (online), essays, online discussion group

The course deals with the survey and management of captive and wild populations of vertebrate animals. Topics covered include: the reasons for management; conflicts between humans and wildlife; the philosophical rationale for maintaining captive collections; development of ecologically based management strategies for the purpose of conservation; management of endangered species; management of harvested and pest populations; legal and administrative framework; the impact of diseases on wild animal populations. The course is structured as a guided reading course focussing on scientific papers dealing with populations of wild animals.

### Level II

# ANIML SC 2014RW

# Wildlife Management

- 4 units semester 2
- Presented online, 5 day field camp in midsemester break
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms or APP ECOL 1003RW Biology of Plants and Animals
- Restriction: ANIML SC 1014RW Fauna Management
- Assessment: theory examination (online), essays, online discussion group, trip report

The course deals with the survey and management of captive and wild populations of vertebrate animals. Topics covered include: the reasons for management; conflicts between humans and wildlife; the philosophical rationale for maintaining captive collections; development of ecologically based management strategies for the purpose of conservation; management of endangered species; management of harvested and pest populations; legal and administrative framework; the impact of diseases on wild animal populations. The course is structured as a guided reading course focussing on scientific papers dealing with populations of wild animals. The course is complemented by a day trip to a wildlife management institution.

# ANIML SC 2029WT

#### **Genes and Inheritance**

- 4 units semester 2
- Prerequisite: Full year of Level I Biology or equiv.
- Assessment: mix of practical reports, presentations, tests, final exam

The nature and structure of genetic material and the role of genes in determining the characteristics of organisms. The basis of inheritance and utilisation of variation in breeding programs and natural selection. The relationship between genetics and the composition of natural and managed populations. The role of new technologies in genetic improvement will be discussed.

# ANIML SC 2030RW

### **Livestock Production Science**

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOLOGY 1101/1102 Biology 1: Molecules, Genes and Cells A/B, BIOLOGY 1202 Biology I: Organisms or APP ECOL 1004RW Cell Biology & Genetics and APP ECOL 1003RW Biology of Plants & Animals
- Assessment: practical reports, written papers, tests, final exam

Livestock Production Science deals with the application of science to animal production systems. The primary species are sheep and cattle but with reference to other species. Topics include on-farm management to maximise profit and quality, animal welfare and handling, meat, milk and wool processing. A major focus is grazing management and supplementary feeding common to all systems. The course also includes anatomy and physiology of muscles, skin, and the mammary system. Practicals include modelling production systems, assessing product quality, assessing live animals, and field trips

# ANIML SC 2031RW

### **Companion Animal and Equine Studies**

- 4 units semester 1
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOLOGY 1102 Biology I: Molecules, Genes and Cells B and BIOLOGY 1202 Biology I: Organisms, or APP ECOL 1004RW Cell Biology & Genetics and APP ECOL 1003RW Biology of Plants & Animals
- Assessment: practical reports, tests, final exam

The origins of companion animals. The historical role of the horse as a means of transport. The role of dogs, cats and other companion animals in modern Australian society. The role of dogs, cats and horses in other cultures. Breeds and terminology. Handling, husbandry and management of the common types of companion animals.

# ANIML SC 3015RW

### **Animal Nutrition and Metabolism**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science
- Restriction: ANIML SC 3010RW Diseases & Nutrition of Livestock
- Assessment: exam, practicals, assignments

This course will discuss the principles and application of animal nutrition across a range of species, focusing mostly, although not exclusively, on livestock species. Students will develop an understanding of the nutritional components of feedstuffs and nutrient requirements, including requirements for energy, protein, carbohydrate, fat, minerals and vitamins. The effects of nutrient supply on growth, reproduction, body composition (eg, fatness), health and welfare and product quality (for agricultural animals) are considered. The hormonal regulation of nutrient partitioning is also discussed, with particular reference to the changing requirements associated with growth, pregnancy and lactation. The role of nutritionists in animal-based enterprises, including the use of least-cost ration formulation is discussed. The course includes lectures and practicals, including hands-on animal trials.

### ANIML SC 3016RW

#### **Animal Health**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science, ANIML SC 3017RW Comparative Animal Physiology
- Restriction: ANIML SC 3010RW Diseases & Nutrition of Livestock, ANIML SC 3016RW Animal Health and Welfare
- Assessment: exam, essay, practical reports

Basic pathology, immunology, and epidemiology. Common diseases of Australian native animals and farm animals caused by viral, bacterial, fungal and parasitic infections. Non-infectious diseases including metabolic disturbances, trace element deficiencies and genetic diseases.

#### ANIML SC 3017RW

#### **Comparative Animal Physiology**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, θ/or practicals
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science
- Restriction: ANIML SC 2015RW Physiology of Farm Animals
- Assessment: exam, practicals, assignments

This course deals with animal physiology: the tissues; physiology of the major systems including skeletal and muscular, circulatory, respiratory, digestive, excretory, nervous, endocrine, reproductive, environmental physiology.

### ANIML SC 3018RW

#### **Pig Production - Science into Management**

- 3 units summer semester
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science
- Restriction: ANIML SC 3001RW Intensive Livestock Management
- Assessment: to be advised

Pork is the most consumed meat in the world and the second largest agricultural commodity. The management of modern pork production systems is based on detailed information on all aspects of the enterprise, including genetics and breeding, animal nutrition and growth performance, environmental and welfare requirements, health status, reproductive efficiency and product (meat) quality. This course will consider the advantages and disadvantages of various modern pork production systems (including welfare considerations, economic factors, the demand for product consistency, food safety issues, and other consumer expectations). The main factors that are required for the successful management of pigs are discussed, focusing on the management of suckling piglet, the weaner/grower pig and the breeding sow. This course is offered by the National Centre for Pork Industry Training and Education, based at Roseworthy Campus. It includes lectures: site visits to commercial operations, and other practical sessions. It is intended that students completing the course will understand both commercial pork production and the science that underlies it

# ANIML SC 3019RW

#### **Ecology and Management of Vertebrate Pests**

- 3 units summer semester
- 10 days during summer vacation
- Quota will apply
- Assumed Knowledge: ENV BIOL 2003 Ecology EBII or ENV BIOL 2001 Evolutionary Biology EBII
- Assessment: exam, written assignments

This course strongly emphasises the field application of vertebrate pest control techniques and provides the theoretical bases for these techniques. Topics covered are the biology and ecology of vertebrate pests; the damage caused by pest animals; the legislative and administrative aspects of vertebrate pest control; district organisations; extension; vertebrate pest control practice.

# ANIML SC 3043RW

#### **Biotechnology in the Animal Industries**

- 3 units summer semester
- February workshop
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science and ANIML SC 2029WT Genes and Inheritance or equiv.
- Assessment: written assignment, practical report, participation

The application of biotechnology to the animal industries will be examined. Challenges facing the intensive and extensive livestock industries will be explored, discussed and debated in the context of biotechnologies that may be applied in these industries.

The technologies of artificial insemination, in-vitro fertilisation, embryo transfer and animal cloning are introduced with some practical exposure. The use of reproductive and genetic technologies to maximise responses to selection are examined for a range of livestock industries. The design of breeding programs will be explained including definition of breeding objectives.

# ANIML SC 3045RW

#### **Animal Breeding and Genetics**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: ANIML SC 2028WT Genes and Inheritance or APP ECOL 1004RW

Cell Biology & Genetics and APP ECOL 1003RW Biology of Plants & Animals, ANIML SC 2030RW Livestock Production Science

- Restriction: PLANT SC 3007WT Introductory Plant & Animal Breeding, PLANT SC 3018WT Advanced Plant & Animal Breeding
- Assessment: to be advised

The application of scientific methods to animal breeding has led to major improvements in the output, cost and quality of meat, milk and fibre. In addition, animal breeding plans are important for continued improvement of companion animals and management of endangered species. Topics include an introduction to quantitative genetics, maximising response to selection, crossbreeding, estimation of genetic parameters and breeding values, mode of inheritance, mating systems, fitness and quality traits, animal diversity, development of breeding programs, use of biotechnology in breeding programs including gene mapping and parentage testing. Examples will be drawn from Australia's livestock industries as well as wildlife and companion animals.

# ANIML SC 3100RW

#### Laboratory Animal Science

- 3 units semester 1
- 2 lectures, 1 tutorial, 1 practical per week
- Corequisite: ANIML SC 3017RW Comparative Animal Physiology
- Assumed Knowledge: BIOLOGY 1101/1102 Molecules, Genes & Cells; BIOCHEM 2106WT Biochem (Agric) A
- Assessment: to be advised

This course aims to instil the major principles of the study of laboratory animals and their utilisation for teaching, research and commercial purposes. This will include developing a scientific understanding of the applications and limitations of various laboratory animal species in addition to practical experience in animal handling and other procedures.

Topics will include animal handling, breeding, feeding, maintenance, minor interceptions and minor surgical procedures. Students will be involved with a research project in which relevant aspects of laboratory animal science will be undertaken. Species studied will include mice, rats, guinea pigs and rabbits. The student will become familiar with processes associated with induction of gastrointestinal diseases and disorders which affect humans, in rats and mice. These disorders could include chemotherapyinduced mucositis, gastric ulceration and inflammatory bowel disease. Students will also be exposed to the ways in which the animal models can be utilised, for example, in the testing of new treatment modalities.

# ANIML SC 3230RW

#### Animal Behaviour, Welfare and Ethics

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Eligibility: BSc (Animal Science) students only
- Assessment: exam, assignments & practical reports

Communication, aggression, learning; their development in animals. Sexual and maternal behaviour. Abnormal behaviours, particularly in captive wild animals. The philosophy of human dominion over animals. Human and humane treatment of animals. Measures of stress and strain. Animal welfare legislation

# Honours

# ANIML SC 4000RW

# Honours Animal Science (BAg)

- 24 units full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: research thesis, associated seminars - remainder as deemed appropriate to student's program

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline Agricultural and Animal Science, as well as coursework, essays or other assignments deemed appropriate to each students Honours program.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the ordinary degree and be prepared to begin studies in the Discipline at the beginning of February, or other vacations.

# ANIML SC 4001RW/WT Honours Animal Science (BAgSc)

- 12 units full year
- Students must consult Head of Discipline preferably before beginning 3rd year, or 4th year

Candidates will be required to undertake a research project under the supervision of one or more members of the Academic staff and present seminars and a thesis on their research work. Candidates will also participate in tutorials and journal club. The research project can be undertaken in any area of animal science or production supported by the Discipline.

Interested candidates should consult with the Head of Discipline of Agricultural and Animal Science and potential supervisors during the third year of the degree, and be prepared to begin studies at the beginning of February or July (mid year intake).

# ANIML SC 4002WT

#### **Honours Animal Science (BAg)**

- 24 units full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by the Head of Discipline
- Assessment: research thesis, associated seminars - remainder as deemed appropriate to students program

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline of Agricultural and Animal Science, as well as coursework, essays or other assignments deemed appropriate to each students Honours program.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the degree.

# ANIML SC 4003RW Honours Animal Science (BNRM)

# • 24 units - full year

- Prerequisite: credit or higher in at least 2 Level III courses approved by the Head of Discipline
- Assessment: to be advised

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline of Agricultural and Animal Science, as well as coursework, essays or other assignments deemed appropriate to each student's Honours program.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the degree and be prepared to begin studies in early February, or other vacations.

#### ANIML SC 4004RW

#### **Honours Animal Science**

- 24 units full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by the Head of Discipline
- Assessment: research thesis, associated seminars - remainder as deemed appropriate to student's program

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline of Agricultural and Animal Science, as well as coursework, essays or other assignments deemed appropriate to each student's Honours program.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the degree and be prepared to begin studies in early February, or other vacations.

#### ANIML SC 4005RW

#### Honours Environmental Science (Animal Sc.)

- 12 units full year
- Prerequisite: credit or higher standard in at least 2 Level III courses approved by Head of Discipline
- Corequisite: research project undertaken at the same time as corequisite coursework (4 Level III courses relevant to student's Honours project & approved by Head of Discipline, 12 units)
- Assessment: research proposal, seminars, thesis, viva voce, average of specified 4 Level III courses

Intending candidates should consult potential supervisors during the third year and be prepared to begin studies at that beginning of February or July (mid year intake).

# ANTHROPOLOGY

# Level I

# ANTH 1102

#### Introducing Social Anthropology\*

- 3 units semester 1
- 3 contact hours per week
- · Available for non-award study
- Restriction: Introduction to Social Anthropology
- Assessment: tutorial papers/participation, essays

The exploration of cultural difference has always been central to the discipline of social anthropology. From its modest beginnings in colonial territories in Africa. Asia and Australasia. social anthropology has systematically examined the ways in which the basic organization of kinship, production, ritual and politics can vary enormously, even between societies living proximately to one another. This course introduces students to the ways in which social anthropologists go about the business of exploring cultural difference. It looks at the techniques we use when doing fieldwork, the ways we extract information from our informants, how we identify our key problems, and how we write the ethnographies which are the hallmark of social anthropology. We do so by looking at some of the most challenging studies produced by social anthropologists - of Balinese cockfights, devil worship in South America, gypsy rituals in Europe. and ethnic conflicts in West Africa - in order to detail the contrasts between cultures, and the differences between the anthropologists studying them. Social anthropology allows us to escape the limits of our everyday existence by showing how even the most basic aspects of social organization can be organized on markedly different lines to those which we take for granted.

# ANTH 1104

#### Foundations of Social Anthropology\*

- 3 units semester 2
- 3 contact hours per week
- · Available for non-award study
- Assessment: tutorial papers/participation, essays

This course examines essential aspects of human social life from the cross-cultural perspective that is one of the defining characteristics of anthropology. It also provides an introduction to the historical emergence of anthropology as a distinctive social scientific discipline. The main features of social life that will be covered in this course include primary social relations (kinship and friendship'), political economy ('ownership and leadership'), religion ('worship'), and cultural creativity ('authorship'). These elementary properties of social life are found in all human societies and we trace the study of each topic from its origins in the classic works of anthropology, through the historical development of the discipline, into more recent times. This course aims to show how anthropologists came to analyse human social life in the way they did, and how we can make use of this knowledge to inform the critical analysis of contemporary society, including present-day Australia.

\* ANTH 1102 & ANTH 1004 are designed to work in concert as a general foundation course in the theories and methods of the social sciences, but can be studied on a stand-alone basis.

# Level II

# ANTH 2003

# Anthropology of Health and Medicine

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: oral & written seminar presentations, major essay

This course develops a cross-cultural understanding of health, healing, beliefs about the body, and theories of illness - cultural, social and bio-medical. It critically examines the way in which medical beliefs and practices are socially constructed. Specific topics covered will include: cultural understandings of the mind/body, illness as symbol and metaphor, healers and their roles, institutional responses to disease, and the interaction between different health systems. Through the lens of medical anthropology the course asks students to contemplate their own assumptions about health and illness, and how each of these are 'treated' in a range of social and cultural settings.

# ANTH 2021 Anthropology of Development

- 4 units semester 1
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: Applied Anthropology: Strategies and Partnerships, Poverty and Development: Conditions and Experience
- Assessment: seminar papers/participation, major essay

This course concerns two aspects of the anthropological involvement in development. Firstly, the practices, problems and processes in social or community-based development and planned culture change - currently one of the most challenging arenas for anthropologists. Students will assess the knowledge and skills needed in seeking practical solutions in a variety of development settings. Secondly, the course will take an actor-oriented, insider's perspective, critically grounding applied practices and placebased experiences in the context of macroeconomic, historical and socio-political contexts. Students will also engage in some of the contemporary debates and ethical dilemmas in the anthropology of development.

Anthropologists are currently involved in a variety of interventions, from depoliticised mainstream development programs to alternative, autonomous strategies of people's (self-) development. The choices of engagement are open to applied/practicing anthropologists, their own particular orientations and interests. Essentially, students will look at the following: (i) Culture and development as power-knowledge; with special attention given to the current post-structuralist turn in its avid critique and deconstruction of development as a discourse and set of practices.

(ii) Relationship between culture-change theory and practice in local/endogenous or communitybased development; use of various participatory methods concerned with generating shared information, elucidating local views and ensuring community empowerment.

# ANTH 2022

#### **Popular Culture: Discourse and Desire**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: Popular Culture: Passion, Style, Tribe, Popular Culture: Sex, Drugs and Rock n Roll
- Assessment: workshop papers/participation, essays

This course will examine theoretical approaches to the study of popular culture. In the study of popular culture, sex, drugs and musical practices and ideas are not only characterisable as individual practices, preferences and choices, they are also important social activities that feature in the public realm, where they may be the subjects of moral, religious, political and legal debates, discussions and actions. Sex, drugs and music may all provide means for individuals to shape identity, and may also serve as shapers of individual, social and cultural identity. This course will examine the ways in which sex, drugs and popular music are involved in personal, social and cultural identity making and shaping, and the moral, political, family, legal and other 'socialscapes' in which these features of culture are embedded. We will examine what specifically anthropological insights can offer to our understandings of these complex, and often controversial, aspects of social life.

# **ANTH 2024**

#### **Anthropology of Conflict and Crisis**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: workshop papers/participation, essays

The course addresses the issues of conflict and complex political and ecological emergencies from a comparative anthropological perspective using primary ethnographic examples from countries such as Afghanistan, Sierra Leone, Zimbabwe, Guatemala and Northern Ireland. It introduces students to some of the methodological issues surrounding the undertaking of fieldwork in dangerous locations and addresses a number of core themes that include: food and famine; violence and evil; terror, fear and suffering; war and visual culture, media culture and spiritualism; and conflict, global governance and the global economy.

# ANTH 2026

#### Consuming Passions: Anthropology of Food and Drink

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: Anthropology of Food and Drink
- Assessment: seminar papers/participation, essays

Why is food usually shared? Why is drinking alone considered deviant? What is the connection between food and sex? Why is eating together integral to courtship? How do we decide what is ethnic food, and what isn't? Why do we change our eating and drinking habits as we climb the social ladder? How are we supposed to consume articles on diet and dieting? Why is our appetite for TV cookery programs insatiable? What makes fast food so appealing? Why is eating out taking the place of eating in? What difference will genetically modified foods make to Australian society and its culture? Food and drink are imperative to the reproduction of all social life. Their consumption is therefore integral to the construction of social identity. This course aims to raise a range of challenging and topical questions about the place of food and drink in contemporary society. It will introduce students to the work of those social anthropologists who have prioritised the study of food and drink in a range of local ethnographic contexts. It will increasingly concentrate on the nature of ethnic, hybrid and cosmopolitan cuisines as significant contributions to the emergence of global culture.

# ANTH 2027

#### **Poverty and Social Development**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: seminar papers/participation, essays

This course introduces students to some of the principal theoretical paradigms that have supported development and poverty alleviation strategies in poor countries over the past five or six decades. The course examines some of the essential historical precursors to contemporary notions of development and planned socioeconomic change through an examination of colonialism and the historical underdevelopment of regions such as Africa. South Asia and Latin America. Examination of colonial markets. economies and extractive economies leads on to examination of the end of various colonial empires and the emergence of the Bretton Woods institutions (World Bank and IMF) and United Nations system post-1944. Post-war the theoretical thrust of development has centred both on competing neo-Marxist (socialist) and neo-Liberal (capitalist) notions of modernity, industrialisation, peripheralisation and dependency. The relative ability or inability of grand theories to explain or support the alleviation of poverty through planned social change has been strongly challenged in more recent decades by theorists and practitioners more concerned with understanding issues surrounding: (i) gendered aspects of poverty: (ii) the fulfilment of the basic needs of the poor; and (iii) enhancing the participation of the poor in process of planned change.

#### **ANTH 2028**

#### **Communication Technologies for Development**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: workshop papers/participation, essays

Information communication technologies (ICTs) are rapidly changing the face of the developing world. Their application and use in processes of poverty reduction are numerous and cover areas such as conflict mitigation, the provision of humanitarian information, health information, and the strengthening of civil society through media deregulation and the proliferation of citizen or community media. This course examines: (i) the varied effects of information inclusion and exclusion; (ii) the information needs of poor people; (iii) the practical methods (such as Ethnographic Action Research and Communications for Social Change) and debates associated with ICT for Development (such as the digital divide); (iv) sectoral issues such as those relating to the communication of HIV/AIDS, informal education provision, and distance education; (v) the uses and applications of new

technologies in poor countries; (vi) international and national ICT policy; and (vii) some of the popular genres associated with ICT for Development such as edutainment soap operas, street theatre, and participatory video. The course will encourage students to develop a geographical and thematic focus in their research essay work.

#### ANTH 2030

#### **Ethnography: Engaging Social Research**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: research portfolio, workshop papers/participation

Academic fields have distinctive orientations and approaches to knowledge. Founded in social anthropology, ethnography is social research par excellence. Ethnographers explore social life intensively, as social beings, engaged for long periods in the social life they seek to understand. Ethnography entails 'being there', face-to-face, to gain new insight into what it is to be human in a world of difference. In this course you will learn more than the ensemble of research techniques and stances which are at the heart of ethnography. You can also explore how and why ethnography has been the orienting approach of social anthropological research since the 1920s and, more recently, how and why some ethnographic practices have been adopted, and inspired critical reflection about methodology, epistemology, and the nature of the human condition, in other fields of social research. If you are interested in understanding human conditions, qualitative research, engagement, epistemology, or the ethics of research then this course is for you (whether you are studying in the Health Sciences, Humanities, Law, Architecture, Sciences, Engineering or the Social Sciences). If you are thinking of becoming an anthropologist, a social scientist or a gualitative researcher then this course provides a foundation for professional development.

# **ANTH 3003**

#### Anthropology of Health and Medicine

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: oral & written seminar presentations, major essay

This course develops a cross-cultural understanding of health, healing, beliefs about the body, and theories of illness - cultural, social and bio-medical. It critically examines the way in which medical beliefs and practices are socially constructed. Specific topics covered will include: cultural understandings of the mind/body, illness as symbol and metaphor, healers and their roles, institutional responses to disease, and the interaction between different health systems. Through the lens of medical anthropology the course asks students to contemplate their own assumptions about health and illness, and how each of these are 'treated' in a range of social and cultural settings.

# ANTH 3021

#### Anthropology of Development

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Applied Anthropology: Strategies and Partnerships, Poverty and Development: Conditions and Experience
- Assessment: seminar papers/participation, major essay

This course concerns two aspects of the anthropological involvement in development. Firstly, the practices, problems, and processes in social or community-based development and planned culture change - currently one of the most challenging arenas for anthropologists. Students will assess the knowledge and skills needed in seeking practical solutions in a variety of development settings. Secondly, the course will take an actor-oriented, insider's perspective, critically grounding applied practices and placebased experiences in the context of macroeconomic, historical and socio-political contexts. Students will also engage in some of the contemporary debates and ethical dilemmas in the anthropology of development.

Anthropologists are currently involved in a variety of interventions, from mainstream development programs to alternative, autonomous strategies of people's (self-) development. The choices of engagement depend on particular orientations and interests. Essentially, students will look at the following: (i) Culture and development as powerknowledge: with special attention given to the current post-structuralist turn in its avid critique and deconstruction of development as a discourse and set of practices. (ii) Relationship between culture-change theory and practice in local or community-based development: use of various participatory methods concerned with generating shared information, elucidating local views and ensuring community empowerment.

# ANTH 3022

#### **Popular Culture: Discourse and Desire**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Popular Culture: Passion, Style, Tribe, Popular Culture: Sex, Drugs and Rock n Roll
- Assessment: workshop papers/participation, essay

This course will examine theoretical approaches to the study of popular culture. In the study of popular culture, sex, drugs and musical practices and ideas are not only characterisable as individual practices, preferences and choices, they are also important social activities that feature in the public realm, where they may be the subjects of moral, religious, political and legal debates, discussions and actions. Sex, drugs and music may all provide means for individuals to shape identity, and may also serve as shapers of individual, social and cultural identity. This course will examine the ways in which sex, drugs and popular music are involved in personal, social and cultural identity making and shaping, and the moral, political, family, legal and other 'socialscapes' in which these features of culture are embedded. We will examine what specifically anthropological insights can offer to our understandings of these complex, and often controversial, aspects of social life.

# **ANTH 3024**

# **Anthropology of Conflict and Crisis**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: workshop papers/participation, essays

The course addresses the issues of conflict and complex political and ecological emergencies from a comparative anthropological perspective using primary ethnographic examples from countries such as Afghanistan, Sierra Leone, Zimbabwe, Guatemala and Northern Ireland. It introduces students to some of the methodological issues surrounding the undertaking of fieldwork in dangerous locations and addresses a number of core themes that include: food and famine; violence and evil; terror, fear and suffering; war and visual culture, media culture and spiritualism; and conflict, global governance and the global economy.

# ANTH 3026

# Consuming Passions: Anthropology of Food and Drink

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Anthropology of Food and Drink
- Assessment: seminar papers/participation, essays

Why is food usually shared? Why is drinking alone considered deviant? What is the connection between food and sex? Why is eating together integral to courtship? How do we decide what is ethnic food, and what isn't? Why do we change our eating and drinking habits as we climb the social ladder? How are we supposed to consume articles on diet and dieting? Why is our appetite for TV cookery programs insatiable? What makes fast food so appealing? How is it that some critics of fast food become heroes? Why is eating out taking the place of eating in? What difference will genetically modified foods make to Australian society and its culture?

Food and drink are imperative to the reproduction of all social life. Their consumption is therefore integral to the construction of social identity. This course aims to raise a range of challenging and topical questions about the place of food and drink in contemporary society. It will begin with a tour of food and drink shelves in the local supermarket, and it will end with a communal meal to which all students will contribute.

# ANTH 3028

#### **Communication Technologies for Development**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: workshop papers/participation, essays

Information communication technologies (ICTs) are rapidly changing the face of the developing world. Their application and use in processes of poverty reduction are numerous and cover areas such as conflict mitigation, the provision of humanitarian information, health information, and the strengthening of civil society through media deregulation and the proliferation of citizen or community media. This course examines: (i) the varied effects of information inclusion and exclusion; (ii) the information needs of poor people; (iii) the practical methods (such as Ethnographic Action Research and Communications for Social Change) and debates associated with ICT for Development (such as the digital divide); (iv) sectoral issues such as those relating to the communication of HIV/AIDS, informal education provision, and distance education; (v) the uses and applications of new technologies in poor countries; (vi) international and national ICT policy; and (vii) some of the popular genres associated with ICT for Development such as edutainment soap operas, street theatre, and participatory video. The course will encourage students to develop a geographical and thematic focus in their research essay work.

# ANTH 3029 Anthropological Theory

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: seminar papers/participation, essays

This course introduces students to some of the major theories that inspire and inform anthropological ways of knowing. It explores competing approaches to the use of social theory

from the late 19th century to the present. Its purpose is to provide students with an understanding of how distinctive modes of anthropological thinking have been formed through specific engagements and debates with a broader field of social theory. The emphasis will be on understanding anthropological uses of theory in an historical, social and intellectual context. identifying areas of connection that make older ideas and controversies relevant to the anthropological present. In this course we will move backwards and forwards through theoretical texts and ethnographic accounts in order to explore the kinds of questions, issues and debates that have shaped the anthropological engagement with social theory. This approach, rather than being comprehensive in its coverage of debates and concepts, is designed to expose students to compelling ethnographic descriptions and analyses, as well as the theoretical questions embedded in them. This will highlight the distinctive character of anthropological knowledge that emerges in the mutual relationship between theory and ethnography. In this way, students will have experienced and critically evaluated some of the enduring question of society, culture and human experience at the heart of anthropology.

# Honours

# ANTH 4401

#### **Honours Anthropology**

- 24 units full year
- Prerequisite: UG degree & distinction average in courses contributing to major in Anthropology or equiv. approved by Head of Discipline candidates without prerequisite may apply to Honours Coordinator
- Assessment: coursework (2 topics), 15000-17000 word thesis

Students wishing to take Honours Anthropology should consult the Honours Coordinator prior to commencing level III to ensure that appropriate course choices are made in preparation for Honours.

Honours Anthropology is a full year program, involving weekly seminars, essays and a final dissertation. In some circumstances Honours Anthropology can be studied part-time over two years or can be combined with Honours in another discipline.

# APPLIED ECOLOGY

# Level I

# APP ECOL 1002RW Field Studies IA

- 3 units semester 1
- 1 day (6 hours) per week
- Assessment: reports, portfolios, seminars, field aptitude

This course covers a range of techniques for recording and analysing environmental data: animal capture and measurement; fauna handling and maintenance; radio-telemetry; plant propagation techniques; electronic data management and analysis; aquatic sampling.

# APP ECOL 1006RW

#### **Plant and Animal Diversity**

- 3 units semester 2
- 3 lectures, 3 hours practical work per week
- Assumed Knowledge: APP ECOL 1003RW Biology of Plants and Animals
- Assessment: theory 50%, practical work 50%

The course deals with the diversity of Australian flora and fauna, including their origins and history. There is a focus on higher plants and animals (vertebrates). The practical component of the course provides the skills needed for accurate identification of flowering plants and vertebrate fauna.

# Honours

# APP ECOL 4000RW

# Honours Plant and Pest Science (BNRM)

- 24 units full year
- Prerequisite: credit or better in at least 2 Level III courses or by permission of Head of Discipline
- · Assessment: thesis, seminar, coursework

Candidates are expected to undertake a substantial research project on a topic relevant to the Discipline. They will have one or two supervisors, and will present a research proposal, a thesis, a seminar, and some coursework. Coursework will take the form of essays and/or approved courses. Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the degree and be prepared to begin studies in either February or July.

# APP ECOL 4003WT

# Honour Environmental Science (Plant & Pest Science)

- 12 units full year
- Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: Seminars, thesis on research project, average of specified Level III courses
- Requirement: research project of student's choosing (topic acceptable to Discipline) normally undertaken at the same time as course-work (4 Level III courses relevant to student's project and approved by Head of Discipline - 12 units)

Candidates will be required to undertake a research project under one or more members of academic staff in the Discipline or jointly with a staff member from another discipline as approved by the Head of Discipline. Intending candidates should consult the Head of Discipline and potential supervisors during third year and be prepared to begin studies in either February or July.

# ARCHITECTURE

# Level I

# ARCH 4028

#### **Architecture Elective Studio A**

- 6 units semester 1
- Up to 9 hours lectures/tutorials/workshops including an average of 6 hours studio; contact hours vary from week to week
- Eligibility: B.Arch., B.L.Arch., B.Arch./B.L.Arch. students only
- Restriction: ARCH 4000 Architecture Studio IC
- · Assessment: assignments, projects

This course explores the theory and practice of the adaptive re-use of existing buildings. It examines examples of projects that successfully combine 'new' and 'old' work, the survey and documentation of existing buildings, and strategies for design and construction. The course will also discuss heritage

listing and the Burra Charter as frameworks for the protection of culturally important existing buildings.

# **ARCH 4029**

#### **Architecture Studio**

- 6 units semester 1
- Up to 9 hours lectures/tutorials/workshops including an average of 6 hours studio; contact hours vary from week to week
- Eligibility: B.Arch., B.Arch./B.L.Arch.students
- Restriction: ARCH 4025 Architecture Studio IB
   or ARCH 5027 Architecture/Landscape
   Architecture Studio IIF
- Assessment: assignments, projects

This course focuses on the design and construction of a house or similar small building. Students will develop a brief from a client's instructions, develop design options that respond to the brief, the site and environmental objectives, predict and analyse the potential performance of the chosen design, and develop a set of construction specifications and drawings. The analysis and documentation will be carried out using digital media.

#### ARCH 4030

#### **Urban Design Studio**

- 6 units semester 2
- Intensive studio during approx. Weeks 1-8; up to 18 hours lectures/tutorials/workshops including an average of 6 hours studio; contact hours vary from week to week
- Eligibility: B.Arch., B.L.Arch. and B.Arch./B.L.Arch. students only
- Restriction: ARCH 4003 Architecture Studio ID, ARCH 4026 Architecture/Landscape Architecture Studio IE, LARCH 4002 Landscape Architecture Studio ID
- · Assessment: assignments, projects

This course addresses the theory and practice of urban design and its expression in two kinds of urban design projects: 'hard landscape' urban projects such as an alley, square or street; and large-scale elements in the urban landscape such as a footbridge or shade structure. Projects are developed from conceptual levels to outline construction strategies and details. Design processes and presentation emphasise the role of digital media in urban design modelling and simulation.

# **ARCH 4031**

#### **Architecture Elective Studio B**

- 6 units semester 2
- Intensive studio in approx Weeks 8-13; up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: B.Arch., B.L.Arch, B.Arch./B.L.Arch. students only
- Restriction: ARCH 4016 Architecture Studio IA or ARCH 4027 Architecture/Landscape Architecture Studio IF
- Assessment: assignments and projects

This course will explore connections between architectural design and avant-garde trends, culture, aesthetics and/or aspects of architecture theory. The course is intended to be an opportunity to expand creative design boundaries. It may include cross-disciplinary connections with landscape architecture, art and urban design.

# **ARCH 5002**

#### **Advanced Studies in Architecture II**

- 3 units semester 1
- 2-hour tutorial/seminar per week
- Eligibility: approved Honours B.Arch. students
- Prerequisite: selective admission, based on prior results - selection guidelines available in the School of Architecture, Landscape Architecture and Urban Design
- Assessment: final report

Students will be required to undertake supervised research into a particular topic, leading to the presentation of a seminar paper and submission of a final essay or report of the order of 4000 words.

Topics offered for this course will depend upon staff availability. Examples of topics which can be expected from time to time are: Architectural History, Architectural Theories in Modern Architecture, Australian Architectural History, Building Materials and Performance, Computer-Aided Design, Computer Applications in Architecture, Criticism and Architecture, Conservation in the Built Environment, Daylight Studies, Energy in Buildings, Housing, Project Management, Solar Access; Urban Design

# ARCH 5027

#### Architecture/Landscape Architecture Studio IIF

- 4 units semester 1
- Up to 9 hours lectures/tutorials/workshops; contact hours vary from week to week
- Eligibility: B.Arch/B.L.Arch. double degree students
- Restriction: ARCH 4025 Architecture Studio IB
- · Assessment: assignments, projects

This course focuses on the design and construction of a house or similar small building. Students will develop a brief from a client's instructions, develop design options that respond to the brief, the site and environmental objectives, predict and analyse the potential performance of the chosen design, and develop a set of construction specifications and drawings. The analysis and documentation will be carried out using digital media.

# **ARCH 5028**

#### **Professional Practice**

- 4 units semester 1
- Up to 6 hours lectures a week
- Eligibility: B.Arch., B.L.Arch. and B.Arch./B.L.Arch. students only
- Corequisite: ARCH 5029 Architecture Processes or LARCH 5031 Landscape Architecture Processes; ARCH 5030 Design Seminar
- Restriction: ARCH 5024 Architecture Practice II, ARCH 5025 Architecture/Landscape Architecture Practice II, LARCH 5017 Landscape Architecture Practice II
- Assessment: work diaries, seminar papers, projects

This course examines practice management and project management in the built environment professions, particularly architecture and landscape architecture. Topics in practice management include: ethical practice; the character and operation of practices; legal requirements; cash flow and profitability; running a business; professional memberships and registration; risk and professional liability; and personal career planning. Topics in project management include: project stages; procurement and feasibility; statutory requirements; management of time, cost and quality; and contracts and contract administration in private and public realms. The course is articulated with Architecture Processes and Landscape Architecture Processes, one of which is taken concurrently.

# **ARCH 5029**

#### **Architecture Processes**

- 6 units semester 1
- Up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: B.Arch., B.Arch./B.L.Arch. students
- Prerequisite: 18 units of Level I B.Arch. or B.Arch./B.L.Arch courses, including at least 12 units of core courses
- Corequisite: ARCH 5028 Professional Practice and ARCH 5030 Design Seminar
- Restriction: ARCH 5018 Architecture Studio II
- Assessment: assignments & projects

This course will mirror in an educational setting the processes by which medium to large scale architecture projects are managed, initiated, developed and documented. Students will develop integrated proposals for a mixed-use urban project or projects raising significant urban design issues, linking stages from project conception and planning to construction and documentation. It will address the stakeholders, environment, and means of achieving design objectives.

# **ARCH 5030**

#### **Design Seminar**

- 2 units semester 1
- 2-3 hours lectures/tutorials/workshops/field trips; contact hours vary from week to week
- Eligibility: B.Arch., B.L.Arch., B.Arch./B.L.Arch. students only
- Corequisite: ARCH 5029 Architecture Processes or LARCH 5028 Landscape Arch. Processes; and ARCH 5028 Professional Practice
- Assessment: projects, seminar papers

This course examines contemporary issues and theory in design and design practice, including themes such as critique, precedents, the ways in which design is presented and represented in professional and popular media, design heritage and its recognition and conservation, globalisation, and the cultural and cross-cultural contexts of design. Students are encouraged to engage in the international discourse about design and to establish a personal theory agenda and to locate appropriate resources as references and support for their design work.

# ARCH 5031

#### **Architecture Project**

- 10 units semester 2
- Up to 20 hours a week studio work with specialist lectures irregularly spaced
- Eligibility: B.Arch., B.Arch./B.L.Arch. students
- Prerequisite: ARCH 5029 Architecture Processes or ARCH 5018 Architecture Studio II
- Corequisite: ARCH 5032 Architecture Seminar
- Restriction: ARCH 5011 Architecture Project II
- Assessment: final project

This course focuses on the definition, development and description of a major culminating architectural design project that both challenges and demonstrates students' skills and knowledge of architecture. The project, which will be of moderate complexity and of a student's own choice, is negotiated with academic staff and may potentially be drawn from any aspect of architecture. Responses should demonstrate all phases of architectural designing; sketch plans, technical development including one specialised topic, and a final presentation which should show a thorough integration of all major aspects of the academic program. The course links with the concurrent course Architecture Seminar.

# ARCH 5032

#### **Architecture Seminar**

- 2 units semester 2
- 2-3 hours lectures/tutorials/workshops; contact hours vary from week to week
- · Eligibility: B.Arch., B.Arch./B.L.Arch. students
- Prerequisite: ARCH 5029 Architecture Processes or ARCH 5018 Architecture Studio II
- Corequisite: ARCH 5031 Architecture Project
- Assessment: assignments, seminar papers

This course examines contemporary issues, theories and philosophies in architectural design. It will engage in the critical review of influential and cutting edge practice and practitioners. It supports the concurrent course Architecture Project in which the critical thinking developed in this course is expressed as creative work.

# ARTS

# Level I

# ARTS 1006

# Learn to Study/Study to Learn: Arts

- 3 units semester 1
- 3 contact hours per week
- Quota will apply
- Restriction: Students who have successfully completed ANTH 1101 may not choose the Anthropology module within this course
- Assessment: participation 10%, overview module collection/quiz 10%, skills module assignment 20%, research portfolio 50%, learning contribution 10%

This is a course for all kinds of first-year students. This course will help you choose directions that are right for you and get you to where you want to go in your university studies. It will introduce you to university and academic life, and help you develop the skills to succeed. You will also gain practical experience in a particular field of knowledge. This year, choose from Anthropology. Asian Studies, History, and Media Studies. Then, guided by an expert who is passionate about that field, explore university life more deeply. Meet key challenges identified in national research about the transition to university study. Explore what is distinctive about universities and their specialist research-based approaches to knowledge. Orient vourself to key features and differences between specialist fields of knowledge. Choose one specialist module and learn more about university life through its lens. Master key tertiary study skills. Orient vourself on this campus. Develop collegial relationships by working as part of a small research-learning team.

# ASIAN STUDIES

# Level I

# ASIA 1101

#### Introduction to Chinese Society and Culture

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study

• Assessment: term quizzes, essays, tutorial papers/presentations, hand-outs

From Gods, ghosts, bound lotus feet, peasants, Chineseness, revolution and dictatorship to little emperors, bad girl literature and Chinese rappers; Introduction to Chinese Society and Culture introduces issues like these for anybody interested in China. This course focuses on some social and cultural issues that are important for understanding modern and contemporary China and the influence of traditional society. By the end of the semester you will be familiar with some of the central concerns of Chinese culture and key academic ways of studying them. The course stresses critical (logical) thinking about materials and approaches used, how to use your insights to write better papers, and to show you how to use academic works to make better sense of the world. Teaching combines lectures, tutorials and slide/video presentations.

# ASIA 1102

#### Introduction to Japanese Society and Culture

- 3 units semester 2
- 3 contact hours per week
- · Available for Non-Award Study
- Assessment: essay, tutorial papers, participation, exam

This course is designed to introduce Japanese society and culture both to students of Japanese language and non-language students. The first half of the course deals with the history of Japan, starting from pre-history and leading up to the end of WWII. We also examine the origins of Japanese people and the nature of Japanese language. The second half deals with diverse themes in contemporary Japanese society and culture, including politics, women, education and economy.

# ASIA 1103

# Asia and the World

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: tutorial presentations, tutorial paper & handouts, term quizzes, major essay and/or exam

Before the Greeks and Romans there were Asian superpowers. Before Nintendo and takeaway Chinese stir-fry, there was Zen, silk, ginger, nutmeg, exams and much, much more. As an introductory course, Asia and the World surveys the impact of Asia in shaping world history, culture and politics. We examine Asian powers and their military and diplomatic expansion and contractions, technological breakthroughs, commercial rises and declines, cultural/religious and other influences. These issues are discussed in the context of Asia's role in the ancient and precolonial past, the colonial era when Europe set out to dominate the world and the post-colonial contemporary world. The course stresses Asian influences that shaped our world, critical (logical) thinking about materials and approaches used, how to use your insights to write better papers, and shows you how to use academic works to make sense of the world.

# Level II

# ASIA 2002

#### Asian Studies (Core Topic)

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation, tutorial papers, essays, journal/research exercise

This course introduces Asia and Asian Studies as an area-focused discipline and examines discourse on Asia in a range of traditional disciplines such as politics, economics, history, sociology and philosophy. Some key constructs/theories for the study of Asia will be introduced and a number of themes will be examined in order to integrate theoretical knowledge with empirical examples. The course covers issues such as "Asian values", democratisation, economic development and culture, as well as Australia's relations with Asia.

#### **ASIA 2008**

#### **Contemporary China: Politics and Society**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: term quizzes, tutorial papers and major research essay (singular or group) or takehome exam

From 'sick man' to red menace and vellow terror to great friend, wild swans and huge market, contemporary China focuses on themes underlying the evolution of Chinese politics and society from circa 1900 to today. We examine the social and political currents which first gave rise to the Chinese Communist Party (CCP) and how these helped it to come to power in 1949. We look at how the CCP consolidated its power and began its attempt to make China, strong, prosperous and socialist. This includes tracing the evolution of CCP ideology, the development and ultimate failure of Maoism (e.g. the Great Leap Forward and Cultural Revolution). We examine how the CCP initiated a process of reform under Deng Xiaoping, a process which continues to have profound effects on the development of Chinese society and politics. Subsequent social change has created major problems for the CCP. As a result. half the course will cover contemporary problems facing China: the ability to respond to change, social problems, environmental concerns, corruption and the like. The relevance of historical. theoretical and ideological issues for understanding China today is stressed and introduced via workshops.

#### ASIA 2012

#### **Contemporary Japan: Culture and Identity**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: tutorial papers, major essay, participation

This course is designed as a sociological examination of the cultural aspects of contemporary Japanese society. Emphasis is on examining the character of the social and cultural order in contemporary Japan. Basic themes examined include: perspectives on identity formation, perspectives on Japanese identity, the individual and community, authority, work and identity, gender identity, ethnic identity, nationalism, minorities, youth culture, popular culture, food culture and mass media. The themes covered may vary from year to year.

#### **ASIA 2015**

# Politics and Foreign Policy in Contemporary Japan

- 4 units semester 1
- 3 contact hours per week.
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: tutorial presentation, tests, participation, semester essays

The course focuses on the post-war Japanese political experience and examines issues in Japan's public policy and foreign relations. The course aims to provide students with an appreciation of the workings of the Japanese political and policy-making system and its foreign relations. Additionally it will aim at assisting students to apply concepts and methods (especially those of political science and international relations) to a particular country. Topics include the institutional basis of the postwar political system, the party system, policy processes, Parliament and the electoral process, regional politics, defence and security, Japan and the United States, Japan's relations with Asian nations, Japan and international organisations (GATT, WTO, UN), Japan and Australia and Japan's foreign economic aid policy.

# ASIA 2016

#### **Religions of China**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: group & individual presentations, two short papers, research paper

This course examines some crucial elements of Chinese religious belief and practice as they relate to Chinese life past and present. These elements may include some examination of Buddhism, folk religion, Daoism and Confucianism as well as contemporary practices and beliefs such as Falungong. Students may visit local places of Chinese religious practice and worship including Buddhist temples, Daoist home-temples, Yiguandao lecture halls and private home temples. On these visits students are expected to further their understanding of the modern interpretation of doctrine and scripture, as well as the function of traditional Chinese ritual practices in a contemporary Australian environment. Students will gain an insight into general principles underlying Chinese religious beliefs and hence possibly also into their own beliefs; a first-hand experience of Chinese religious and ritual practices; and an understanding of the function of religious practice in maintaining Chinese identity and links with tradition.

# Level III

#### ASIA 3008

#### **Contemporary China: Politics and Society**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial papers, term quizzes and major research essay (singular or group) or takehome exam

From 'sick man' to red menace and yellow terror to great friend, wild swans and huge market, contemporary China focuses on themes underlying the evolution of Chinese politics and society from circa 1900 to today. We examine the social and political currents which first gave rise to the Chinese Communist Party (CCP) and how these helped it to come to power in 1949. We look at how the CCP consolidated its power and began its attempt to make China, strong, prosperous and socialist. This includes tracing the evolution of CCP ideology, the development and ultimate failure of Maoism (e.g. the Great Leap Forward and Cultural Revolution). We examine how the CCP initiated a process of reform under Deng Xiaoping, a process which continues to have profound effects on the development of Chinese society and politics. Subsequent social change has created major problems for the CCP. As a result, half the course will cover contemporary problems facing China: the ability to respond to change, social problems, environmental concerns, corruption and the like. The relevance of historical, theoretical and ideological issues for understanding China today is stressed and introduced via workshops.

# ASIA 3012

#### **Contemporary Japan: Culture and Identity**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial papers, major essay, participation

This course is designed as a sociological examination of the cultural aspects of contemporary Japanese society. Emphasis is on examining the character of the social and cultural order in contemporary Japan. Basic themes examined include: perspectives on identity formation, perspectives on Japanese identity, the individual and community, authority, work and identity, gender identity, ethnic identity, nationalism, minorities, youth culture, popular culture, food culture and mass media. The themes covered may vary from year to year.

# ASIA 3015

# Politics and Foreign Policy in Contemporary Japan

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial presentation, tests, participation, semester essays

The course focuses on the post-war Japanese political experience and examines issues in Japan's public policy and foreign relations. The course aims to provide students with an appreciation of the workings of the Japanese political and policy-making system and its foreign relations. Additionally it will aim at assisting students to apply concepts and methods (especially those of political science and international relations) to a particular country. Topics include the institutional basis of the postwar political system, the party system, policy processes, Parliament and the electoral process, regional politics, defence and security, Japan and the United States, Japan's relations with Asian nations, Japan and international organisations (GATT, WTO, UN), Japan and Australia and Japan's foreign economic aid policy.

# ASIA 3016 Religions of China

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: mixture of group and individual presentations, two short papers, research paper

This course examines some crucial elements of Chinese religious belief and practice as they relate to Chinese life past and present. These elements may include some examination of Buddhism, folk religion, Daoism and Confucianism as well as contemporary practices and beliefs such as Falungong. Students may visit local places of Chinese religious practice and worship including Buddhist temples, Daoist home-temples, Yiguandao lecture halls and private home temples. On these visits students are expected to further their understanding of the modern interpretation of doctrine and scripture, as well as the function of traditional Chinese ritual practices in a contemporary Australian environment. Students will gain an insight into general principles underlying Chinese religious beliefs and hence possibly also into their own beliefs; a first-hand experience of Chinese religious and ritual practices; and an understanding of the function of religious practice in maintaining Chinese identity and links with tradition.

# Honours

# ASIA 4401 Honours Asian Studies

- 24 units full year
- Prerequisite: UG degree, Cr. average in courses contributing to major in Asian language/Asian Studies or equiv. approved by Head of Discipline
- Assessment: thesis 50%, theory & methodology 25%, advanced language or social science course 25%

Students wishing to take Honours Asian Studies should consult the Honours Coordinator prior to commencing. Entry to Honours is subject to the approval of the Head of Discipline on advice from the Honours Committee. The Honours program consists of three elements: a research thesis, a semester coursework unit on theory and methodology in Asian Studies and a semester coursework unit on advanced language. In some circumstances Honours Asian Studies can be studied part-time over two years or combined with Honours in another discipline.

# BIOCHEMISTRY

# Level II

# **BIOCHEM 2100**

#### **Biochemistry IIA**

- 4 units semester 1
- 3 lectures, 1 tutorial work per week, 4 hours practical per fortnight
- Available for Non-Award Study
- Prerequisite: Pass in at least 6 units of Level I Chemistry & 6 units of Level I Biology
- Restriction: BIOCHEM 2000A/B Biochem II, BIOCHEM 2100/2200 Biochem IIA/B, BIOCHEM 2001A/B, BIOCHEM 2101, BIOCHEM 2201 Biochem II(MolBiol), BIOCHEM 2005A/B BIOCHEM 2105, BIOCHEM 2205 Biochem II (Biotech), BIOCHEM 2003 Mol Biol II (Biotech)
- Assessment: exams on lecture material, tutorials & practicals

Biochemistry provides an understanding and an appreciation of Molecular Biology and Metabolic Biochemistry. The topics covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and signal transduction pathways including some disease states.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

# **BIOCHEM 2101**

# **Biochemistry II (Molecular Biology) A**

- 3 units semester 1
- 3 lectures, 1 tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: Pass in CHEM 1000A/B or CHEM 1100 & CHEM 1200 & BIOLOGY 1101 or BIOLOGY 1102 & BIOLOGY 1201 or BIOLOGY 1202 - other prerequisites may be accepted at discretion of Head of Discipline

- Corequisite: BIOCHEM 2002A Advanced Molecular Biology IIA
- Assumed Knowledge: Level 1 Biology
- Restriction: BIOCHEM 2000A/B, BIOCHEM 2100, BIOCHEM 2200, BIOCHEM 2001A/B, BIOCHEM 2101, BIOCHEM 2201, BIOCHEM 2003
- Assessment: exams on lecture material, other material as specified

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and signal transduction pathways including some disease states.

# BIOCHEM 2102

#### Advanced Molecular Biology A

- 2 units semester 1
- 2 hours practicals/tutorials per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: Pass in either CHEM 1000A/B or CHEM 1100 & CHEM 1200, & pass in BIOLOGY 1101 or BIOLOGY 1102 & BIOLOGY 1201 - other prerequisites may be accepted at discretion of Head of Discipline
- Corequisite: BIOCHEM 2101 Biochemistry II (Molecular Biology) A
- Assumed Knowledge: Level I Biology
- Assessment: practical component, tutorials, written reports

This is a specialist course which promotes an integrated view of the molecular basis of biology and the chemistry of life with a particular focus on interdisciplinary areas. Students should acquire a thorough understanding of the power that molecular biology brings to modern research into gene function and cell biology, with applications to medicine and biotechnology. The course material will be presented by staff from the Schools of Molecular and Biomedical Science, Physics and Chemistry and Agriculture and Wine. Invited professional researchers will present seminars and tutorials in their areas of expertise. Course material will include selected practical work, small group tutorials, seminars and problem-based learning in small teams.

# BIOCHEM 2105

#### **Biochemistry II (Biotechnology) A**

- 4 units semester 1
- 3 lectures, 1 tutorial per week, 4 hours practical per fortnight
- Eligibility: BSc (Biotech) students only
- Prerequisite: Pass in either CHEM 1000A/B, CHEM 1200 & BIOLOGY 1101 or BIOLOGY 1102 & BIOLOGY 1201 or BIOLOGY 1202
- Assumed Knowledge: Level I Biology
- Assessment: exams on lecture material, tutorials & practical assessment

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: specialised proteins, enzyme specificity and regulation, tissue specific metabolism and its control, how the body adjusts to variations in the demand for energy, mechanisms of hormone action and signal transduction pathways including some disease states.

The practical component for this course draws from the MBS Prac A, B and C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

# BIOCHEM 2106WT

#### **Biochemistry II (Agriculture) A**

- 4 units semester 1
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: CHEM 1000A/B Chemistry I Parts 1 & 2 or CHEM 1001A/B Foundations of Chemistry Parts 1 & 2
- Restriction: PLANT SC 2002WT Chemistry of Biopolymers, BIOCHEM 2100 Biochemistry IIA
- Assessment: exams on lecture material; tutorials & practicals

This course provides an introduction to the fundamental metabolic processes of microbial, plant and animal metabolism. Topics will include protein structure and function, mechanisms of enzyme action, the biochemistry of carbohydrate, fat and protein metabolism and the generation of energy by organisms. Examples of the applications of biochemistry to agriculture will be used to illustrate important principles.

# BIOCHEM 2200

# **Biochemistry IIB**

- 4 units semester 2
- 3 lectures, 1 tutorial per week, 4 hours practical per fortnight
- Available for Non-Award Study
- Prerequisite: Pass in at least 6 units of Level I Chemistry AND 6 units of Level I Biology
- Assessment: exams on lecture material, tutorials & practicals

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: DNA structure and synthesis, mutation and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation and signal transduction pathways.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

# **BIOCHEM 2201**

# **Biochemistry II (Molecular Biology) B**

- 3 units semester 2
- 3 lectures, 1 tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: Pass in either CHEM 1000A/B or CHEM 1100 & CHEM 1200 & pass in BIOLOGY 1101 or BIOLOGY 1102 & BIOLOGY 1201 or BIOLOGY 1202 - other prerequisites may be accepted at the discretion of Head of Discipline
- Corequisite: BIOCHEM 2202 Advanced Molecular Biology B
- Restriction: BIOCHEM 2000A/B, BIOCHEM 2100, BIOCHEM 2200, BIOCHEM 2001A/B, BIOCHEM 2101, BIOCHEM 2201, BIOCHEM 2003
- Assessment: exams on lecture material, other material as specified

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: DNA structure and synthesis, mutation and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation, and signal transduction pathways.

# **BIOCHEM 2202**

#### Advanced Molecular Biology B

- 2 units semester 2
- 2 hours practicals/tutorials per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: Pass in either CHEM 1000A/B or CHEM 1100 & 1200, and pass in BIOLOGY 1101 or/and BIOLOGY 1201 - other prerequisites may be accepted at discretion of Head of Discipline
- Corequisite: BIOCHEM 2101 Biochemistry II (Molecular Biology) B
- Assumed Knowledge: Level I Biology
- Assessment: practical component, tutorials, written reports

This is a specialist course which promotes an integrated view of the molecular basis of biology and the chemistry of life with a particular focus on interdisciplinary areas. Students should acquire a thorough understanding of the power that molecular biology brings to modern research into gene function and cell biology, with applications to medicine and biotechnology. The course material will be presented by staff from the Schools of Molecular and Biomedical Sciences, Physics and Chemistry and Agriculture and Wine. Invited professional researchers will present seminars and tutorials in their areas of expertise. Course material will include selected practical work, small group tutorials, seminars and problem-based learning in small teams.

# **BIOCHEM 2205**

#### **Biochemistry II (Biotechnology) B**

- 4 units semester 2
- 3 lectures, 1 tutorial per week; 4 hours practical per fortnight
- Eligibility: For BSc (Biotech) students only
- Prerequisite: Pass in either CHEM 1000A/B, CHEM 1201 or Chemistry IANR, & pass in BIOLOGY 1101 or 1102 & BIOLOGY 1201or 1202
- Corequisite: other courses required for BSc.(Biotech)
- Assumed Knowledge: BIOCHEM 2105 Biochemistry II (Biotech.)
- Assessment: exams on lecture material; tutorials & practicals

Biochemistry provides an understanding and an appreciation of Molecular Biology, Cell Biology and Metabolic Biochemistry. The topics covered include: DNA structure and synthesis, mutation and repair, RNA and protein synthesis and the control of gene expression, recombinant DNA technology, cell structure and organisation and signal transduction pathways. The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

# Level III

#### **BIOCHEM 3000**

#### Molecular and Structural Biology III

- 6 units semester 1
- 3 lectures, 1 tutorial, 8 hours practical per week
- Available for Non-Award Study
- Prerequisite: Pass in both BIOCHEM 2100 & 2200 Biochemistry IIA/B, or Pass in BIOCHEM 2205 Biochemistry II (Biotechnology) B
- Assumed Knowledge: Students who completed Biochemistry II prior to 1995 should consult department for advice
- Restriction: BIOCHEM 3900 Molecular Biology of the Gene; BIOCHEM 3902 Protein Structure and Function; BIOCHEM 3904 Molecular Biology and Protein Engineering Laboratory; BIOCHEM 3905 Biochemistry of Control of Gene Expression
- Assessment: exam on lecture material, practical component

This course has two major aims - to extend the discussions presented in Biochemistry II of molecular biology, and structure and function of proteins. Topics include - structure and function of different classes of proteins, protein folding, molecular recognition, chromatin structure and its remodelling during transcription, RNA synthesis, processing, modification, stability, translation, and manipulation of these to effect selective gene expression.

# **BIOCHEM 3001**

#### **Cell and Developmental Biology III**

- 6 units semester 2
- 3 lectures, 1 tutorial, 8 hours practical per week
- Available for Non-Award Study
- Prerequisite: either Pass in both BIOCHEM 2100 & 2200 Biochemistry IIA/B, or Pass in both BIOCHEM 2105 Biochemistry II (Biotech.) A a& BIOCHEM 2205 Biochemistry II (Biotech.) B
- Assumed Knowledge: BIOCHEM 3000 Molecular and Structural Biology III
- Restriction: Molecular Biology of Development, BIOCHEM 3901 Molecular Biology of the Cell, BIOCHEM 3903 Cell and Developmental Biology Laboratory
- Assessment: exam on lecture material, practical component

This course will focus on molecular aspects of cell and developmental biology. Over the last few years major advances have been made towards a complete understanding of cell behaviour, how cells respond to intracellular and extracellular signalling pathways and how this plays a central role in control of cell proliferation, development and disease states such as cancer. Topics include intracellular compartments, trafficking of proteins and other molecules; the cytoskeleton and its role in determining cell shape; cell adhesion and cell migration. The course also examines molecular mechanisms underlying cell-cell communication, signal transduction pathways, control of cell proliferation, cell fate decisions and differentiation. Specific topics include cell cycle control, chromosomal DNA replication, programmed cell death/apoptosis and molecular control of cell lineage. All of these concepts are finally integrated to discuss the role of oncogenes and tumour suppressor genes in the molecular basis of cancer. The molecular basis of animal development in both simple systems and vertebrates will be discussed, including limb regeneration, differentiation and morphogenesis, the molecular basis of segmentation and body plan, cellular events during embryogenesis, the role of growth factors in developmental decisions and medical applications. Animal transgenesis will also be discussed.

# **BIOCHEM 3125**

#### Advanced Molecular Biology IIIA (Biochemistry)

- 6 units semester 1
- 3 lectures, 5 hour practical, 1 hour tutorial per week
- Eligibility: BSc (Molecular Biology) only
- Prerequisite: Adv. Molecular Biology; Biochemistry II
- Restriction: BIOCHEM 3000 Molecular and Structural Biology III; GENETICS 3110 Advanced Molecular Biology IIIA (Genetics)
- Assessment: written exam on lecture material, written & oral reports on practicals & tutorials

This course combines lectures from Molecular and Structural Biology 3 with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/ Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The PBL segment of course will include aspects of biochemistry, genetics, microbiology/ immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

# **BIOCHEM 3225**

#### Advanced Molecular Biology IIIB (Biochemistry)

- 6 units semester 2
- 3 lectures, 5 hour practical, 1 hour tutorial per week
- Eligibility: BSc (Molecular Biology) only
- Prerequisite: Adv. Molecular Biology; Biochemistry II
- Restriction: BIOCHEM 3001 Cell & Development Biology III; GENETICS 3210 Advanced Molecular Biology IIIB (Genetics)
- Assessment: written exam on lecture material, written & oral reports on practicals & tutorials

This course combines lectures from Cell and Development Biology 3 with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The PBL segment of the course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

# Honours

# **BIOCHEM 4000**

# **Honours Biochemistry**

- 24 units full year
- Prerequisite: satisfactory performance in Level III courses offered by School of Molecular & Biomedical Science - students from other departments/Institutions who have passed suitable Level III courses may be considered

Candidates are required to give their full time to a special program of study and experimental work. Candidates will normally be expected to start the program on the first Monday of February, but this can be altered in special circumstances by arrangement with the Discipline Leader for Biochemistry. The work includes participation in a series of lecture-symposia on topics of modern biochemistry; participation in research seminars, and importantly, the performance of research work under the supervision of one or more members of the Biochemistry staff. Early in the year students will report on the aim, significance and approach of their research topic. During the program candidates may present and defend an original proposition on science and submit the results of their research in the form of a thesis, which will also contain a literature review surrounding their research topic.

Intending Honours candidates should consult the Discipline Leader of Biochemistry during the final year of the BSc.

# BIOLOGY

Level I

# BIOLOGY 1101 Biology I: Molecules, Genes and Cells A

- 3 units semester 1
- Available for Non-Award Study
- Restriction: BIOLOGY 1102 Biology I: Molecules, Genes and Cells IB, ENV BIOL 1000A/B Biology I, GENETICS 1000A/B Molecular Cell Biology I

Assessment: exams, practical work/tutorial assessment

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce many of these concepts, thereby providing the foundation for further studies in semester 2 courses and more specialist level II/III courses.

The topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

This course is designed to accommodate students who have either not studied SACE stage 2 Biology or scored below 13. It runs in parallel with Molecules Genes and Cells B.

# BIOLOGY 1101MED Biology I: Molecules, Genes and Cells A

- 3 units semester 1
- Eligibility: Medical students only

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce many of these concepts, thereby providing the foundation for further studies in semester 2 courses and more specialist level II/III courses. Topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

This course is designed to accommodate students who have either not studied SACE stage 2 Biology or scored below 13. It runs in parallel with Molecules Genes and Cells B.

# BIOLOGY 1102

# Biology I: Molecules, Genes and Cells B

- 3 units semester 1
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Biology with subject achievement score of at least 13 or equiv.
- Assessment: exams, practical work/tutorial assessment

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce or reinforce many of these concepts, thereby providing the foundation for further studies in semester 2 courses and more specialist level II/III courses. Topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

This course is designed to accommodate students who have studied SACE stage 2 Biology and runs in parallel with Molecules Genes and Cells A.

# **BIOLOGY 1102MED**

#### **Biology I: Molecules, Genes and Cells B**

- 3 units semester 1
- Eligibility: Medical students only

The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve. The aim of this course is to introduce or reinforce many of these concepts, thereby providing the foundation for further studies in semester 2 courses and more specialist level II/III courses.

The topics to be covered include the chemicals of life, macromolecules, the role of nucleic acids in genetic information transfer, protein synthesis, lipid membranes and the structure of cells, storage and utilisation of energy, meiosis and mitosis.

This course is designed to accommodate students who have studied SACE stage 2 Biology and runs in parallel with Molecules Genes and Cells A.

#### **BIOLOGY 1103RW**

#### **Cell Biology and Genetics**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Restriction: Biology A, 8057 Biology INR, BIOLOGY 1101/1102 Biology I: MG&CA/B, ENV BIOL 1000A/B Biology I
- Assessment: practical reports, tutorial exercises, exam

The course is an introduction to cell biology and genetics and also provides an introduction to further studies in agricultural production and environmental management. It does not assume previous biological knowledge. Topics include: structure of bacteria, plant and animal cells and an introduction to and role of the main cellular components: role of membranes in the regulation of the cell environment; respiration and energy production; fermentation; photosynthetic processes and synthesis of sugars: cell interaction and cell division, chromosome structure and inheritance: location and structure of genes: genotype and phenotype; DNA, its replication, transcription and translation: protein synthesis: mutation: introduction to plant and animal breeding and genetic engineering, role in biodiversity and conservation.

#### BIOLOGY 1201

#### **Biology I: Human Perspectives**

- 3 units semester 2
- Available for Non-Award Study
- Assumed Knowledge: Either BIOLOGY 1101 Biology I: Molecules, Genes & Cells IA or BIOLOGY 1102 Biology I: Molecules, Genes & Cells IB
- Restriction: ENV BIOL 1000A/B Biology I, GENETICS 1000A/B Molecular Cell Biology I, BIOLOGY 1202 Biology I: Organisms I
- Assessment: exams, practical work/tutorial assessment

This course builds on fundamentals of biology that have been developed in Molecules. Genes and Cells. The course takes molecular, cellular, whole body, population and evolutionary approaches to understanding biology as it pertains to human function and the interactions of the body with the environment. In many cases, our understanding of human function is best derived for studies of mammalian and non-mammalian organisms, and where appropriate, such models will be discussed. The themes that will be covered include: the organisation of the body, evolution, inheritance, regulation of gene expression, communication and control systems in the body; developmental biology and defence systems. Sessions, which provide opportunities to integrate the information and demonstrate how it provides an understanding of normal human function and of disease, will be a regular feature of the course.

# BIOLOGY 1201MED

#### **Biology I: Human Perspectives**

- 3 units semester 2
- · Restriction: Medical students only

This course builds on fundamentals of biology that have been developed in Molecules, Genes and Cells. The course takes molecular, cellular, whole body, population and evolutionary approaches to understanding biology as it pertains to human function and the interactions of the body with the environment. In many cases, our understanding of human function is best derived for studies of mammalian and non-mammalian organisms, and where appropriate, such models will be discussed. The themes that will be covered include: the organisation of the body, evolution, inheritance, regulation of gene expression, communication and control systems in the body; developmental biology and defence systems. Sessions, which provide opportunities to integrate the information and demonstrate how it provides an understanding of normal human function and of disease, will be a regular feature of the course.

#### BIOLOGY 1202

#### **Biology I: Organisms**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: Either BIOLOGY 1101 Biology I: Molecules, Genes & Cells A or BIOLOGY 1102 Biology I: Molecules, Genes & Cells B
- Restriction: ENV BIOL 1000A/B Biology I, GENETICS 1000A/B Molecular Cell Biology I, BIOLOGY 1201 Biology I: Human Perspectives I, ENV BIOL 1003 Biology of Organisms
- Assessment: exam, assignments, practical reports

This course focuses on the biology and diversity of multicellular organisms, with evolution as the central theme. It addresses key questions in biology: What are plants and animals? How do they evolve? How do they function? How do they interact with other organisms and the environment? These questions are answered by analysing the scientific evidence that supports current theory.

#### BIOLOGY 1203RW

#### **Biology of Plants and Animals**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: APP ECOL 1004RW Cell Biology and Genetics or equiv.
- Restriction: BIOLOGY 1202 Biology I: Organisms; ENV BIOL 1000A/B Biology I
- Assessment: exam, tutorial exercises, practical reports

This course is an introduction to the diversity of form and function in higher plants and animals. Examples of both native and agricultural species are used to illustrate the structure and function of flowering plants and vertebrate animals, their reproduction, growth, nutrition, control systems, and interactions with the environment.

# BIOMETRY

# Level III

#### **BIOMET 3000WT**

#### Agricultural Experimentation

- 3 units semester 1
- 2 lectures, 3 hour tutorial a week
- Prerequisite: STATS 1004 Statistical Practice I (Life Sc.) or STATS 1000 Statistical Practice I
- Assessment: Individual assignment, written assignments, final exam

The philosophy of science via experimental design and data analysis. Topics covered include: sample linear regression, polynomial and multiple regression. Analysis of variance including, one-way (without or with blocking), Latin squares, factorial, and split-plot designs. In addition, analysis of covariance, linear contrast (including orthogonal polynomials), advanced regression and generalised linear models may be covered. The statistical package GenStat will be used for the designing of experiments and the analysis of data sets.

# BIOTECHNOLOGY

# Level I

#### **BIOTECH 1000**

#### Introduction to Biotechnology

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Eligibility: BSc (Biotech) students only
- Assessment: exam, assignments/group projects

Global significance of biotechnology, categories of biotechnology processes and products, "traditional" vs "modern" biotechnology processes; key developments in history of biotechnology, enabling technologies - fermentation, downstream processing; recombinant methods, antibody monoclonals, analysis and automation, PCR, genomics, proteomics, metabolomics; biotechnology enterprises in South Australia and Australia, global biotechnology enterprises/industries; biotechnology and society perceived vs actual benefits and drawbacks, legal and ethical issues, regulations governing biotechnology research and industry; considerations in the genesis of the typical biotechnology process/product/enterprise: development costs, venture capital, patenting, product safety, legislation, marketing. Case studies on the interdisciplinary nature of biotechnology and factors favouring local/regional development of a biotechnology industry will also be included. Some field trips may be required.

# Level II

# BIOTECH 2005 Principles of Biotechnology II

- 4 units semester 2
- 3 lectures, 4 hrs tutorial/practical work per week
- Available for Non-Award Study
- Prerequisite: CHEM 1000A/B Chemistry I and GENETICS 1000A/B Molecular and Cell Biology I
- Assessment: exams on lecture material 70%, practical component & tutorial material 30%

This multi-disciplinary course provides students with an introduction to key aspects of modern biotechnology practice including the interaction between scientific discovery and practical production tools and aspects. Four key areas will be covered: Introduction to Bio-Process Engineering Principles - enzymes, cell-culture systems, fermenters, recovery and purification of product. Microbial Gene Expression - sequencing and amplification of DNA, gene expression in prokaryotic and eukaryotic systems, molecular diagnostics, therapeutic agents, vaccines and commercial processes. Plant Systems - DNA marker technology, plant culture, genetic engineering and genomics. Mammalian Systems characteristics and growth, gene transfer in vitro & in vivo, expression systems, applications.

# Level III

#### BIOTECH 3000 Biotechnology Practice III

- 6 units semester 2
- 3 lectures, 1 tutorial, 5 hrs project work per week
- · Eligibility: BSc (Biotech) students only
- · Available for Non-Award Study
- Prerequisite: MICRO 2002 Microbiology II (Biotechnology), BIOCHEM 2003 Molecular Biology II (Biotechnology) and CHEM ENG 2005 Principles of Biotechnology II
- Assessment: written exam 70%, project 30%

The aim of this course is to add to the strong scientific focus of the degree by providing an introduction to aspects of technology, business and ethical issues relevant to the diverse nature of biotechnology industry. Students completing this course should be well equipped to undertake further studies (e.g. Honours in Biotechnology or a Master of Business Administration), obtain employment in research laboratories, obtain employment in local, interstate and overseas biotechnology companies or create their own business. Topics include intellectual property and its commercialisation, basic business accounting, preparing a business plan, principles in bioprocess engineering and design, use of animal and plant cell culture systems, validation and monitoring, food biotechnology, genetically modified organisms, food additives and byproducts. The group-based project involves preparation of a business plan to operate a model biotechnology business.

# CHEMISTRY

# Level I

# **CHEM 1100**

#### **Chemistry IA**

- 3 units semester 1
- 3 lectures, 1 tutorial per week; 6 x 3 hour practical sessions (or equiv.), interactive computer assessed tutorials & practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Chemistry with Subject Achievement score of at least 13 or equiv. - in exceptional circumstances, consult the Head of Chemistry
- Restriction: CHEM 1101 Foundations of Chemistry IA, CHEM 1201 Foundations of Chemistry IB
- Assessment: exam 70%, practical work 20%, computer assessed tutorials 10%

Shape and structure - the importance of molecular shape and how chemists determine the structure of compounds using spectroscopic techniques including ultraviolet, infrared and nuclear magnetic resonance. Chemistry of the Elements - chemistry of the main group metals and non-metals, an introduction to bonding in transition (d-block) elements, coordination complexes, bioinorganic systems.

# **CHEM 1101**

#### Foundations of Chemistry IA

- 3 units semester 1
- 3 lectures, 1 tutorial per week, 6 x 3 hour practical sessions (or equiv.), interactive computer assessed tutorials & practicals
- Eligibility: students with SACE Stage 2 Chemistry Subject Achievement score of less than 13 or equiv.
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Chemistry or equiv.
- Restriction: CHEM 1100 Chemistry IA, CHEM 1200 Chemistry IB
- Assessment: exam 70%, practical work 20%, computer assessed tutorials 10%

Atoms, Molecules & Structure - an introduction to theories of molecule formation and structure including the importance of molecular shape; intermolecular forces. Chemistry of the Elements an introduction to the chemistry of the elements, including redox processes, natural and biological element cycles, atmospheric chemistry and the crucial differences in the chemistries of the s-, pand d-block elements.

# **CHEM 1200**

#### **Chemistry IB**

- · 3 units semester 2
- 3 lectures, 1 tutorial per week, 6 x 3 hour practical sessions (or equiv.), interactive computer assessed tutorials & practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Chemistry Subject Achievement score of at least 13 (or equiv.) - in exceptional circumstances, consult Head of Chemistry
- Assumed Knowledge: CHEM 1100 Chemistry IA
- Restriction: CHEM 1201 Foundations of Chem. IB
- Assessment: exam 70%, practical work 20%, computer assessed tutorials 10%

Matter and Energy - the relevance of intermolecular forces, chemical equilibrium, energy considerations and chemical reactivity applied to aspects of chemistry and biochemistry. Synthetic and Bioorganic Chemistry - an introduction to chemical synthesis with particular reference to addition and substitution reactions. Strategies for synthesis and properties of biologically significant molecules will also be addressed.

#### **CHEM 1201**

#### Foundations of Chemistry IB

- 3 units semester 2
- 3 lectures, 1 tutorial per week; 6 x 3 hour practical sessions (or equiv.), interactive computer assessed tutorials & practicals
- Eligibility: students with SACE Stage 2 Chemistry Subject Achievement score of less than 13 or equiv.
- Available for Non-Award Study
- Assumed Knowledge: CHEM 1101 Foundations
   of Chemistry IA
- Restriction: CHEM 1100/1200 Chemistry IA/IB
- Assessment: exam 70%, practical work 20%, computer assessed tutorials 10%

Equilibrium & Energy - Introduction to chemical equilibrium - acids and bases, titrations, buffers. Energy considerations applied to aspects of chemistry and biochemistry. Bio-organic & Polymer Chemistry - introduction to spectroscopic identification of functional groups and molecular structure, chemistry of synthetic and biological polymers including polyalkenes, polyesters and polyamides; peptides and proteins.

# Level II

#### **CHEM 2003**

#### **Environmental Chemistry II**

- 4 units semester 1
- 3 lectures, 1 tutorial, 6 hours practical work per week
- Available for Non-Award Study
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, CHEM 1101 Foundations of Chemistry IA & CHEM 1201 Foundations of Chemistry IB or equiv.
- Restriction: SOIL&WAT 2009WT Environmental Chemistry II (NR)
- Assessment: exam 75%, practical work 25%

This course aims to establish a sound understanding of the chemical nature of the biosphere and the natural and human induced chemical variations in local and global environments. The atmospheric, terrestrial, riverine and oceanic chemical compositions and their interactions to produce climate and other environmental variations are examined. The natural chemical cycles of major environmental importance, such as those of carbon, nitrogen, oxygen-ozone, phosphorus and sulfur, are examined. The chemical environmental impact of human activities, such as farming, mining and other industries, will be examined in both general terms and through case studies. Teaching will be through lectures and practical classes and may include some field study.

#### **CHEM 2100**

#### **Chemistry IIA**

- 4 units semester 1
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv) per week
- Available for Non-Award Study

- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, CHEM 1101 Foundations of Chemistry IA (Cr) & CHEM 1201 Foundations of Chemistry IB (Cr) or equiv.
- Assessment: exams 65%, practical work 25%, tutorial papers 10%

Studies in Chemistry at Level 2 deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry and/ or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIA focuses on chemical reactivity and illustrates both how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of structure determination, the properties and reactions of molecules, thermodynamics, kinetics and the principles of metal-ligand chemistry.

# **CHEM 2101**

#### **Chemistry IIA (Molecular Biology)**

- 3 units semester 1
- 3 lectures, 1 tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB
- Corequisite: BIOCHEM 2102 Advanced Molecular Biology A
- Restriction: CHEM 2100 Chemistry IIA
- Assessment: exam 80%, tutorial papers 20%

Chemistry IIA (Mol Biol) focuses on chemical reactivity and illustrates both how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of structure determination, the properties and reactions of molecules, thermodynamics, kinetics and the principles of metal-ligand chemistry.

# CHEM 2104

#### **Chemistry IIAE**

- 4 units semester 1
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv) per week
- Eligibility: Chemical Engineering students only
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, CHEM 1101 Foundations of Chemistry IA (Credit) & CHEM 1201 Foundations of Chemistry IB (Credit) or equiv.
- Restriction: CHEM 2100 Chemistry IIA
- Assessment: exam 65%, practical work 25%, tutorial papers 10%

Chemistry IIAE focuses on chemical reactivity and illustrates both how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of structure determination, the properties and reactions of molecules, thermodynamics, kinetics and the principles of metal-ligand chemistry.

# **CHEM 2105**

# **Chemistry IIA (Ecochemistry)**

- 4 units semester 1
- 3 lectures, 2 tutorials, 6 hour practical (or equiv..) per week
- Eligibility: BSc (Ecochemistry) students only
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, CHEM 1101 Foundations of Chemistry IA (Cr) & CHEM 1201 Foundations of Chemistry IB (Cr) or equiv.
- Restriction: CHEM 2100 Chemistry IIA
- Assessment: exams 60%, practical work 25%, tutorials 15%

Chemistry IIA (Ecochemistry) focuses on chemical reactivity and illustrates both how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of structure determination, the properties and reactions of molecules, thermodynamics, kinetics and the principles of metal-ligand chemistry.

# **CHEM 2106**

#### Chemistry IIA (Molecular & Drug Design)

- 4 units semester 1
- 3 lectures, 2 tutorials, 6 hours practical work (or equiv) per week
- Eligibility: BSc (Mol. & Drug Design) students
- Prerequisite: CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB
- Restriction: CHEM 2100 Chemistry IIA
- Assessment: exam 60%, practical work 25%, tutorial papers 15%

Chemistry IIA (Mol Drug Des) focuses on chemical reactivity and illustrates both how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of structure determination, the properties and reactions of molecules, thermodynamics, kinetics and the principles of metal-ligand chemistry.

# CHEM 2107

#### **Chemistry IIA (NanoScience & Materials)**

- 4 units semester 1
- 3 lectures; 2 x 2 hour tutorials; 6 hour practical (or equiv) per week
- Eligibility: BSc (Nanosc. & Materials) students
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB
- Restriction: CHEM 2100 Chemistry IIA
- Assessment: exams 60%, practical work 25%, tutorials 15%

Chemistry IIA (Nanoscience & Materials) focuses on chemical reactivity and illustrates both how reactions occur and how structure influences the properties of molecules. The examples used to illustrate these points draw on expertise in the areas of structure determination, the properties and reactions of molecules, thermodynamics, kinetics and the principles of metal-ligand chemistry.

# **CHEM 2200**

#### **Chemistry IIB**

- 4 units semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv) per week
- Available for Non-Award Study

- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, CHEM 1101 Foundations of Chemistry IA (Cr) & CHEM 1201 Foundations of Chemistry IB (Cr) or equiv.
- Assumed Knowledge: CHEM 2100 Chemistry IIA
- Assessment: exam 65%, practical work 25%, tutorial papers 10%

Studies in Chemistry at Level 2 deal with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and materials science. The courses have been designed to provide students who have an interest in chemistry with the necessary knowledge and skills to undertake further studies in chemistry and/or pursue alternative pathways in the biological, environmental, earth and physical sciences.

Chemistry IIB focuses on the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry and stereochemistry, homogeneous catalysis and organic synthesis.

# **CHEM 2201**

#### **Chemistry IIB (Molecular Biology)**

- 3 units semester 2
- 3 lectures, 1 tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB
- Corequisite: BIOCHEM 2202 Advanced Molecular Biology B
- Assumed Knowledge: CHEM 2101 Chemistry IIA (Mol. Biol.)
- Restriction: CHEM 2200 Chemistry IIB
- Assessment: exams 80%, tutorial papers 20%

Chemistry IIB (Mol. Biol.) focuses on the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry and stereochemistry, homogeneous catalysis and organic synthesis.

# CHEM 2204 Chemistry IIBE

- 2 units semester 2
- 12 hours lectures, 4-5 x 6 hour practical sessions (or equiv), tutorials
- Eligibility: Chemical Engineering students only
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, CHEM 1101 Foundations of Chemistry IA (Credit) & CHEM 1201 Foundations of Chemistry IB (Credit) or equiv.
- Assumed Knowledge: CHEM 2104 Chemistry IIAE
- Restriction: CHEM 2200 Chemistry IIB
- Assessment: exams 65%, practical work 25%, tutorial papers 10%

Chemistry IIBE will focus on why and how reactions occur. To illustrate this, the topics to be covered will be selected from thermodynamics and quantum energetics, reaction kinetics and dynamics, surface chemistry and/or aspects of industrial chemistry (such as polymers, petroleum chemistry and catalysis).

# **CHEM 2205**

#### **Chemistry IIB (Ecochemistry)**

- 4 units semester 2
- 3 x 1 hour lectures, 2 x 1 hour tutorials, 6 hour practical (or equiv) per week
- Eligibility: BSc (Ecochemistry) students only
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB, Credit in CHEM 1101 Foundations of Chemistry IA & CHEM 1201 Foundations of Chemistry IB (or equiv)
- Restriction: CHEM 2200 Chemistry IIB
- Assessment: exams 60%, practical work 25%, tutorials 15%

Chemistry IIB (Ecochemistry) focuses on the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry and stereochemistry, homogeneous catalysis and organic synthesis.

#### **CHEM 2206**

#### Chemistry IIB (Molecular and Drug Design)

- 4 units semester 2
- 3 lectures, 2 tutorials, 6 hours practical work (or equiv) per week
- Eligibility: BSc (Mol. & Drug Design) students
- Prerequisite: CHEM 1100/1200 Chemistry IA/IB
- Assumed Knowledge: CHEM 2106 Chemistry IIA (Mol.Drug Des.)
- Restriction: CHEM 2200 Chemistry IIB
- Assessment: exam 60%, practical work 25%, tutorial papers 15%

Chemistry IIB (Mol. Drug Des.) focuses on the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry and stereochemistry, homogeneous catalysis and organic synthesis.

# **CHEM 2207**

#### **Analytical Chemistry II**

- 4 units semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv) per week
- Available for Non-Award Study
- Prerequisite: CHEM 1100/1200 Chemistry IA/IB, CHEM 1101/1201 Foundations of Chemistry IA/IB or equiv.
- Assessment: exam 65%, practical work 25%, tutorial papers 10%

This course examines and provides a sound physical understanding of the techniques that a professional chemist would use to determine the chemical composition of material. It includes chromatography of various types, electrochemical and optical spectroscopic methods (including metal analysis), advanced instrumental techniques and statistical analysis of data. Issues surrounding ethical professional practice will also be addressed.

# **CHEM 2208**

# **Analytical Chemistry II (Ecochemistry)**

- 4 units semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv) per week
- Eligibility: BSc (EcoChemistry) students only

- Prerequisite: CHEM 1100/1200 Chemistry IA & IB, CHEM 1101/1201 Foundations of Chemistry IA & IB or equiv.
- Corequisite: CHEM 2200 Chemistry IIB
- Restriction: CHEM 2207 Analytical Chemistry II
- Assessment: exam 65%, practical work 25%, tutorial papers 10%

This course examines and provides a sound physical understanding of the techniques that a professional chemist would use to determine the chemical composition of material. It includes chromatography of various types, electrochemical and optical spectroscopic methods (including metal analysis), advanced instrumental techniques and statistical analysis of data. The practical component will focus on environmental applications of these techniques. Issues surrounding ethical professional practice will also be addressed.

# **CHEM 2209**

# Analytical Chemistry II (Nanoscience & Materials)

- 4 units semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv) per week
- Eligibility: BSc (Nanosc. & Materials) students
- Prerequisite: CHEM 1100/1200 Chemistry IA & IB, CHEM 1101/1201 Foundations of Chemistry IA & IB or equiv.
- Corequisite: CHEM 2200 Chemistry IIB
- Restriction: CHEM 2207 Analytical Chemistry II
- Assessment:exam 65%, practical work 25%, tutorial papers 10%

This course examines and provides a sound physical understanding of the techniques that a professional chemist would use to determine the chemical composition of material. It includes chromatography of various types, electrochemical and optical spectroscopic methods (including metal analysis), advanced instrumental techniques and statistical analysis of data. The practical component will focus on applications of these techniques to modern materials. Issues surrounding ethical professional practice will also be addressed.

# **CHEM 2210**

#### **Chemistry IIB (NanoScience & Materials)**

- 4 units semester 2
- 3 lectures, 2 x 2 hour tutorials, 6 hour practical (or equiv) per week
- Eligibility: BSc (NanoSc. & Materials) students
- Prerequisite: CHEM 1100 Chemistry IA & CHEM 1200 Chemistry IB
- Restriction: CHEM 2200 Chemistry IIB
- Assessment: exams 60%, practical work 25%, tutorials 15%

Chemistry IIB (Nanoscience & Materials) focuses on the spectroscopic and geometric properties of molecules, and how these influence reactivity. The examples used to illustrate these points draw on expertise in atomic and molecular spectroscopy, symmetry and stereochemistry, homogeneous catalysis and organic synthesis.

# Level III

#### **CHEM 3005**

#### **Topics in Chemistry IIIA**

- 6 units semester 1
- 4 lectures, 12 hours practical work (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equivalent

Course content by arrangement with the Head of Chemistry.

#### **CHEM 3006**

#### **Topics in Chemistry IIIB**

- 6 units semester 2
- 4 lectures, 12 hours practical work (or equiv.)
   per week
- · Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equivalent

Course content by arrangement with the Head of Chemistry.

# CHEM 3111

#### Chemistry III

- 6 units semester 1
- 4 lectures, 1 tutorial, 12 hours practical work (or equiv.) per week
- · Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equiv.
- Restriction: CHEM 3109 Chemical Synthesis IIIA, CHEM 3110 Chemistry of Materials IIIA, CHEM 3209 Chemical Synthesis IIIB, CHEM 3210 Chemistry of Materials IIIB
- Assessment: exam 75%, practical work 25%

This course is foundational to all Level 3 studies in Chemistry. It will commence with classification of molecules according to symmetry, then the application of symmetry, group theory & character tables and their relationship to molecular properties will be explored. The spectroscopic interaction of matter with varying forms of radiation will be examined, including the phenomena of absorption, fluorescence and phosphorescence. A variety of spectroscopies will be explored in detail. The use of spectroscopic techniques, particularly IR & NMR, and mass spectrometry for the determination of chemical structures will be described. Strategies for solving problems related to chemical composition and structure will be emphasised. Introduction to metal mediated reactions and catalytic cycles relevant to synthesis will be explored, particularly chemistry based around Group 10 metals. Carbene/alkylidene chemistry and its use in metathesis reactions will also be presented. Strategy and tactics used in the synthesis of new molecular architectures will be introduced. There will be an emphasis on developing a logical approach to planning a synthesis.

#### **CHEM 3112**

#### **Chemical Applications III**

- 6 units semester 1
- 4 lectures, 1 tutorial, 12 hours practical work (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equiv.
- Corequisite: CHEM 3111 Chemistry III

- Restriction: CHEM 3109 Chemical Synthesis IIIA, CHEM 3110 Chemistry of Materials IIIA, CHEM 3209 Chemical Synthesis IIIB, CHEM 3210 Chemistry of Materials IIIB
- Assessment: exam 60%, project work 15%, practical work 25%

This course will consider the application of a number of chemical principles. An introduction to Frontier Molecular Orbital theory as a means of rationalising electrocyclic reactions, cycloaddition reactions and sigmatropic rearrangements will be presented. The Woodward-Hoffman rules will be introduced. The interaction of metals with unsaturated organic molecules will be discussed as a prelude to consideration of some processes used in industry, including the use of Group 4 based metallocenes. The idea of 'sustainable synthesis' will be introduced and will include discussion of bio-transformations, use of ionic liquids and super-critical fluids as solvents, and use of fluorous phases in synthesis. Finally, aspects of modern instrumentation will be described. Essentials of optical methods including light sources, detectors, sensitivity and signal-tonoise ratios will be discussed. Principles of synchrotron and free-electron laser sources will also be presented including and introduction to diffraction techniques (X-ray, neutron and electron). Digital vs analogue data acquisition, pulsed vs CW. and FT methods will also be described.

# CHEM 3211

#### Heterocyclic Chemistry & Molecular Devices III

- 3 units semester 2
- 2 lectures, 1 tutorial, 6 hours practical (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equiv.
- Assumed Knowledge: CHEM 3111 Chemistry III
- Restriction: CHEM 3109 Chemical Synthesis IIIA, CHEM 3110 Chemistry of Materials IIIA, CHEM 3209 Chemical Synthesis IIIB, CHEM 3210 Chemistry of Materials IIIB
- Assessment: exam 75%, practical work 25%

This course will begin with a survey of the common heterocyclic ring systems including their distribution and importance. A discussion of the chemistry, synthesis and reaction of aromatic heterocyclic compounds with emphasis on those biological significance will then follow. Particular emphasis will be placed on reagents and mechanisms of these processes. The synthesis, properties and utility of a range of macrocycles including coronands and cryptands will then be presented. Recognition of metal ions by coronands and cryptants will be used as an introduction to the principles of host-guest chemistry. The recognition of hydrophobic species by cyclodextrins will then be presented. Finally aspects of the construction of molecular devices will be discussed.

# CHEM 3212

#### Materials Chemistry III

- 3 units semester 2
- 2 lectures, 1 tutorial, 6 hours practical (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equiv.
- Assumed Knowledge: CHEM 3111 Chemistry III
- Restriction: CHEM 3109 Chemical Synthesis IIIA, CHEM 3110 Chemistry of Materials IIIA, CHEM 3209 Chemical Synthesis IIIB, CHEM 3210 Chemistry of Materials IIIB
- Assessment: exam 75%, practical work 25%

The principles of photochemistry will be presented with emphasis on the role of light in both inducing and monitoring chemical reactions and controlling electron transfer. Focus will then turn to the special characteristics of laser radiation including underlying aspects and operation of various types of lasers. The use of lasers in chemical process, such as photo-lithography, will then be considered. Finally aspects of one and two dimensional nanostructured materials will be considered, including their structure, generation and quantum properties.

# CHEM 3213

#### Advanced Synthetic Methods III

- 3 units semester 2
- 2 lectures, 1 tutorial, 6 hours practical (or equiv) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equiv.
- Assumed Knowledge: CHEM 3111 Chemistry III

- Restriction: CHEM 3109 Chemical Synthesis IIIA, CHEM 3110 Chemistry of Materials IIIA, CHEM 3209 Chemical Synthesis IIIB, CHEM 3210 Chemistry of Materials IIIB
- Assessment: exam 75%, practical work 25%

Theoretical aspects and applications of a variety of synthetically useful reactions will be presented. During the course, we will continually expand the arsenal of powerful synthetic methods available and exemplify their uses. We will focus on efficiency (how do you get the greatest amount of the desired compound in the fewest steps?), chemo- and regio-selectivity (how do you get only the reaction you want and only at the site of interest?) and stereochemistry (how do you control the absolute and relative stereochemistry of the products of various reactions?). An overview will be given of synthetic strategy including the design and control of stereochemistry in the synthesis of complex molecules. The applications of chemical principles in a variety of contexts including industrial processes & chiral synthesis will be addressed.

# **CHEM 3214**

#### Medicinal and Biological Chemistry III

- 3 units semester 2
- 2 lectures, 1 tutorial, 6 hours practical (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA & CHEM 2200 Chemistry IIB or equiv.
- Assumed Knowledge: CHEM 3111 Chemistry III
- Restriction: CHEM 3109 Chemical Synthesis IIIA, CHEM 3110 Chemistry of Materials IIIA, CHEM 3209 Chemical Synthesis IIIB, CHEM 3210 Chemistry of Materials IIIB
- Assessment: exam 75%, practical work 25%

An introduction to the principles of medicinal chemistry including natural product isolation, lead generation, lead optimisation and quantitative structure-activity relationships will be presented. The principles of parallel and combinatorial synthesis will be presented in this context. Applications of mass spectrometry, NMR spectroscopy and other techniques to the structure determination of biologically important molecules (particularly proteins) will be presented. The chemistry of a number of key biological processes (e.g. enzyme chemistry, action of antibiotics on membranes etc.) will also be presented. An introduction to the arena of biomimetic inorganic chemistry will be presented, including extensive discussion of the structure and function of metalloenzymes. The section will emphasise how the principles of nature can be applied to the rational design of metallic species capable of controlled N<sub>2</sub>, CO<sub>2</sub>, CO and CH<sub>4</sub> activation.

#### Honours

#### **CHEM 4000**

#### **Honours Chemistry**

- 24 units full year
- Prerequisite: Major in Chemistry, Organic Chemistry, Physical & Inorganic Chemistry, Chemical Synthesis, Chemistry of Materials or another appropriate program, at a standard satisfactory to Head of Chemistry
- Assessment: coursework undertaken, research report, oral exam, seminar

Intending Honours students should consult the Head of Chemistry during the preceding year. The Discipline of Chemistry runs Honours programs commencing in February and August (mid year intake). Each student is required to devote their full time to a coursework program and a research project. The course work covers a range of advanced topics, the methods of presentation and assessment of which vary according to topic. Honours students are required to attend seminars and research colloquia. The research project, chosen after consultation with academic staff, is designed to broaden and deepen student's chemical understanding, experimental skills, independent thought and communication skills. Each student will be required to present a seminar and a research report on their project at the end of the Honours year.

# CHEM 4001

#### Honours B.Env.Sc. (Chemistry)

- 12 units full year
- Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Chemistry
- Assessment: research proposal, seminars, thesis, viva voce 60%, average of Level III courses referred to above 40%

Intending candidates should consult Head of Chemistry for potential supervisors during third year and be prepared to begin studies at the start of February or August. Research project of the student's choosing (on topic acceptable to Head of Chemistry) normally taken at same time as coursework (12 units of Level III courses relevant to the student's Honours project)

# CHINESE

# Level I

# CHIN 1001

# **Chinese IA**

- 3 units semester 1
- 5 contact hours, 1 hour language lab (unsupervised) per week
- Available for Non-Award Study
- Assumed Knowledge: no previous knowledge of Chinese required
- Assessment: continuous assignments and tests, oral tests, mid-term test and final exams

The course consists of the study of the basic grammar, vocabulary and structures of modern standard Chinese (Mandarin) with special emphasis on the style and usage found in China today. Students will learn around 250 Chinese characters and associated compounds, concentrating on vocabulary which relates to contemporary China.

# **CHIN 1002**

# **Chinese IB**

- 3 units semester 2
- 5 contact hours, 1 hour in language lab (unsupervised) per week
- Available for Non-Award Study
- Prerequisite: CHIN 1001 Chinese IA or equiv.
- Assessment: assignments, tests, oral tests, midterm test and final exams

This course is a continuation of CHIN 1001 Chinese IA. It continues instruction and practice in the speaking, understanding, writing and reading of modern standard Chinese. Throughout the course, mastery of conversational skills will be reinforced through oral-aural practice and at the same time, increased emphasis will be placed on contemporary texts. By the end of the semester students will know around 600 Chinese characters and associated compounds.

# CHIN 1011 Chinese ISA

- 3 units semester 1
- 5 contact hours per week
- Available for Non-Award Study
- Prerequisite: Continuers level Chinese (16 or better) or equiv.
- Assessment: weekly assignments, tests, midterm  $\boldsymbol{\vartheta}$  oral tests, exam

The course consists of tuition in speaking, listening to, writing and reading modern standard Chinese. Chinese ISA extends students' knowledge of basic grammar, vocabulary and structures found in the spoken and written form of Chinese today. The main emphasis is on building up students' communicative skills in both speaking and reading through learning activities in class. It is anticipated that by the end of the course the student will know about 900 Chinese characters and associated compounds related to contemporary China.

# CHIN 1012

# Chinese ISB

- 3 units semester 2
- 5 contact hours per week
- Available for Non-Award Study
- Prerequisite: CHIN 1011 Chinese ISA or equiv.
- Assessment: weekly assignments, tests, midterm  $\boldsymbol{\vartheta}$  oral tests, exam

This course consists of tuition in the speaking, listening to, writing and reading of modern standard Chinese. The main emphasis is on building up vocabulary and reading experience as a basis for studying contemporary Chinese society and culture. It is anticipated that by the end of the course the student will know around 1200 Chinese characters.

# Level II

# CHIN 2001 Chinese IIA

- 4 units semester 1
- 5 contact hours per week
- Prerequisite: CHIN 1002 Chinese IB or equiv.
- Assessment: weekly assignments, tests, midterm  $\boldsymbol{\vartheta}$  oral tests, exam

The course consists of tuition in speaking, listening to, writing and reading modern standard Chinese. Chinese IIA extends students' knowledge of basic grammar, vocabulary and structures found in the spoken and written form of Chinese today. The main emphasis is on building up students' communicative skills in both speaking and reading through learning activities in class. It is anticipated that by the end of the course the student will know about 900 Chinese characters and associated compounds related to contemporary China.

#### **CHIN 2002**

#### **Chinese IIB**

- 4 units semester 2
- 5 contact hours per week
- Prerequisite: CHIN 2001 Chinese IIA or equiv.
- Assessment: weekly assignments, tests, midterm & oral tests, exam

This course consists of tuition in the speaking, listening to, writing and reading of modern standard Chinese. The main emphasis is on building up vocabulary and reading experience as a basis for studying contemporary Chinese society and culture. It is anticipated that by the end of the course the student will know around 1200 Chinese characters.

# **CHIN 2003**

#### **Chinese for Chinese Speakers IIA**

- 4 units semester 1
- 3 contact hours per week
- Assessment: continuous assessment, tests, exam

The course is designed for students who speak Chinese (including Chinese dialects) at home and have studied Chinese in primary/secondary schools in China, Taiwan, Hong Kong, Singapore and Malaysia and for those who have acquired an equivalent standard of linguistic skills in Chinese. It aims to extend students' linguistic skills and knowledge of modern standard Mandarin Chinese. It consists of tuition in oral, reading, writing and translation practice. The emphasis is on improving the students' pronunciation through the mastery of the Pinyin phonetic system.

#### **CHIN 2004**

#### **Chinese for Chinese Speakers IIB**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: CHIN 2003 Chinese for Chinese Speakers IIA or equivalent
- Assessment: continuous assessment, tests, exam

The course assumes knowledge and linguistic skills equivalent to Chinese for Chinese Speakers IIA. It consists of tuition in oral, reading, writing and translation practice. Students will be taught the basic skills in writing academic essays.

#### **CHIN 2011**

#### **Chinese IISA**

- 4 units semester 1
- 5 contact hours per week
- Prerequisite: CHIN 1012 Chinese ISB or equiv.
- Assessment: listening & written tests, oral test, composition/short essay, final exam

This course aims to consolidate and extend the language skills developed at Chinese ISB level by means of further oral, reading, writing and translation practice. The emphasis is on the application of the student's language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. It is expected that by the end of the semester students should be able to read texts in modern Chinese using reference materials, should have an active vocabulary of around 1600 Chinese characters and should be able to discuss the content of the materials studied in Chinese.

# CHIN 2012 Chinese IISB

- 4 units semester 2
- 5 contact hours per week
- Prerequisite: CHIN 2011 Chinese IISA or equiv.
- Assessment: listening & written tests, oral test, composition/short essay, final exam

This course is a continuation of CHIN 2011 Chinese IISA. This course aims to consolidate and extend the language skills developed by means of further oral, reading, writing and translation practice. The emphasis is on the application of the student's language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. It is expected that by the end of the semester students will have continued their linguistics skills and gained further training in reading modern literary and journalistic styles. The texts studied will include: contemporary short stories, documentary materials and selected texts dealing with topics related to Chinese society and culture. By the end of the semester students should be able to read original texts in modern Chinese with the aid of reference materials, should have an active vocabulary of around 2000 Chinese characters and should be able to discuss the content of the materials studied in Chinese.

# Level III

#### CHIN 3001 Chinese IIIA

- 6 units semester 1
- 5 contact hours per week
- Prerequisite: CHIN 2002 Chinese IIB or equiv.
- Assessment: listening & written tests, oral test, composition/short essay, final exam

This course aims to consolidate and extend the language skills developed in Chinese IIB by means of further oral, reading, writing and translation practice. The emphasis is on the application of the student's language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. It is expected that by the end of the semester students should be able to read texts in modern Chinese using reference materials, should have an active vocabulary of around 1600 Chinese characters and should be able to discuss the content of the materials studied in Chinese.

# **CHIN 3002**

#### **Chinese IIIB**

- 6 units semester 2
- 5 contact hours per week
- Prerequisite: CHIN 3001 Chinese IIIA or equiv.
- Assessment: listening & written tests, oral test, composition/short essay, final exam

This course is a continuation of CHIN 3001 Chinese IIIA. The course aims to consolidate and extend the language skills developed by means of further oral, reading, writing and translation practice. The emphasis is on the application of the student's language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. It is expected that by the end of the semester students will have continued their linguistics skills and gained further training in reading modern literary and journalistic styles. The texts studied will include: contemporary short stories, documentary materials and selected texts dealing with topics related to Chinese society and culture. By the end of the semester students should be able to read original texts in modern Chinese with the aid of reference materials, should have an active vocabulary of around 2000 Chinese characters and should be able to discuss the content of the materials studied in Chinese.

# **CHIN 3003**

#### **Chinese for Chinese Speakers IIIA**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: CHIN 2004 Chinese for Chinese Speakers IIB or equiv.
- Assessment: oral tests, translations, composition, short essays, exam

This courses aims to consolidate and extend the language skills developed in CHIN 2004 Chinese for Chinese Speakers IIB by means of further oral, reading, writing and translation practice. The emphasis will be on the application of the student's language training to the study of Chinese source materials reflecting Chinese culture and society. The texts studied will include short stories, documentary materials and selected texts from the internet dealing with topics related to Chinese society and culture.

# CHIN 3004

#### **Chinese for Chinese Speakers IIIB**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: CHIN 3002 Chinese for Chinese Speakers IIIA or equiv.
- Assessment: oral tests, translations, composition, short essays on the background to materials studied, exam

This course aims to consolidate and extend the language skills developed in CHIN 3003 Chinese for Chinese Speakers IIIA by means of further oral, reading, writing and translation practice. The emphasis will be on the application of the student's language training to the study of Chinese source materials reflecting Chinese culture and society. The texts studied will include short stories, documentary materials and selected texts from the Internet dealing with topics related to Chinese society and culture.

# CHIN 3011

# **Chinese IIISA**

- 6 units semester 1
- 3 contact hours, 2 hours unsupervised per week
- Prerequisite: CHIN 2012 Chinese IISB or equiv.
- Assessment: continuous, final exam

This course is an advanced program in Chinese language and traditional studies. Students will also read a selection of modern Chinese documents and literature. By the end of the course students will be familiar with a range of written styles. Throughout the course, emphasis will also be placed on oral/aural skills and the ability to analyse the materials studied using oral Chinese.

# CHIN 3012

#### **Chinese IIISB**

- 6 units semester 2
- 3 contact hours, 2 hours unsupervised per week
- Prerequisite: CHIN 3011 Chinese IIISA or equiv.
- Assessment: continuous, final exam

This course is a continuation of CHIN 3011 Chinese IIISA. Students will also read a selection of modern and traditional Chinese documents and literature. By the end of the course students will be familiar with a range of written styles. Throughout the course, emphasis will also be placed on oral/aural skills and the ability to analyse the materials studied using oral Chinese.

# Honours

# **CHIN 4401**

#### **Honours Chinese Studies**

- 24 units full year
- Prerequisite: high credit or above in Chinese IIIB/Advanced Chinese A/B, 4 semester courses or equiv. (2 at Level II/III at credit or higher) from specified list (see Honours Handbook)

Students wishing to take Honours in Chinese Studies should consult the Honours Coordinator

prior to commencing Level II to ensure that appropriate course choices are made in preparation for Honours. They are encouraged to stream their courses so that their language study is combined with: (a) a variety of Chinese Studies courses; and (b) a sequence of courses in one discipline (eg History, Politics, Economics, etc).

Entry to Honours is subject to the approval of the Head of Discipline on advice from the Honours Committee of the Centre. Honours work includes course work and thesis - details are in the Centre's Honours Handbook. Students wishing to take Honours but who are without prerequisites are advised to consult the Honours Coordinator as soon as possible.

# CLASSICAL STUDIES

# Level I

#### **CLAS 1001**

#### **Classics: From Egypt to Ancient Greece**

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 2 x 1200 word tutorial papers 60%, 2 hour exam 40%

This course is designed to be the first part of an introduction to the ancient world and its influence on Western civilisation. Students will be introduced to the literature and material remains of the distant past, 1500-480 BCE. The lectures will deal with Egypt, Mesopotamia, Syro-Palestine, Minoan Crete, Mycenaean Greece, Persia and early Greek states.

# **CLAS 1002**

#### **Classics: From Ancient Greece to Rome**

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 2 x 1200 word tutorial papers 60%, 2 hour exam 40%

This course is designed to be the second part of an introduction to the ancient world and its influence on Western civilisation, but can be taken on its own, without having done the first part. Lectures will deal with the literature and material remains of Ancient Greece and Rome, from 5th Century BCE Athens to Constantine the Great, 4th Century CE.

### Level II

### **CLAS 2003**

#### Science, Technology and Medicine in Antiquity

- 4 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 2 x 1600 word essays 40%, 2500 word academic journal or 2 hour exam 40%, seminar/tutorial contribution (short presentation, tutorial summaries) 20%

The focus of the course is the beginnings of western science, with an emphasis on ancient medicine as we progress in time. It highlights important contributions to the fields of science, technology and medicine, from the Ionian Greeks (ca 600 BC) down to the late Roman empire (ca AD 300) in a non-technical way. It looks at the material and intellectual conditions for innovations made in these areas, and general issues such as their lasting legacy, pseudo-science, attitudes towards technology, the relation between theory and practice, and their lasting legacy.

### **CLAS 2005**

### Egypt, Greece and the Aegean: Archaeology

- 4 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: not available to students who have completed previous Classical or Greek Archaeology, Art or Architecture courses offered by the University
- Assessment: 2 hour exam 35%, slide test 18%, 3 x 1000 word seminar papers 47%

This course will examine the cultural and political interrelationships of Egypt, Mycenaean Greece and those cultures neighbouring the Aegean during the Bronze and early Iron Ages, using archaeological evidence. Special emphasis will be placed on the study of Late Bronze Age Aegean and mainland Greece, the period of Mycenaean culture.

### CLAS 2006 Early Mediaeval Europe: A.D. 200-800

- 4 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 3 x 1000 word tutorial papers 60%, 2 hour exam 40%

This course examines a period of transformation, from the barbarian invasions of the old Roman Empire to the 'new' Roman Empire of Western Europe. The intellectual and religious tensions within this period will be studied especially the role of the Church in the society as well as its material culture and socio-economic and political structures. Regions surveyed will include the Frankish, Anglo-Saxon, and Lombardic Italian kingdoms.

### CLAS 2012

### **Classical and Hellenistic Greek Archaeology**

- 4 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: not available to students who have completed previous Classical or Greek Archaeology, Art or Architecture courses offered by the University
- Assessment: 2 hour exam 35%, slide test 18%, 3 x 1000 word seminar papers 47%

This course examines Greek material culture from the 5th to the 2nd Century BC, concentrating on the material remains of Athens, Pergamon and Alexandria. Current archaeological surveys and excavations in these cities provide evidence of developments in architectural and artistic style, and the evolving use of sculpture, paintings and buildings for political and religious purposes in the Greek world.

### **CLAS 2016**

### Roman Imperial History A.D. 14-192

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 2 hour exam or participation in online discussion - 2400 words 40%, 2 x 1500 word tutorial papers 46%, 7 tutorial summaries 14%

This course covers the political and social history of Rome from Tiberius to Commodus. The last four weeks of the semester will be devoted to a special topic: slavery and the Roman family.

### **CLAS 2020**

### Afterlife and Underworld in Antiquity

- 4 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 2 hour exam or 2500 word academic journal 40%, 2 x 1600 word essays 40%, seminar contribution 20%

The focus of this course is on the myths and rituals dealing with the process of death and the passage to the afterlife, from pharaonic Egypt to Christian Rome. It deals with popular beliefs about and philosophical ideas on death and dving, and the prospects and nature of an afterlife, in an underworld or elsewhere. A recurrent issue is the relationship between the quality of life lived and that of subsequent existence. What sort of rewards and punishments were obtained? Drawing on ancient literary and material evidence, and making some use of modern cinematic treatments, the course deals with topics such as funeral rites, burial customs, epitaphs, shamanism, reincarnation, martyrdom, mystery ceremonies that promised immortality to initiates, mummification and maltreatment of corpses.

### CLAS 2021

### Eastern Mediterranean Archaeological Field School

- 4 units summer semester
- Quota will apply
- Prerequisite: 6 units level I Humanities/Social Science, Level II Classical Archaeology or equiv. course (subject to approval of course coordinator)

 Assessment: 3 practical tests 30%, written group report 50%, short critique 10%, individual database catalogue work 10%

Students participate in excavation so must be physically able to undertake assessable tasks of excavation, recording & planning; students work as a group & individually and are responsible for costs of participation (contact Classics for details).

Students will develop basic skills in trench recording, excavation and site-interpretation during a 4 week overseas archaeological field-school in the Eastern Mediterranean. Basic techniques in surveying, planning, section-drawing, site photography, context recording and basic Harris matrix will all be taught and assessed. From a secure dighouse on a Romano-Byzantine archaeological site in the Hashemite Kingdom of Jordan, students will gain first-hand experience of the range of material culture within this formerly wealthy and culturally diverse Roman province, and will visit wellpreserved cities such as Jerash and Gadara.

### Level III

### **CLAS 3003**

### Science, Technology and Medicine in Antiquity

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2 x 1800 words essays 30%, 3500 word academic journal or 2-hour exam 40%, 2 seminar/tutorial contributions (short presentation, tutorial summaries) 30%

The focus of the course is the beginnings of western science, with an emphasis on ancient medicine as we progress in time. It highlights important contributions to the fields of science, technology and medicine, from the Ionian Greeks (ca 600 BC) down to the late Roman empire (ca AD 300) in a non-technical way. It looks at the material and intellectual conditions for innovations made in these areas, and general issues such as their lasting legacy, pseudo-science, attitudes towards technology, the relation between theory and practice, and their lasting legacy.

### **CLAS 3005**

### Egypt, Greece and the Aegean: Archaeology

- 6 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: not available to students who have completed previous Classical or Greek Archaeology, Art or Architecture courses offered by the University
- Assessment: 2 hour exam 30%, slide test 15%, 2 x 1300 word seminar papers 30%, 3000 word essay 25%

This course will examine the cultural and political interrelationships of Egypt, Mycenaean Greece and those cultures neighbouring the Aegean during the Bronze and early Iron Ages, using archaeological evidence. Special emphasis will be placed on the study of late Bronze Age Aegean and mainland Greece, the period of Mycenaean culture

### **CLAS 3006**

### Early Mediaeval Europe: A.D. 200-800

- 6 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2 hour exam 40%, 2 x 1300 word seminar papers 30%, 3000 word essay 30%

This course examines a period of transformation from the barbarian invasions of the old Roman Empire to the 'new' Roman Empire of Western Europe. The intellectual and religious tensions within this period will be studied especially the role of the Church in society as well as its material culture and socio-economic and political structures. Regions surveyed will include the Frankish, Anglo-Saxon, and Lombardic Italian Kingdoms.

### CLAS 3012

### **Classical and Hellenistic Greek Archaeology**

- 6 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 8 units Level II Humanities/Social Sc.

- Restriction: not available to students who have completed previous Classical or Greek Archaeology, Art or Architecture courses offered by the University
- Assessment: 2 hour exam 30%, slide test 15%, 2 x 1300 word seminar papers 30%, 3000 word essay 25%

This course examines Greek material culture from the 5th to the 2nd Century BC, concentrating on the material remains of Athens, Pergamon and Alexandria. Current archaeological surveys and excavations in these cities provide evidence of developments in architectural and artistic style, and the evolving use of sculpture, paintings and buildings for political and religious purposes in the Greek world.

### CLAS 3016

### Roman Imperial History A.D. 14-192

- 6 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2 hour exam or participation in an online discussion, 3300 words 40%, 2 x 1500 word tutorial papers 32%, 2700 word essay 28%

This course covers the political and social history of Rome from Tiberius to Commodus. The last four weeks of the semester will be devoted to a special topic: slavery and the Roman family.

### CLAS 3020

### Afterlife and Underworld in Antiquity

- 6 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2 hour exam or academic journal 40%, 2 seminar papers each 15%, worksheet 15%, seminar contribution 15%

The focus of this course is on the myths and rituals dealing with the process of death and the passage to the afterlife, from pharaonic Egypt to Christian Rome. It deals with popular beliefs about and philosophical ideas on death and dying, and the prospects and nature of an afterlife, in an underworld or elsewhere. A recurrent issue is the relationship between the quality of life lived and that of subsequent existence. What sort of rewards and punishments were obtained? Drawing on ancient literary and material evidence, and making some use of modern cinematic treatments, the course deals with topics such as funeral rites, burial customs, epitaphs, shamanism, reincarnation, martyrdom, mystery ceremonies that promised immortality to initiates, mummification and maltreatment of corpses.

### **CLAS 3021**

### Eastern Mediterranean Archaeological Field School

- 6 units summer semester
- Quota will apply
- Prerequisite: 8 units level II Humanities/Social Sciences including level IIClassical Archaeology or equiv. course (subject to approval of course coordinator)
- Assessment: 3 practical tests 30%, written group report 40%, short critique 5%, site diary 5%, individual database catalogue work 5%, 2500 word essay 15%

Students will develop basic skills in trench recording, excavation and site-interpretation during a 4 week overseas archaeological field-school in the Eastern Mediterranean. Basic techniques in surveying, planning, section-drawing, site photography, context recording and basic Harris matrix will all be taught and assessed. From a secure dighouse on a Romano-Byzantine archaeological site in the Hashemite Kingdom of Jordan, students will gain first-hand experience of the range of material culture within this formerly wealthy and culturally diverse Roman province, and will visit wellpreserved cities such as Jerash and Gadara.

### Honours

### CLAS 4401

### **Honours Classical Studies**

- 24 units full year
- Prerequisite: UG degree with credit average in courses in major in Classical Studies or equiv, usually successful completion of at least 1 year's study in Ancient Greek and/or Latin - all approved by Head of Discipline
- Assessment: coursework (2 topics) totalling 16000 words 50%, 15000-20000 word thesis 50%

Students wishing to take Honours Classical Studies should consult the Honours Coordinator

prior to commencing Level II to ensure appropriate course choices are made in preparation for Honours.

There are three components within the Classical Studies Honours course, two of which are to be taken in first semester, the third in second semester. Two seminar courses must be taken in first semester. Choices of course topics will vary from year to year within the discipline - consult with the Honours Coordinator for details. Each seminar course will require written work of approximately 6000 words in total per course. A research project or dissertation will be undertaken in second semester. The exact arrangement of the course may be varied by the Head of Discipline in accordance with the interests of the students and the availability of specialised teaching.

Students are strongly advised that any higher degree work in the area of ancient history, archaeology or philosophy or related areas of ancient culture will require at the very least a basic expertise in one or more ancient languages, as well as a reading knowledge of French, German and/or Italian. It is in the student's own interests to incorporate one or more of these languages into his or her undergraduate degree. In some circumstances Honours Classical Studies can be studied part-time over two years or can be combined with Honours in another discipline.

## COMMERCE

### Honours

### COMMERCE 4000 Honours Commerce

- 24 units full year
- Eligibility: approved Commerce students only
- Assessment: research project, presentation of thesis of approx. 10000 words 50% - thesis will form part of Honours exam

Detailed arrangements for classes will depend on enrolments and students are advised to communicate with the Head of School well before the beginning of the academic year. Students will be admitted to Honours classes only with the approval of the Head.

A supervisor will be allocated to each student based on the topic or research area of interest. Late in the first semester students will be expected to outline their thesis objective and proposed approach to a meeting of a small number of staff. The thesis is to be completed and presented by the end of semester 2 lectures. Four copies, typed double spaced on A4 paper and bound must be presented. Students will be expected to present themselves for an oral examination on their thesis at a date towards the end of the University's November examination period.

Each student is required to undertake four first semester modules based on their research area of choice, as follows:

Research Methodology; Quantitative Methods in Business; Contemporary Theoretical Issues in Commerce.

The Fourth module will be in the discipline area of the student's thesis topic and may include:

Advanced Accounting Theory

Advanced Finance Theory

Information Theory

Issues in Tax and Commercial Law

Management and Organisation Theory

Management Accounting Theory

Strategic Marketing.

## COMMERCIAL LAW

### Level I

### **COMMLAW 1004**

### **Commercial Law I(S)**

- 3 units summer semester or semester 2
- 2 lectures, 1 tutorial, 6 hours self-directed study per week
- Available for Non-Award Study
- Quota may apply
- Assessment: exam, assignments as determined at first lecture

An introduction to the legal system including the roles of the Constitution, parliaments and courts. An introduction to the basic rules of commercial law including breach of contract, the tort of negligence, liability for unsafe products, misleading conduct and unconscionable conduct.

### Level II

### COMMLAW 2000

### **Commercial Law II**

- 4 units semester 1
- 2 lectures, 2 hour tutorial , 8 hours self-directed study per week
- Available for Non-Award Study
- Assumed Knowledge: COMMLAW 1004 Commercial Law I(S)
- Assessment: exam, assignment as determined at preliminary lecture

An examination of the law relating to business structures including sole traders, partnerships, joint ventures and trusts. The majority of the course is devoted to an examination of corporations law in Australia including the following topics: the constitutional background and history of companies legislation, the concept of corporate personality, the distinguishing features of different types of companies, authority of agents to bind the company, pre-registration contracts, company capital, management of the company, company financial reporting, auditors and directors duties, members' rights, voluntary administration, receivers, winding up of companies.

### Level III

### COMMLAW 3010 Income Tax Law III

- 4 units semester 1
- 2 lectures, 2 hour tutorial, 8 hours self-directed study per week.
- Available for Non-Award Study
- Prerequisite: COMMLAW 2000 Commercial Law II
- Assessment: exam, assignments as determined at preliminary lecture

This course provides an introduction to, and overview of, fundamental concepts of income tax law. Topics include jurisdiction to tax; assessable income, including capital gains and losses; exempt income; deductions; tax accounting; tax entities; anti-avoidance; and tax administration.

## COMPUTER SCIENCE

### Level I

### COMP SCI 1003

### **Internet Computing**

- 3 units semester 2
- 3 lectures, 3 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Assessment: written exam, compulsory projects

Internet Architecture: Decentralisation, Tolerance, End-to-end Argument, Unambiguous Humanreadable Naming, Packet Switching. Web Architecture: Least Power, Independent Invention, Evolvability, REST. Protocols: TCP/IP, SMTP, FTP, HTTP. Naming: DNS and URLs. Data Formats: HTML, XML, XML-Schema. Meta-data and the Semantic Web. Trust. Practicals: Web Programming using PHP.

### COMP SCI 1007

#### **Computer Science Concepts**

- 3 units semester 1 or 2
- 8 lectures, 6 hours practical work per week
- · Eligibility: bridging course approved students only
- · Available for Non-Award Study
- · Assessment: written exam; compulsory projects

Programming in Java: variables, control structures, methods, classes, input/output; object orientation, interfaces, inheritance; introduction to graphical user interfaces. Introduction to computer systems, system software and basic Unix.

### COMP SCI 1008

### **Computer Science IA**

- 3 units semester 1 or 2
- 3 lectures, 3 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies
- Restriction: cannot be counted with COMP SCI 1004 Computer Literacy I, COMP SCI 1000 Engineering Programming IE, or PURE MTH 1002 Quantitative Methods Using Computers I
- · Assessment: written exam, compulsory projects

Programming via the Java language: variables, types, control structures (selection, iteration), principles of data abstraction, objects (classes, methods, inheritance, interfaces), scope and visibility, input/ output, program design, error detection and debugging, elementary datastructures.

### COMP SCI 1009

#### **Computer Science IB**

- 3 units semester 1 or 2
- 3 lectures, 3 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1008 Computer Sc. IA
- Restriction: cannot be counted with COMP SCI 1004 Computer Literacy I, COMP SCI 1000 Engineering Programming IE, or PURE MTH 1002 Quantitative Methods Using Computers I
- Assessment: written exam, compulsory projects

Programming via the Java language: recursion, event handling, and graphical user interfaces. Introduction to computer science: numerics, computer architecture, finite state machines, information systems, artificial intelligence, theory of computation, ethics for Information Technology.

### Level II

### COMP SCI 2000

#### **Computer Systems**

- 3 units semester 1 or 2
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: Mathematics, as in MATHS 1011/1012 Mathematics IA/IB or MATHS 1008 Mathematics for Information Technology I
- Assessment: written exam, compulsory projects

Information storage representation, Memory organisation and hierarchy, Processor fundamentals, assembler programming, assembler operation, subroutine calling mechanisms, linking/loading, Inputoutput and device controllers requirements for supporting an operating system and device drivers.

### COMP SCI 2002

### **Database and Information Systems**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design
- Assumed Knowledge: Mathematics, as in MATHS 1011/1012 Mathematics IA/IB, MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology I
- Restriction: cannot be counted with previously offered Databases and Information Systems
- Assessment: written exam, compulsory projects

Characteristics of secondary storage media, Database algorithms for projection, selection, join, union, intersection, difference updating and grouping illustrated in Cobol. The use of SQL to create query databases. Implementation issues. Integrity and security of data, professional practice.

### COMP SCI 2003

### **Numerical Methods**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB
- Assessment: written exam, compulsory projects

Floating point numbers; representation, subtractive cancellation, machine epsilon. Solution of non-linear equations by fixed point iteration methods. Interpolation and least squares, approximation of functions by polynomial and spline functions. Methods of numerical integration: simple and composite rules. Numerical solution of differential equations.

### COMP SCI 2004

#### **Data Structures and Algorithms**

- 3 units semester 1 or 2
- 2 lectures, 4 hours practical work per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: Mathematics, as in MATHS 1011/1012 Mathematics IA/IB, MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology I
- Assessment: written exam, compulsory projects

Program development techniques including basic ideas of correctness; representation of lists, stacks, queues, sets, trees and hash tables. Notions of complexity and analysis; notion of abstract data type; sets and sequences as examples; searching and information retrieval illustrated with a 'table' abstract data type; various representations of a 'table' abstract data type; recursion.

### COMP SCI 2005

### Systems Programming in C and C++

- 3 units semester 2
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Introduction to C; syntax of functions and basic structure, keywords, expressions. Variables; scoping and lifetime, structures, arrays and pointers. Run time stack; function invocation, parameter passing, passing arrays. Memory; segmentation, dynamic allocation, leaks and buffer over-runs. Compilation process; preprocessor, compiling object code, static and dynamic linking. File I/O; streams, reading and writing files. UNIX tools; design philosophy, combining programs using pipes and I/O redirection. Profiling tools, binary tools, debugging. Basic shell scripting. Build tools. Compiler flags. C++; class syntax, C++ object model, inheritance, virtual and pure virtual functions. Copy and assignment semantics and their consequences. Overloading operators. I/O using the C++ STL. Templates; syntax, use with the STL, default types, run time performance.

### COMP SCI 2006

### Introduction to Software Engineering

- 3 units semester 2
- 2 lectures, 4 hours practical work per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms; Mathematics such as in MATHS 1011/1012 Mathematics IA/IB or MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology
- Assessment: written exam, compulsory projects

Design: software design, UML notation, static models - identifying classes and associations, dynamic models - identifying states, events, transitions, use cases, mapping designs into code. Specification: the scope, role and styles of software specification. Testing: modes of testing, organising test suites. Human issues: managing objectoriented projects, ethics, professional practice.

### Level III

### COMP SCI 3001

### **Computer Networks and Applications**

- 3 units semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design
- Assessment: written exam, compulsory projects

Introduction to networks and digital communications with a focus on Internet protocols: Network layer model, Internet application protocols, UDP, TCP (reliable transport, congestion and flow control), IP (routing, addressing), Data Link layer operation (Ethernet, 802.11), physical transmission media, selected current topics such as: security, multimedia protocols, Quality of Service, mobility, emerging protocols (IPv6).

### COMP SCI 3002

### **Programming Techniques**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Restriction: cannot be counted with 1006 Programming and Data Structures B
- Assessment: written exam, compulsory projects

Program development: methods of specification, design, implementations, testing and debugging, case studies, design patterns, Graphs: construction, traversal, topological sorting, applications. Sorting and searching: internal and external algorithms, correctness and complexity analysis.

### COMP SCI 3004

### **Operating Systems**

- 3 units semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems and COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

OS purposes: resource management and the extended virtual computer; historical development. Processes: critical sections and mutual exclusion, semaphores, monitors, classical problems, deadlock; process scheduling. Input and Output: hardware and software control. Memory management: multi-programming; swapping; virtual memory, paging and symbolic segmentation; File System: operations, implementation, performance. Protection mechanisms: protection domains, access lists, capability systems, principle of minimum privilege. Distributed systems: communication, RPC, synchronisation, distributed file systems, authentication.

### COMP SCI 3005

### **Computer Architecture**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems and COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Fundamentals of computer design; quantifying cost and performance; instruction set architecture; program behaviour and measurement of instruction set use; processor datapaths and control; pipe-lining, handling pipeline hazards; memory hierarchies and performance; I/O devices, controllers and drivers; I/O and system performance.

### COMP SCI 3006

### **Software Engineering and Project**

- 3 units semester 2
- 2 lectures, 4 hours practical work per week, weekly project meeting
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 3002 Programming Techniques, COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory group project

This course in software engineering provides an introduction to the production of high quality software solutions to large tasks. Among the topics covered in this course are the following: models of the software life-cycle, requirements analysis and specification, program design techniques and paradigms, software specification techniques, configuration management and version control, quality assurance, integration and testing, project management, risk analysis, case study of ethical considerations in Software Engineering.

### COMP SCI 3007

### Artificial Intelligence

- 3 units semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Al methodology and fundamentals: philosophy of Al, representation techniques, goal reduction. Search techniques: hill-climbing, beam, best-first, A\*, game playing techniques with minimax and alpha-beta pruning. Learning: Winston's methods, neural networks. Rule based systems; forward and backward chaining methods. Al systems: ANALOGY, MYCIN, GPS, Xcon. Fuzzy systems. Computer vision, Evolutionary computation: genetic algorithms, evolution strategies, genetic programming.

### COMP SCI 3009

### **Advanced Programming Paradigms**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

A selection of topics from the following: Fundamental models of computation, illustrated by the lambda calculus. Different approaches to programming: functional and logic paradigms. Fundamental concepts of programming languages, including abstraction, binding, parameter passing, scope, control abstractions. Programming models expressed via Scheme: substitution model; map/reduce programming; environment model; object oriented model; a compositional programming model. Introduction to parallel computing: data parallelism, Java threads, and relationship to distributed computing. Examples in application: map/reduce programming in Google; flow-oriented programming for composition of web-services. Ontologies in the semantic web.

### COMP SCI 3012

### **Distributed Systems**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems, COMP SCI 2004 Data Structures & Algorithms, COMP SCI 3001 Computer Networks & Applications; exposure to SQL programming - eg, COMP SCI 2002 Database & Information Systems
- Restriction: cannot be counted with COMP SCI 3012 Open Systems and Client/Server Computing
- Assessment: written exam, compulsory projects

A selection of topics from the following: the challenges faced in constructing client/server software: partial system failures, multiple address spaces, absence of a single clock, latency of communication, heterogeneity, absence of a trusted operating system, system management, binding and naming. Techniques for meeting these challenges: RPC and middleware, naming and directory services, distributed transaction processing, 'thin' clients, data replication, cryptographic security, mobile code. Introduction to Java RMI.

### COMP SCI 3013

### **Event Driven Computing**

- 3 units semester 2
- 2 lectures, 4 hours practical work per week, 1 tutorial per three weeks
- Available for Non-Award Study

- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007 Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms, COMP SCI 2006 Introduction to Software Engineering
- Assessment: written exam, compulsory projects

Event driven paradigm: Finite State Automata, their behaviour, synchronisation, correspondence with regular expressions. Manifestation as Statecharts, Petri Nets, handling concurrency, differences. Environments and their expected behaviour, state space coverage and relation to testing. Examples of embedded systems. Building Graphical User Interfaces: Model-View-Controller paradigm. Design Patterns for managing complexity. Building GUIs in Java with the Swing library. Contrast with other GUI toolkits. Ease of use and HCI issues.

Practical project to cover both the use of FSA for control logic and for GUI design.

### COMP SCI 3014

#### **Computer Graphics**

- 3 units semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB or COMP SCI 1007Computer Science Concepts or both COMP SCI 1000 Engineering Programming IE & ELEC ENG 1004 Logic Design
- Assumed Knowledge: PURE MTH 2000 Discrete Mathematics II or MATHS 1012 Maths IB, COMP SCI 2005 Systems Programming in C & C++
- Restriction: cannot be counted with COMP SCI 7016 Advanced Artificial Intelligence C
- Assessment: written exam, compulsory projects

Light and the human visual system. Colour. Images, quantisation and sampling. Image manipulations. Raster graphics. Coordinate systems and transformations. The viewing frustum. The graphics pipeline and toolkits. Clipping and culling. Visibility. Lighting and shadows. Transparency and blending. Texture mapping. Local shading models. Environment mapping techniques. Multi-pass rendering. Level of detail. Raytracing. Animation. Particles. Implementation Efficiency.

### COMP SCI 3015A/B

### Software Engineering Group Project 1

- 6 units full year
- · 240 hours practical work
- Eligibility: students in specified programs only
- Assessment: performance during project work, written reports, seminar presentations

A major Software Engineering Project as approved by Head of School

### Level IV

### COMP SCI 4000

### **Software Architecture**

- 3 units semester 1
- 2 hours lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assessment: exam and/or assignments

Topics in Software Architecture approved by Head of School.

### COMP SCI 4001

### Software Engineering Group Project 2

- 8 units Not offered in 2007
- · 320 hours project work
- Eligibility: students in specified programs only
- Assessment: performance during project work, written reports, seminar presentations

A major Software Engineering Project approved by Head of School.

### COMP SCI 4022

### **Computer Vision**

- 3 units semester 1
- 2 hours lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assessment: exams and/or assignments

Over the last 30 years, researchers in artificial intelligence have endeavoured to develop computers with the capacity to "see" the world around them. This course aims to convey the nature of some of the fundamental problems in vision, and to explain a variety of techniques used to overcome them. Emphasis is placed on aspects of 3-D vision and the gaining of practical experience in image-processing via TV-camera facilities. Various vision problems are considered, including: the detection of edges in images, and the accumulation of edge data to form lines; the use of a stereo image pair to derive 3D surface information; the exploitation of image shading (or intensity variation) to obtain surface normal data; motion detection in video images; forming image mosaics; tracking objects in video; video surveillance techniques; Marr's theory as a framework for visual information processing; object recognition. Several assignments enable the student to gain practical experience in aspects of the above.

### COMP SCI 4023

#### Software Process Improvement

- 3 units semester 2
- 2 hours lectures, 4 hours practical work per week
- Available for Non-Award Study

The course introduces students to elements of the Software Engineering Institute's Personal Software Process, PSP. The PSP is introduced in increasing levels of sophistication with the essential elements illustrated by programming assignments and report writing.

### COMP SCI 4041

### Language Translators

- 3 units Not offered in 2007
- 2 hours lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: Cannot be counted with COMP SCI 3011 Compiler Construction and Project
- Assessment: exams and/or assignments

The structure of compilers: lexical analysis, syntax analysis (top-down and bottom-up techniques), the handling of context-sensitive and context-free errors, type checking and code generation. BNF languages and grammars. This course is closely coupled with the writing of a large, compulsory programming project

### COMP SCI 4044

### **Computer System Security**

- 3 units semester 1
- 2 hours lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assessment: exams and/or assignments

This course provides an introduction to computer system security at all levels. The course includes: computer security models, hardware systems, operating system mechanisms and policy, network security, and application security. The course will also cover some of the current security threats. Introduction to Computer Security: Threats. vulnerabilities, controls; risk; cost; method, opportunity, motive; technical, administrative, physical controls; prevention, detection, deterrence. Basic cryptography terms, symmetric and asymmetric cyphers; Cryptographic protocols: digital signatures, key exchange, certificates, cryptographic hash functions. Security Models: Introduction to Military Security: Bell La Padula models, BIPA. Security in programs: Flaws -Malicious code: viruses, Trojan horses, worms; Program flaws: buffer overflows, time-of-check to time-of-use flaws, incomplete mediation. Defenses - Software development controls, Testing techniques. Security in Operating Systems: Memory, time, file, object protection requirements and techniques; Protection in contemporary operating systems. Identification and authentication: Identification goals; Authentication requirements: human authentication, machine authentication, authentication technologies. Trusted operating systems: Assurance; trust; Design principles; Evaluation criteria; Evaluation process. Network security: Threats - Network technology: eaves-dropping, spoofing, modification, denial of service attacks. Controls - architectural controls; cryptographic controls; technological controls; administrative and physical controls; overlapping controls. Technologies - Firewalls: Intrusion detection systems; Monitoring systems; Virtual private networking; Remote authentication systems. Management of security: Security policies; Risk analysis; Physical threats and controls.

### COMP SCI 4054

### **High Integrity Software Engineering**

- 3 units semester 1
- 2 hours lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assessment: exams and/or assignments

This course introduces students to high-integrity software engineering, with a focus on the development of safety-critical software. Lectures will cover hazard analysis, risk analysis, safetycritical software, formal methods, safety cases and safety management. Students will apply a variety of practical techniques in assignments.

### COMP SCI 4077

#### System Modelling and Simulation

- 3 units semester 1
- 2 lectures, 1 tutorial, 4 hours practical work per week
- Available for Non-Award Study
- Assessment: exams and/or assignments

This course concerns techniques for the modelling and simulation of complex systems using a variety of methods and software tools. Students are introduced to the packages Matlab and Simulink and are taken through a study of the techniques used in these and other sophisticated modelling packages to solve common engineering problems. The Matlab programming language is used extensively and students learn to program their own solutions for these problems. In addition to studying the equations for these models and their solutions, students study the stability, accuracy and reliability of the solution methods.

### Honours

#### COMP SCI 4002

#### **Software Engineering Honours Project**

- 8 units Not offered in 2007
- 320 hours practical work
- Eligibility: students in specified programs only
- Assessment: performance during project work, written reports, seminar presentations

A major Software Engineering Project as approved by Head of School.

#### COMP SCI 4999

#### **Honours Computer Science**

- 24 units full year
- 8 lectures, 25 hours practical work per week
- Prerequisite: degree & major in Comp.Sc; passes in Level II & III courses in Mathematical & Computer Sciences approved by Head of School

   students with a different background should apply to Head of School
- Assumed Knowledge: various Level II/III Computer Science courses (or year 2 courses &

year 3 options if completed before 1989) depending on composition of Honours program

• Assessment: 60% on performance in 6 lecture courses, 40% on major project

Students intending to enrol in Honours Computer Science are advised to consult the Head of the School of Computer Science, preferably before enrolling for Level III courses

The course will be determined from year to year and will consist mostly of lectures given in the School of Computer Science. Other courses may be included, subject to the approval of the Head of the School. Students will be required to undertake a major computing project, under the guidance of a supervisor.

## CORPORATE FINANCE

### Level II

### CORPFIN 2006

### **Business Finance II**

- 4 units semester 1 or 2
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Assumed Knowledge: either ECON 1008 Business Data Analysis I or STATS 1000 Statistical Practice I, ECON 1004 Microeconomics I, either ACCTING 1002 Accounting for Decision Makers I or ACCTING 1005 Accounting Method I - or similar syllabus content
- Assessment: participation 10%, assignment 15%, test 10%, exam 65%

This course examines firm investment and distribution decisions in the context of a capital market and efficiency of market structures. Valuation methods are developed for valuing projects and securities. Simple asset pricing models are introduced for the purpose of determining the cost of capital for use in investment evaluation. Elementary capital structure theorems are presented, in relation to which the dividend decisions are analysed. Dividend imputation system is described. Principles of working capital management are addressed, as is the valuation of leases. The elements of risk management, involving futures and options, are introduced.

### Level III

#### **CORPFIN 3008**

#### **Corporate Finance Theory III**

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Prerequisite: CORPFIN 2006 Business Finance II
- Assumed Knowledge: SACE Stage 2 Math. Studies, ACCTING 1002 Accounting for Decision Makers I, CORPFIN Business Finance II and ECON 2008 Financial Economics II
- Assessment: assignments, tests, exam, as determined at preliminary lecture

This course looks at theoretical issues in corporate finance and their practical application. Topics include capital structure and the preferences for debt or equity as suggested by agency models, including leases, pecking order theory and timing models; dividend policy; applications of option pricing theory including real options, convertible securities and executive compensation; initial public offerings; internal capital markets and diversification.

### **CORPFIN 3009**

#### Portfolio Theory and Management III

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- · Available for Non-Award Study
- Prerequisite: CORPFIN 2006 Business Finance II
- Assumed Knowledge: SACE Stage 2 Math. Studies, ECON 2008 Financial Economics II
- Assessment: tests, exam, assignment, as determined at preliminary lecture

This course identifies investment classes available and considers investment mandates in the context of managed funds. The course begins with a review of various methods for pricing risky assets. Asset allocation techniques are then examined for both fixed income and equity portfolios. The course then goes on to analysing issues for measuring portfolio tracking error as well as measuring risk exposure, such as through the use of Value At Risk. The course concludes with a look at performance evaluation and international portfolio management.

### **CORPFIN 3013**

### **Options, Futures and Risk Management III**

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Prerequisite: CORPFIN 2006 Business Finance II
- Assumed Knowledge: SACE Stage 2 Math. Studies, Business Finance II & Financial Economics II; discrete & continuous compounding, how financial markets operate, stock & bond price valuation procedures, algebra & simple differentiation
- Assessment: exam, assessment as per course outline

This course examines the function and operation derivative markets serve in finance. To begin, the course identifies relationships that must hold in such markets if there are to be no arbitrage opportunities. The course then covers options pricing using the Binomial and Black-Scholes approach, as well as describing a wide range of futures and options dealing strategies, along with their applications to hedging and risk management. Currency and fixed-interest derivatives are also considered as well as swaps, options on futures and some alternative exotic options.

### **CORPFIN 3019**

### **Corporate Investment and Strategy III**

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Prerequisite: CORPFIN 2006 Business Finance II
- Assumed Knowledge: SACE Stage 2 Math. Studies, ACCTING 1002 Accounting for Decision Makers, CORPFIN 2006 Business Finance II, ECON 2008 Financial Economics II
- Assessment: exam, assignment/test as determined at first class

This course examines techniques and issues in corporate finance with a focus on corporate investment decisions. The course covers several aspects of valuation in a corporate setting: estimation of free cash flow, stock valuation along with recognition of growth opportunities, risk management strategies, estimation of beta using online data, and specifying market scenarios to identify sustainable growth outcomes when evaluating investment proposals. Further topics include merger and acquisition strategies, examination of options embedded in corporate capital structures, incentive-aligning compensation including executive stock options, and techniques for measuring financial performance including Economic Value Added.

## DENTISTRY

### Level I

### **DENT 1000H0**

First Annual B.D.S. Examination

### DENT 1001AHO/BHO

### **Dental and Health Science I**

- 6 units full year
- 7 hours per week, including problem-based learning sessions, class meetings, learning laboratories & tutorials
- Eligibility: BDS students only
- Corequisite: DENT 1002AHO/BHO Dental Clinical Practice I, DENT 1003AHO/BHO Human Biology ID, DENT 1004AHO/BHO General Studies ID
- Assessment: assignments, short tests, practical exercises, short answer problem based exam

From a patient care focus, this stream introduces students to the oral cavity and practice of dentistry and provides a foundation for understanding the normal structure and function of the oral cavity, patient management and dentistry as a career. By using problem-based learning packages that present a range of practice situations, students begin to develop patient investigation skills and an integrated knowledge base. The stream emphasises the scientific basis of dentistry; introduces new developments and outlines. important ethical issues in the health professions; develops individual and group learning skills, describes the normal appearance of oral soft tissues, the morphology and development of the teeth and main features of the masticatory system as a basis for the analysis of patients' oral health and disease; discusses the nature, aetiology and prevention of common dental diseases at both individual and community level; introduces students to behavioural sciences and psychology applied to dentistry; provides exposure to the

influences on dental practice and begins an examination of contexts in which dentists work.

Topics include: oral surface features; morphology of the teeth; tooth emergence and calcification; introduction to dental occlusion, radiographic anatomy; nature and distribution of dental diseases; preventive dentistry; fear and anxiety in dentistry; management and motivation of dental patients; dentist-patient communication; behavioural consequences of oral diseases; community dental health issues; dental education and the shaping of the professional; the professional environment; the dentist's role; career pathways; adaptation to change and the possible future for dentistry.

### DENT 1002AHO/BHO

### **Dental Clinical Practice I**

- 8 units full year
- 7 hours per week including clinical, practical sessions
- · Eligibility: BDS students only
- Corequisite: DENT 1001AHO/BHO Dental and Health Science I, DENT 1003AHO/BHO Human Biology ID, DENT 1004AHO/BHO General Studies ID
- Assessment: assignments, clinical & laboratory assessment (self & tutor assessment, journal of reflection, workbooks), station-based semester exams - details in Dental Clinical Practice Workbook

This stream introduces students to the clinical practice of dentistry and provides a foundation for patient management and dentistry as a career. By working through a range of clinical and laboratory based exercises centred on the provision of initial phases of patient care, students have the opportunity to develop clinical skills and knowledge. Students work in a collaborative environment to learn to critically evaluate themselves, and plan and implement strategies for improvement. Learning will be supported by independent study and discussion of findings in class. In particular, DCP I aims to introduce and provide clinical experiences of infection control, ergonomics, occupational health and safety, dental records, preventive dentistry in the management of common dental diseases, development of manual dexterity skills and application of various moisture control methods.

Topics include: introduction to the clinical

environment; infection control; ergonomics and occupational health and safety; patient histories and oral soft tissue examination and recording: dental alginate and impressions; radiography: introduction and interpretation; forensic dentistry; hard tissue examination and charting: cariology. toothwear and staining: plague: dental instruments and handpieces; preventive dentistry: oral hygiene instructions and oral hygiene products; fluoride, action and application; prophylaxis,; mouthquards and splinting of avulsed teeth: dietary assessment: introduction to anatomy and function of the TMJ: dental materials: introduction to amalgam, composite resin and glass ionomer cement: introduction to diagnosis and treatment planning: structure and physico-chemical properties of teeth; minimal intervention dentistry; rubber dam application fissure sealants; periodontal tissue examination and hand instrumentation.

## DENT 1003AHO/BHO

### **Human Biology ID**

- 6 units full year
- 7 hours per week, including class meetings, laboratory sessions, research-based practical sessions, tutorials
- Eligibility: BDS students only
- Corequisite: DENT 1001AHO/BHO Dental and Health Science I, DENT 1002AHO/BHO Dental Clinical Practice ID, DENT 1004HO/BHO General Studies ID
- Assessment: will include tutorials, laboratory exercises, written assignments, tests & exams

This stream aims to provide an overview of the biology of the human species including an evolutionary perspective of the vertebrate. especially the human masticatory system. The stream aims to provide students with a basic knowledge of classical and molecular genetics and to indicate where this knowledge is applicable to dentistry, to provide an introduction to cell biology and to the structure of the human body at the gross and microscopic levels, and to provide an integrated coverage of the structure and function of selected body systems. Giving students the pre-requisite knowledge leading to courses taught in subsequent years of the program, and the tools to communicate effectively with other health professionals and scientists.

Topics include: human evolution including evolution of head form, human adaptability,

essentials of body chemistry, cell structure and function, tissue histology, heredity and variation, genes and chromosomes, linkage, molecular organisation of chromosomes, genetic structure and variation of human populations, genetic engineering, structure and function of the skeletal and neuromuscular systems, skin and sense organs.

### DENT 1004 AHO/BHO

### **General Studies ID**

- 4 units full year
- 3 hours per week
- Eligibility: BDS students only
- Corequisite: DENT 1001AHO/BHO Dental and Health Science I, DENT 1002AHO/BHO Dental Clinical Practice I, DENT 1003AHO/BHO Human Biology ID
- Assessment: projects, written reports, tests, assignments & group presentations

This stream includes topics that will be made available to students during first and second years. Aspects of Basic Physics: the basic physics forming the prerequisite knowledge for the major streams in the BDS program; includes X-rays. Aspects of Basic Chemistry: the aspects of basic chemistry forming the prerequisite knowledge for the major streams in the BDS program. Evidenced Based Dentistry: provides students with an appreciation of the nature and scope of statistics applied to biological problems (biostatistics) as well as a working knowledge of basic statistics, including presentation, interpretation and analysis of data. Computing: provides students with a basic understanding of computers and computing with particular reference to the needs of dental students and dentists. Communication and Learning: introduces students to the educational philosophy and various study skills of the BDS program and emphasises the need to be proficient in communication. Evidence Based Dentistry II provides students with skills necessary to sustain and enhance the clinical practice of dentistry using scientific information published in biomedical journals. Social Context of Dentistry: aims to provide an understanding of the diversity of the Australian community and how that diversity influences the process of dental care and oral health outcomes.

### Level II

### **DENT 2000HO**

### Second Annual B.D.S. Examination

### DENT 2001 AHO/BHO

### **Dental and Health Science II**

- 6 units full year
- 7 hours per week including problem-based learning sessions, class meetings, learning laboratories, tutorials
- Eligibility: BDS students only
- Prerequisite: DENT 1001A/BHO Dental and Health Science I, DENT 1000HO First Annual BDS Exam
- Corequisite: DENT 2002AHO/BHO Dental Clinical Practice II, Dent 2003 AHO/BHO Structure and Function of the Body IID, DENT 2004 AHO/BHO General Studies IID
- Assessment: tests, written exam, performance in tutorials & learning laboratories, project

This stream aims, through the exploration of problem-based learning packages, to provide students with a detailed understanding of the embryology and histology of the dento-facial structures; to provide a basic understanding of the biochemistry of the human body with particular reference to the oral cavity; to develop an appreciation of the scientific aspects of clinical dentistry including functioning of the masticatory system and the importance of occlusion in all branches of dentistry.

Topics include: embryology of face; odontogenesis including enamel and dentine formation; histology of the oral tissues; dental caries; the structural basis of biochemistry; principles of nutrition; molecular organisation including bioenergetics and the principles of metabolism; the integration and control of metabolism; hormones and growth factors; the biochemistry of soft tissues - including epithelium and connective tissue; the biochemistry of calcified tissues - bone, dentine, cementum and enamel; development of occlusion; occlusal variation; orofacial sensation; masticatory function; aspects of behavioural science. A number of problem-based dental learning packages are provided in this stream to give a context to student learning.

### DENT 2002 AHO/BHO

### **Dental Clinical Practice**

- 8 units full year
- 12 hours per week including clinical, practical, resource sessions
- Eligibility: BDS students only
- Prerequisite: DENT 1002A/BHO Dental Clinical Practice I, DENT 1000HO First Annual BDS Exam
- Corequisite: DENT 2001AHO/BHO Dental and Health Science II, Dent 2003 AHO/BHO Structure and Function of the Body IID, DENT 2004 AHO/BHO General Studies IID
- Assessment: practical (lab & clinic), academic (assignments & exams) - details in Dental Clinical Practice Manual

This course builds upon Dental Clinical Practice I with regard to the acquisition and consolidation of dental clinical skills. Experience will be gained in patient management, emphasising communication and behaviour management, clinical examination procedures and diagnostic methods before working with selected patients of the SA Dental Service.

Topics include: clinical assessment and recording of dental health data; diagnosis; introductory treatment planning; obtaining intra-oral radiographs; preventative regimes; basic restorative dentistry; properties of commonly used dental materials; introduction to management of emergencies; introduction to gingival and periodontal conditions, introduction to local anaesthesia.

### DENT 2003 AHO/BHO

### Structure and Function of the Body IID

- 6 units full year
- 7 hours per week, including class meetings, laboratory sessions, research-based practical sessions, tutorials
- · Eligibility: BDS students only
- Prerequisite: DENT 1003A.BHO Human Biology ID, DENT 1000HO First Annual BDS Exam
- Corequisite: DENT 2001AHO/BHO Dental and Health Science II, Dent 2002 AHO/BHO Dental Clinical Practice II, DENT 2004AHO/BHO General Studies IID
- Assessment: will include written exams, case scenarios, problem-based learning, tutorial and laboratory exercises

This stream aims to provide: an integrated coverage of the structure and function of selected body systems; a detailed description of the gross topographical anatomy of the head and neck emphasising aspects of functional and clinical importance; a description of the anatomy of the central nervous system. A number of problembased scenarios are provided in this stream to give a context to student learning.

Topics include: structure and function of the alimentary, cardiovascular, respiratory, lymphoid, endocrine and renal systems; detailed osteology of the skull; applied anatomy of face and scalp, infratemporal region, temporomandibular joints, pterygopalatine fossa, submandibular region, pharynx, larynx, cranial nerves; central nervous system; sensory and motor pathways; autonomic nervous system; blood supply of the brain; anatomy related to local anaesthesia in dentistry.

### **DENT 2004H0**

### **General Studies ID**

- 4 units semester 1
- 3 hours per week
- Eligibility: BDS students only
- Prerequisite: DENT 1004A/BHO General Studies ID, DENT 1000HO First Annual BDS Exam
- Corequisite: DENT 2001AHO/BHO Dental and Health Science II, Dent 2002 AHO/BHO Dental Clinical Practice II, DENT 2003AHO/BHO Structure and Function of the Body IID
- Assessment: projects, written reports, tests, assignments & group presentations

This stream includes topics that will be made available to students during first and second years. Aspects of basic physics: the basic physics forming the prerequisite knowledge for the major streams in the BDS program; includes X-rays. Aspects of basic chemistry: the aspects of basic chemistry forming the prerequisite knowledge for the major streams in the BDS program. Biostatistics: provides students with an appreciation of the nature and scope of statistics applied to biological problems (biostatistics) as well as a working knowledge of basic statistics, including presentation, interpretation and analysis of data. Computing: provides students with a basic understanding of computers and computing with particular reference to the needs of dental students and dentists. Communication and learning: introduces students to the educational

philosophy and various study skills of the BDS program and emphasises the need to be proficient in communication. Evidence Based Dentistry II provides students with skills necessary to sustain and enhance the clinical practice of dentistry using scientific information published in biomedical journals. Social context of dentistry: aims to provide an understanding of the diversity of the Australian community and how that diversity influences the process of dental care and oral health outcomes.

### Level III

### **DENT 3000H0**

Third Annual B.D.S. Examination

### DENT 3001 AHO/BHO

### **Dental and Health Science III**

- 6 units full year
- 7 hours per week (approx)
- · Eligibility: BDS students only
- Prerequisite: DENT 2001AHO/BHO Dental and Health Science II, DENT 2000HO Second Annual BDS Exam
- Corequisite: DENT 3002 AHO/BHO Dental Clinical Practice III, DENT 3003AHO/BHO Disease and Disorders of the Body IIID
- Assessment: short tests, journal review, practical and clinical exercises, problem-based learning sessions & PBL written exam

This stream aims to: describe the normal functioning of the masticatory system, the importance of occlusion and the characteristics of an optimal occlusion, describe the morphological and functional changes that occur in the masticatory system as a result of normal growth and ageing, and the adaptability of the system to these changes; emphasise the importance of occlusion in all branches of dentistry and consider the methods available for diagnosis and treatment of disorders of the masticatory system; consider the causes and effects of disease and stress on the masticatory system; describe human growth and development with particular emphasis on aspects relevant to dentistry; provide an introduction to aspects of orthodontic examination diagnosis and treatment. A number of problembased dental learning packages are provided in this stream to give a context to student learning.

Topics include: orofacial sensation, jaw muscles and receptors; jaw reflexes, mastication and swallowing, temporomandibular joint function and loading, parafunction, occlusal therapy, concepts of physical growth and development, methods for studying growth, factors affecting growth, development of the skull, factors affecting normal dento-facial growth, indices of maturation, facial aesthetics, normal changes in dental arch form, aetiology of orthodontic problems.

### **DENT 3002 AHO/BHO**

#### **Dental Clinical Practice III**

- 12 units full year
- 16 hours per week (approx), including class meetings, laboratory sessions, clinic sessions
- Eligibility: BDS students only
- Prerequisite: DENT 2002 AHO/BHO Dental Clinical Practice II; DENT 2001AHO/BHO Dental and Health Science II; DENT 2003AHO/BHO Structure and Function of the Body IID and DENT 2000HO Second Annual BDS Exam
- Corequisite: DENT 3001AHO/BHO Dental and Health Science III, DENT 3003AHO/BHO Disease and Disorders of the Body IIID
- Assessment: tests of understanding, assignments, laboratory exercises, clinical work, written exam

This stream builds upon Dental Clinical Practice II with regard to the consolidation of preventive, periodontal and restorative clinical skills, through manikin exercises and by provision of treatment for selected patients of the South Australian Dental Service. The pain control component of the stream covers local anaesthetic techniques. The stream includes a laboratory program in removable prosthodontics, endodontic and in cast gold restorations. Topics include: patient assessment for local anaesthesia, pharmacological aspects of local anaesthesia, basic principles of local anaesthesia; aspects of basic and advanced restorative dentistry; treatment planning principles of preparation for indirect gold, resin and porcelain restorations; laboratory stages of cast gold restorations; bonding systems; philosophies and practices of removable partial denture prosthodontics; periodontics aetiology and treatment; pulpal, periapical and periradicular pathology: dental materials; periapical and panoramic radiography.

### DENT 3003 AHO/BHO

### **Diseases and Disorders of the Body IIID**

- 6 units full year
- 6 hours per week
- · Eligibility: BDS students only
- Prerequisite: DENT 2003AHO/BHO Structure and Function of the Body IID, DENT 2000HO Second Annual BDS Exam
- Corequisite: DENT 3001AHO/BHO Dental and Health Science III, DENT 3002 AHO/BHO Dental Clinical Practice III
- · Assessment: 2 written exams, end of year exam

This stream introduces students to pathology, microbiology and immunology in the context of human disease. The course aims to provide students with a detailed understanding of core pathological and immunological reactions that can occur and how such processes relate to clinical disease; to provide students with detailed knowledge of the structure and biology of bacteria, viruses and fungi and how these organisms relate to human disease states and processes; to provide a detailed under-standing of the normal oral microflora and its relationship to oral health and specific dental diseases such as caries and periodontal disease; to provide a detailed understanding of the processes of neoplasia and hyperplasia generally and in relation to the mouth. Topics include: cell injury, acute and chronic inflammation, healing, the cellular composition and function of the normal immune system, immune system reactivity, immunological hypersensitivities; microbial physiology, metabolism and genetics; principles and practice of disinfection and sterilisation, antibiotic therapy, infection control; host-parasite relationships including mechanism of pathogenicity; bacterial, viral and fungal diseases of relevance in dentistry; the oral microbiota and its relation to caries and periodontal diseases; hyperplasia and oral hyperplastic lesions, HIV/AIDS, neoplasia and oral neoplasia.

### Level IV

### **DENT 4000HO**

### Fourth Annual B.D.S. Examination

### DENT 4001 AHO/BHO

### **Dental and Health Science IV**

- 8 units full year
- Contact hours to be determined
- · Eligibility: BDS students only
- Prerequisite: DENT 3001AHO/BHO Dental Health Science III,DENT 3000HO Third Annual BDS Exam
- Corequisite: DENT 4002AHO/BHO Dental Clinical Practice IV, DENT 4003AHO/BHO Dental Selectives IV
- Assessment: short tests, projects, dental learning packages, written exams

This stream provides an understanding of the interactions between general health, general disease and medical treatment with dental treatment. Topics include: general and oral pathology, general medicine, pharmacology and therapeutics, general surgery; social and community aspects of health, and pain control. Dental learning packages (DLP's) will be presented in coordination with the Dental Clinical Practice IV stream. It aims to: provide a systematic overview of clinical and other pathologic features of various diseases/lesions that may be encountered in the tissues of the oral region; describe the systemic diseases and disorders of the body of relevance to dentists; provide an appreciation of principles of drug administration, distribution, action and elimination; provide instruction on important classes of drugs with emphasis on their modes of administration and action, therapeutic uses, adverse effects and interactions: discuss the role of pharmacology and therapeutics in dental practice; discuss the management of medically compromised patients; provide an overview of surgery including knowledge of metabolic response to injury and shock, bleeding and transfusion and surgical infection; discuss social and community aspects of disease including the burden of illness, inequalities and determinants of health, health promotion, care and policy.

An understanding of the basic principles and clinical and microscopic features of disease is assumed, particularly: developmental disorders, inflammation, basic immunopathology, hyperplasia, neoplasia, degenerative disease, hormonal-metabolic disease, physiology, biochemistry and microbiology.

### DENT 4002 AHO/BHO

### **Dental Clinical Practice IV**

- 12 units full year
- 28 contact hours per week, including class meetings, laboratory & clinical sessions
- · Eligibility: BDS students only
- Prerequisite: DENT 3002A/BHO Dental Clinical Practice III, DENT 3000HO Third Annual BDS Exam
- Corequisite: DENT 4001A/BHO Dental and Health Science IV, DENT 4003AHO/BHO Dental Selectives IV
- Assessment: self assessment, tutor assessment of clinical performance, written exams, may also include written assignments or patient case reports & interviews - minimum standards are required in each discipline to complete stream requirements

This stream builds upon previous years with regard to the acquisition and consolidation of dental clinical skills in the disciplines of behavioural science, conservative (operative) dentistry, dental materials, endodontics, oral diagnosis, periodontics, radiology and radiography. The stream consists of class meetings, lectures, seminars, research projects, dental learning packages and clinical practice.

In semester 1 students are introduced to the clinical disciplines of complex conservative dentistry (fixed prosthodontics), paediatric dentistry, orthodontics and removable prosthodontics. Students undertake preclinical practical exercises in these disciplines and must achieve a satisfactory standard before proceeding to treat patients. In semester 2, the disciplines of oral surgery and temporomandibular disorders are introduced through lecture programs. In clinical practice, emphasis is placed on acquiring skills for integrated treatment planning and developing responsible professional attitudes towards care and management of patients assigned to each student for treatment.

### DENT 4003 AHO/BHO Dental Selectives IV

- 4 units full year
- 30 hours total
- Eligibility: BDS students only
- Prerequisite: DENT 3000HO Third Annual BDS Examination
- Corequisite: DENT 3001AHO/BHO Dental and Health Sciences IV, DENT 3002AHO/BHO Dental Clinical Practice III
- Assessment: by supervisors, presentation of work carried out in November selective program

This stream is designed to give students the opportunity to explore aspects of dentistry in more detail or gain additional experience in certain areas or take part in one or more activities not included in other parts of the program. This might include coursework from appropriate programs, supervised research projects, additional experience in advanced aspects of a clinical speciality or exchange visits to other dental schools. Students are strongly advised to discuss their proposed selective program with the coordinator as soon as possible.

### Honours

### **DENT 4100H0**

### **Honours Dentistry**

- 24 units full year
- Eligibility: B.Sc.Dent. Honours students only

Candidates may, with the approval of the Head of Department, enrol in the Honours Dentistry program after they have successfully completed third year, or after they have obtained the degree of Bachelor of Dental Surgery or equivalent. Under certain circumstances, candidates who have obtained an degree in another Faculty may be admitted to an Honours program in Dentistry.

Candidates may choose as their principal area of study one of the current research thrusts of the Dental School. Candidates will be required to undertake on a full time basis for one year (or halftime if approved by the Dean], a program of study which may include essays, seminars, laboratory work, clinical work and a research project under the supervision of a member of the School. A candidate may be required to undertake such formal courses of study in related courses as are deemed desirable. Prospective candidates are advised to consult the Dean of the Dental School and staff members in the year preceding honours year to discuss the area of proposed study.

ANAT SC 4000A/B Honours Anatomical Sciences

BIOCHEM 4000A/B Honours Biochemistry

DENT 4100A/B Honours Dentistry

**GENETICS 4005A/B Honours Genetics** 

PATHOL 4000A/B Honours Pathology

PHARM 4000A/B Pharmacology.

## **DESIGN STUDIES**

### Level I

### DESST 1001

### **Special Topic in Design Studies IB**

- 3 units semester 1
- Up to 3 hours lectures/tutorials/seminars per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 1007**

### **Special Topic in Design Studies IA**

- 3 units not offered in 2007
- Up to 3 hours lectures/tutorials/seminars per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 1009**

### Art History and Theories IA

- 3 units semester 2
- Up to 2 lectures, 1 tutorial per week; occasional excursions
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility

- Quota will apply
- Restriction: Art History and Theories; or DESST 2033 Art History and Theories IIA
- Assessment: slide test 40%, essays 35%, tutorial work 25%

Impressionism and after: a critical view of European art from the time of Manet to the First World War. This course introduces students to the most influential ideas and theories in the art of the latter part of the 19th century, a time of renegotiation of the relationship between artists and the social context within which they work. Included in the study are the major artists and ideas contributing to the development of impressionism, post-impressionism, symbolism, fauvism, cubism, futurism, constructivism, posters and political art. The course aims to stimulate an awareness that familiarity with the history of ideas can aid each person in the expansion, structuring and enrichment of his or her own life. Development of the following skills will be brought into focus: clear-thinking, verbal communication, written communication, interpretation of written and visual material, and ability to work with historical research methods. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

### **DESST 1013**

### An Introduction to Contemporary Arab Culture & Architecture

- 3 units not offered 2007
- Up to 2 lectures, 1 tutorial per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments

An introduction to the major themes of contemporary Arab Culture and architecture. It adopts a multi-disciplinary approach to develop an understanding of the current forces shaping life and built-environment in contemporary Arab societies. The central focus will be upon crosscultural interpretations in the framework of literature, art and architecture and socio-political thought. Within this framework the issues of gender, religion, identity, nationalism, colonialism and the discourse of orientalism will be discussed.

### **DESST 1026**

### **Special Topic in Design Studies IC**

- 3 units semester 2
- Up to 3 hours lectures/tutorials/seminars per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 1027**

### Human Environments: Design and Representation

- 6 units semester 1
- Up to 2 hours of lectures, up to 4 hours studio/workshop/tutorial per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: both DESST 1023 Computer-Aided Design I and DESST 1024 Drawing Architecture & Landscape I
- Assessment: design work, assignments, class & tutorial participation

This course provides an introduction to the fundamentals of design with particular reference to the built environment including the relationships of climate/site, culture/history and technology, with the making of projects, and strategies for designing. The course engages students in active learning through research and project work, both individually and in collaboration with others, to translate ideas and concepts into form in a meaningful way. The course emphasises developing design communication skills: hand/ manual and digital drawing, oral presentation with appropriate visual aids, and written communication.

### **DESST 1028**

### **Natural and Urban Systems**

- 3 units semester 2
- Up to 3 hours lecture/workshop per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply

- Restriction: DESST 1006 Built Environments I
- Assessment: essays/reports

This course provides an introduction to: the concept of systems thinking, including 'natural' and human-made systems with an emphasis upon the built environment context: sciences of landscape. climate, biology, ecology, wetlands, arid landscapes, soil and water eco-units; particular characteristics of Australian and local 'natural' systems: relationship between 'natural' systems and design/construction as well as their impacts on each other; and the concept of sustainability of environmental systems. The course also provides an introduction to the notion of different stakeholders in natural and constructed environments, their needs and aspirations. The course develops effective communication skills especially through oral presentation with appropriate visual aids, and written communication following academic protocols.

### **DESST 1029**

### **Construction and Design: Theories and Practice**

- 6 units semester 2
- Up to 3 hours of lectures, 3 hours studio/tutorial per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: Both of DESST 1008 Composing Architecture and Landscape I and DESST 1014 Construction I
- Assessment: design projects, assignments

This course provides an introduction to the theories and practice of construction. Building and landscape constructions are investigated in relation to the cultural, technological and historical context in which they appear. The course introduces the students to materials and materiality. structural behaviour and construction techniques, and a small planting palette including the plants' performance, behaviour, form and maintenance. It also investigates the relationship between client. architect, engineer and builder. Typical theoretical and practical work in this course includes: interpreting theoretical texts concerned with technological issues: writing concise theoretical texts; design of a small-scale site specific project; building scale models of a small-scale building and its site/topography; building scale models of construction details; reading scaled/working

drawings; and representing ideas by applying the conventions used in professional graphical representations (ie. floor/site plans, elevation, section, detail, axonometric, sketch perspective).

### **DESST 1030**

### **History of Settlements**

- 3 units semester 1
- Up to 3 hours of lectures/tutorials per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: DESST 1018 Image/Text/Architecture I
- Assessment: assignments, quizzes

This course introduces the historical and sociocultural context as well as related design theories of human settlements prior to the 19th century. It fosters a global perspective as well as awareness of particular Australian and local manifestations. The key issues examined will include: geometric and iconographic order, the status and role of architectural designers and writers, methods of representation and reproduction involved in constructing and propagating architectural ideas, and important historical perspectives that situate the developments of human settlements. Practical exercises stimulate skills in research, critical analysis and debate, and academic writing protocols for short analytical texts.

### **DESST 1031**

### **Special Topic in Design Studies ID**

- 3 units semester 2
- Up to 3 hours lectures/tutorials/seminars per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- · Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### Level II

### **DESST 2000**

### **Special Topic in Design Studies IIC**

- 4 units semester 2
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- · Assessment: Assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 2003**

#### Islamic Architecture and Gardens II

- 4 units not offered in 2007
- Up to 2 lectures, 2 tutorials per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: DESST 3023 Islamic Architecture and Gardens III
- Assessment: assignments

This is an introductory course to the history, themes and forms of Islamic architecture and gardens in both traditional and contemporary contexts. It introduces students to the historical development of the constructed environment in the Islamic world, to key building types, and to the elements of place making in urban settings. It discusses order in space, spatial organisation, and spatial sensibility in the Islamic tradition as well as the religious and socio-cultural meanings associated with place making. It examines in some detail the notion of symbolism and the spiritual significance of form and space.

### **DESST 2006**

### **Special Topic in Design Studies IIB**

- 4 units semester 1
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 2010**

### **Conservation in the Built Environment II**

- 4 units not offered in 2007
- Up to 4 hours per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: DESST 3000 Conservation in the Built Environment III
- Assessment: assignments

This course examines the reasons, the what, where and why of conservation in the built environment. It considers how heritage items are identified, recorded, assessed and protected, and questions the validity of these actions. It also examines the various forms of conservation (preservation, restoration, reconstruction etc) and the uses and misuses of traditional and contemporary materials and construction methods. Urban conservation and the complexities of townscape character are canvassed together with the reuse of old buildings and the effects of current popular industries, such as tourism.

### **DESST 2012**

### Colonial and Contemporary Issues in South Asian Architecture II

- 4 units semester 1
- Up to 2 lectures, 2 tutorials per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: Asian Architecture and Landscapes II/III (1996 only) or DESST 3012 Colonial and Contemp. Issues in Sth. Asian Architecture III
- Assessment: 2 tutorial assignments 40%, 3000 word final paper 60%

This course explores historical and theoretical issues arising from the colonial encounter of Europe and Asia, and their implications for contemporary architectural thought and practice. Lectures will focus on the historical case of India since the rarely 19th century.

Through a critical interpretation of British colonial efforts to 'construct' a modern Indian architecture

and the subsequent efforts of post-colonial architects and theorists to 'deconstruct' that spatial and conceptual legacy, the course will consider the discursive nature of architectural knowledge and the built environments it may prescribe, with particular regard to power and the politics of cultural identity. The colonial case study will also draw attention to problems in intercultural understanding, and the relation of architecture to myths, rituals and cosmologies.

### **DESST 2013**

### **Special Topic in Design Studies IIE**

- 4 units not offered in 2007
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 2014**

### **Special Topic in Design Studies IIF**

- 4 units not offered in 2007
- up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- · Assessment: assignments, projects
- Course description will be provided by the School when specialist teaching is available.

### **DESST 2022**

### **Special Topic in Design Studies IIA**

- 4 units semester 1
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- · Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 2027**

### **Special Topic in Design Studies IID**

- 4 units semester 2
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- · Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 2032**

#### Art History and Theories IIB

- 4 units not offered in 2007
- Up to 2 lectures, 1 tutorial hour per week, occasional excursions
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Restriction: Art History and Theories, or DESST 1019 Art History and Theories IB
- Assessment: slide tests 40%, essays 35% and tutorial work 25%

Art history and theories after World War I: modernism and beyond. The course introduces students to some of the leading ideas and manifestations of visual art from about 1920 to the present day. The term 'visual art' is broadly understood to include film, graphics, photography, posters, performance and the arts of process and idea, as well as painting, sculpture and architecture (although architecture is chiefly dealt with in other courses). Expressionism, dada, surrealism, modernism, abstract expressionism, op, pop and minimalism, art and technology, environments, happenings, performance, body art, conceptual art, process art, video, women's art, murals and photorealism are studied. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

### **DESST 2033**

#### Art History and Theories IIA

- 4 units semester 2
- Up to 2 lectures, 1 tutorial hour per week, occasional excursions
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: Art History and Theories; or DESST 1009 Art History and Theories IA
- Assessment: slide tests 40%, essays 35% and tutorial work 25%

Impressionism and after: a critical view of European art from the time of Manet to the First World War. This course introduces students to the most influential ideas and theories in the art of the latter part of the 19th century, a time of renegotiation of the relationship between artists and the social context within which they work. Included in the study are the major artists and ideas contributing to the development of impressionism, post-impressionism, symbolism, fauvism, cubism, futurism, constructivism, posters and political art. The course aims to stimulate an awareness that familiarity with the history of ideas can aid each person in the expansion, structuring and enrichment of his or her own life. Development of the following skills will be brought into focus: clear-thinking, verbal communication, written communication, interpretation of written and visual material, and ability to work with historical research methods. Guest lecturers and excursions are incorporated in the course where appropriate. Use is made of a broad range of visual material.

### DESST 2036

### **Technology in Design**

- 8 units semester 1
- Up to 8 hours per week including lectures, studios, tutorials
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assumed Knowledge: Level I Des.St. core courses
- Restriction: Both DESST 2005 Technology in the Built Environments II & DESST 2034 Domestic Scale Construction II

 Assessment: design projects, assignments, quizzes

This course explores the environmental and technological aspects of design of the built environments. Key topics include climate; thermal performance; thermal comfort; natural light; noise control; building structures; construction materials, techniques and processes; and the interrelationships between plants, hard landscape and domestic scale building construction. The course also introduces students to related Standards, Codes and Regulations on design. The projects encourage innovative and investigative designs that integrate environmental, human and technical issues, with the use of different manual and digital techniques to express design as well as to apply the conventions of technical documentation.

### **DESST 2037**

#### **Cultures, Histories and Designed Environments**

- 8 units semester 2
- Up to 8 hours per week including lectures, studios, tutorials
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assumed Knowledge: Level I.Des.St. core courses
- Restriction: both DESST 2016 Twentieth Century Architecture and Landscape II & DESST 2023 Design and Environments II
- Assessment: Design projects, assignments

This course is concerned with histories and theories of architecture, landscape architecture, and urban design, and related issues in design discourse since the 19th century. Formal and theoretical developments are placed in a coherent historical framework through which further spatial and cultural dimensions may be better understood. While focussing on the global reception and resistance to Modern (European) ideas and forms, the course also addresses issues of cultural difference, including differences in design disciplines and their respective (sub)cultures, and different social backgrounds, needs, preferences, and how these are reflected and responded to in the development of designed environments and urban form. Coursework entails both written and design assignments. These may include critical explorations of specific design theories and

relationships through short analytical texts and three-dimensional compositions, as well as practical translations of theory into built form through the design of small buildings and landscapes in urban context.

### **DESST 2038**

#### **Digital Media II**

- 4 units semester 2
- Up to 4 hours lectures/digital studio per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assumed Knowledge: DESST 1023 Computer-Aided Design I or DESST 1027 Human Environments: Design and Representation
- Restriction: DESST 2025/2008 Computer-Aided Design IIA/IIB
- Assessment: Digital design projects, assignments

Digital design in the built environment is an emerging area with many possible approaches to form making and generation. This course will explore theoretical and ideological discourses on digital design with particular emphasis on the built environment. Through project work incorporating three dimensional solid modelling and animation, students will apply their theoretical knowledge to design innovative and imaginative landscapes/architectures that explore future possible worlds. This course aims to stretch the creative boundaries of past topologies to generate the topologies of the 21st century.

### Level III

### **DESST 3000**

### **Conservation in the Built Environment III**

- 6 units not offered in 2007
- Up to 5 hours per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: DESST 2010 Conservation in the Built Environment II
- Assessment: assignments

This course examines the reasons, the what, where and why of conservation in the built

environment. It considers how heritage items are identified, recorded, assessed and protected, and questions the validity of these actions. It also examines the various forms of conservation (preservation, restoration, reconstruction etc) and the uses and misuses of traditional and contemporary materials and construction methods. Urban conservation and the complexities of townscape character are canvassed together with the reuse of old buildings and the effects of current popular industries, such as tourism.

### **DESST 3005**

### **Special Topic in Design Studies IIIA**

- 6 units semester 1
- Up to 5 hours a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

#### **DESST 3012**

### Colonial and Contemporary Issues in South Asian Architecture III

- 6 units semester 1
- Up to 2 lectures, 3 tutorials a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: Asian Architecture and Landscapes II (1996 only) or Asian Architecture and Landscapes II (1996 only) or DESST 2012 Colonial and Contemporary Issues in South Asian Architecture II
- Assessment: 2 tutorial assignments 40%, 5000 word final 60%

This course explores historical and theoretical issues arising from the colonial encounter of Europe and Asia, and their implications for contemporary architectural thought and practice. Lectures will focus on the historical case of India since the rarely 19th century.

Through a critical interpretation of British colonial efforts to 'construct' a modern Indian architecture and the subsequent efforts of post-colonial architects and theorists to 'deconstruct' that spatial and conceptual legacy, the course will consider the discursive nature of architectural knowledge and the built environments it may prescribe, with particular regard to power and the politics of cultural identity. The colonial case study will also draw attention to problems in intercultural understanding, and the relation of architecture to myths, rituals and cosmologies.

### **DESST 3014**

#### Special Topic in Design Studies IIID

- 6 units semester 2
- Up to 5 hours a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 3016**

#### Special Topic in Design Studies IIIC

- 6 units semester 2
- Up to 5 hours a week
- Eligibility: B.Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 3017**

### **Special Topic in Design Studies IIIE**

- 6 units not offered in 2007
- Up to 5 hours a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- · Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 3018**

### **Special Topic in Design Studies IIIF**

- 6 units not offered in 2007
- Up to 5 hours a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 3023**

### **Islamic Architecture and Gardens III**

- 6 units not offered in 2007
- Up to 2 lectures, 3 hours of tutorials a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Restriction: DESST 2003 Islamic Architecture and Gardens II
- Assessment: assignments

This is an introductory course to the history, themes and forms of Islamic architecture and gardens in both traditional and contemporary contexts. It introduces students to the historical development of the constructed environment in the Islamic world, to key building types, and to the elements of place making in urban settings. It discusses order in space, spatial organisation, and spatial sensibility in the Islamic tradition as well as the religious and socio-cultural meanings associated with place making. It examines in some detail the notion of symbolism and the spiritual significance of form and space.

### **DESST 3024**

### **Special Topic in Design Studies IIIB**

- 6 units semester 1
- Up to 5 hours a week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

### **DESST 3027**

#### **Design for Sustainable Community**

- 6 units semester 1
- Up to 6 hours lectures/seminar/studios/tutorial per week. A field camp may be required.
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assumed Knowledge: Level II Des.St. core courses
- Restriction: DESST 3011 Issues in Urban and Landscape Sustainability III or DESST 3027 Urban Design
- Assessment: main project, assignments

This course centres upon 'place-making' in urban and rural settled environments. It focuses on the diversity of philosophical positions which inform current contemporary approaches to urban and landscape sustainability understood in its widest sense, including not only the 'environmental', but the resource, cultural, social, political, economic, institutional and professional realms, and position them within a design inquiry. Topics typically include introduction to strategic and statutory planning and legislative frameworks, various 'sustainable' environmental systems, economic feasibility study of a design proposal, various standards and codes, and international agreements and impact on local practices. In teamwork and individual work students will explore an existing development and develop a 'sustainable' design/redevelopment proposal, presented in selective and concise graphical presentation using manual and digital techniques, as well as in concise professional report writing.

### **DESST 3028**

### **Natural and Landscape Systems**

- 6 units semester 1
- Up to 6 hours lectures/seminars/tutorials per week. A field camp may be required
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: assignments, presentations, posters, folios, field reports

This course explores in detail 'natural' systems including plant types, taxonomy, performance and maintenance; how they interact with design; and how they are addressed in landscape design. Also covered are hydrology, stormwater management systems, drainage, arid landscapes and wetland design. It specifically explores the issues related to the arid/mallee/coastal and temperate environments of South Australia and how humans reside within and have manipulated the landscapes to their advantage and disadvantage.

### **DESST 3029**

#### **Architecture Design Studio**

- 6 units semester 2
- Up to 6 hours lectures/studios per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- · Quota will apply
- Assumed Knowledge: Level II Des.St. core courses, and DESST 3011 Issues in Urban and Landscape Sustainability III or DESST 3027 Urban Design/Design for Sustainable Community
- Restriction: DESST 3006 Building Design Studio III
- · Assessment: assignments, final project

This course focuses on the exploration of contemporary architecture theories and their application to the design and development of medium scale building project(s). Emphasis will be placed on development of brief and program; developing design to respond to the local environments with the application 'passive' design principles, natural and artificial lighting, and building ergonomics; selecting building materials suitable for the construction; developing construction details; sizing of the structural elements; performing life-cycle cost analysis; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in architectural representation as well as using innovative digital techniques.

### **DESST 3030**

#### Landscape Architecture Design Studio

- 6 units semester 2
- Up to 6 hours lectures/studios/workshops per week, field camp may be required
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assumed Knowledge: Level II Des.St. core courses, 3011 Issues in Urban and Landscape

Sustainability III or DESST 3027 Urban Design/Design for Sustainable Community, and DESST 1025 Natural Systems and Design I or DESST 2025 Natural Systems and Design II or DESST 3028 Natural and Landscape Systems

- Restriction: DESST 3022 Landscape Design Studio III
- Assessment: design projects, assignments, presentations

This course focuses on the exploration of contemporary landscape architecture theories and their application to the design and development of medium to large-scale landscape project(s). Emphasis will be placed on development of brief, process, and program; developing design to respond to the user needs assessed through community consultation and to local environments by taking into consideration topography, vegetation, soil/geology, hydrology and climatology; developing appropriate structure and construction details for the planting and hard scape design as well as irrigation systems; applying night lighting where appropriate; performing life-cycle cost analysis; and presenting design work with manual/ hand and digital drawing and physical modelling using the conventions in architectural representation as well as using innovative digital techniques. The course also introduces the use of Geographic Information System (GIS) in landscape projects.

### DESST 3031 Digital Media Studio

- 6 units semester 2
- Up to 6 hours lectures/digital studio per week
- Eligibility: Des.St.students other students should check their Academic Program Rules re eligibility
- Quota will apply
- Assessment: digital design projects, assignments

This course focuses on the concepts of rules, contingency, grammar and play in the design of virtual places. It explores interaction between the user/designer and virtual space and issues of narrative and animation. Designs will be developed in several digital media applications using visualisation techniques, including Web design, 3D modelling, animation and simulation using a general purpose solid modeller of the kind used in the digital film production industry, as well as 3D Studio Max. An introduction to non-linear editing and sound track production will be used as part of the electronic presentation of virtual design spaces.

### **DESST 4001**

### **Honours Design Studies**

- 24 units full year
- Eligibility: approved Honours B.Des.St.students
- Assumed Knowledge: consult the Head of the School of Architecture, Landscape Architecture and Urban Design
- Discussions with supervisor, occasional seminars, laboratory sessions as appropriate

Students will be required to undertake supervised research in one or two advanced topics, thereby developing a thorough understanding of appropriate research techniques. The outcome of this research will be submitted in the form of a substantial essay or research report including a survey of the literature relevant to the topic(s) chosen. The range of topics to be offered in any year will depend on staff availability.

Topics expected to be offered from time to time include:

Architectural and Landscape Architectural History

Australian Architectural and Landscape Architectural History

Australian Urban Design History and Practice

Computer-Aided Design

Computer Applications in Architecture, Landscape Architecture or Urban Design

Conservation in the Built Environment

Criticism and Architecture and Landscape Architecture

Cross-Cultural Architectural and Landscape Architectural Topics

Dryland Landscape Design

Heritage Conservation and Cultural Landscapes

Islamic Architecture and Garden Design

Issues in Sustainable Architecture and Urban Design

Plants in Design

Project Management

South East Asian Architecture and Landscape Architecture

Theories in Modern Architecture and Landscape Architecture

Thermal Design of Buildings

Urban Design Histories and Theories

Urban Design in Islamic or South East Asian Places Urban Ecology.

Subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design and with the agreement of the other Departments/Schools/Faculties concerned, a course equivalent to 12 units at Level IV taught in another department/ school/faculty may be taken as part of this program.

## **DEVELOPMENT STUDIES**

### Level I

### **DEVT 1001**

### **Introduction to Development Studies**

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: tutorial papers/participation, essays

This course will introduce students to the field of development studies and development processes in countries defined as 'undeveloped' or 'underdeveloped' and some of the contemporary debates in this field. The course examines some of the main thematic development issues associated with the condition of poverty and takes a multidisciplinary approach to understanding poverty through analysis of the distinct social, cultural, economic, political and historical factors that contribute to human vulnerability, risk and inequalities. Students will assesses the causes and extent of global poverty among those people defined as most vulnerable (the poorest quartile, children, women-headed households, minorities, aged and the sick). The lived everyday experiences of poor people are examined through a number of broad themes including famine and hunger, health and welfare, employment, labour and enterprise, rural livelihoods, rural-urban migrations, environment and sustainability, traditionmodernisation, technology and industrialisation, gender, ethnicity, local-global debates and markets. The course will draw upon extensive audio and visual material and case study approach in understanding development and in particular various poverty reduction strategies used in development practice.

## ECONOMICS

### Level I

### **ECON 1000**

### **Principles of Macroeconomics I**

- 3 units summer semester or semester 1 or 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota will apply
- Restriction: not available to students who have already passed ECON 1000 Macroeconomics I
- Assessment: tutorial participation, mid semester test  $\boldsymbol{\vartheta}$  final exam

This course provides an introduction to macroeconomic theory and policy in Australia. Explanations of how we measure the total output or income of the economy; the determination of the equilibrium level of GDP and the influence of money and banking on the economy form the basis for an assessment of Australian policymaking. The effect of fiscal, monetary and incomes policies on the macroeconomic policy objectives of economic growth, low inflation, low unemployment and a sustainable balance of payments position are considered.

### ECON 1002

### Australia & the Global Economy I

- 3 units not offered 2007
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Restriction: not for students who have already passed ECON 1002 The Australian Economy: Institutions & Policy I
- Assessment: tutorial work, essays or papers, final exam

This course deals with relationship between global economic events and their impact on the Australian economy. Topics covered in the course will vary as issues of interest arise. Typical issues to be covered will be the implementation of monetary policy in a world of electronic money and exchange rate volatility, assessment of the consequences of privatisation of essential services such as power, Australia's reluctance to sign the Kyoto Protocol, the consequences for Australia of China's access to the World Trade Organisation, the emergence of the Euro and the negotiation of a Free Trade Agreement with the United States. The course will focus on issues of this type and provide an introduction to the relevant economic tools that can be employed to understand the economic debates surrounding these issues.

### ECON 1004

### Principles of Microeconomics I

- 3 units summer semester or semester 1 or 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota will apply
- Restriction: not available to students who have already passed ECON 1004 Microeconomics I
- Assessment: mid semester exam and final exam

The course provides an introduction to a core area of economics known as microeconomics. It considers the operation of a market economy and the problem of how best to allocate society's scarce resources. The course considers the way in which various decision making units in the economy (individual and firms) make their consumption and production decisions and how these decisions are coordinated. It considers the laws of supply and demand, and introduces the theory of the firm, and its components, production and cost theories and models of market structure. The various causes of market failure are assessed, and consideration is given to public policies designed to correct this market failure.

### ECON 1005

### Mathematics for Economists I

- 3 units semester 1
- 5 hours lectures/tutorials/workshops per week
- Corequisite: ECON 1004 Principles of Microeconomics I
- Restriction: beginners course except with permission of Head of School, may not be taken by students who have performed satisfactorily in SACE Stage 2 Maths Studies, Specialist Maths,or equiv.
- Assessment: tutorial work, mid-semester test, final exam

The course is intended for students without SACE Stage 2 Maths who wish to obtain a knowledge of mathematical techniques suitable for economic analysis. It assumes very little prerequisite knowledge. The approach is informal and aims to show students how to do and apply the mathematics they require for a successful study of economics. Economic applications are considered although this course aims to teach the mathematics not the economics. Topics covered include basic algebra, simple finance, calculus and matrix algebra.

### **ECON 1008**

#### **Business Data Analysis I**

- 3 units summer semester or semester 1 or 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- · Quota will apply
- Restriction: ECON 1008 Business Data Analysis I and STATS 1000 Statistical Practice I cannot both be counted toward degree
- Assessment: tutorials, assignments, tests, final exam

This introductory course covers the collection and organisation of data, the drawing of conclusions and commenting intelligently on the statistical results obtained. Topics include descriptive statistics, correlation and simple regression, index numbers, time series analysis and an introduction to the use of probability in formal statistical inference. Students are taught how to access a statistical database, and how to use a statistical package to do calculations.

### ECON 1009

#### International Financial Institutions & Markets I

- 3 units summer semester or semester 1
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota will apply
- Assessment: tutorial participation, written assignments, mid semester exam and final exam

This course provides an overview of modern and rapidly changing financial systems, with special reference to Australia. It covers the principle institutions, instruments and financial markets, which make up the system. There is a throughout a focus on the economics of the financial markets - including an introduction to the efficient markets hypothesis and behavioural finance theory. Topics covered include the domestic and international flow of funds; the money, credit, capital and foreign exchange markets; the role of the deposit taking and long term savings institutions; the role of the Reserve Bank of Australia as a modern central bank. Instruments discussed include traditional instruments such as equities, bills and bonds, and modern instruments such as asset backed securities. The management of interest rate and foreign exchange risk, including the use of derivatives, is introduced. Elements of financial mathematics are introduced.

### Level II

#### ECON 2000

#### International Trade and Investment Policy II

- 4 units semester 2
- 2 lecturers, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 1004 Principles of Microeconomics I
- Assessment: mid term test, final exam, tutorial presentation

This course examines the interactions between economic, political, strategic, and legal aspects of international trade and investment policies at national, regional and global levels. This includes the ways in which WTO members affect and are affected by regional and multilateral trade and economic integration agreements. The effects of trade and investment policy on the efficiency of resource use, on income distribution, and on national and global trade and economic welfare are analysed using trade theories and models of international trade and investment.

### ECON 2001

#### **Resource & Environmental Economics II**

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 1004 Principles of Microeconomics I
- Restriction: not available to students who have already passed ECON 2001 Environmental Economics II
- · Assessment: project, essays and final exam

This course is designed to demonstrate practical applications of economic analysis to a variety of

environmental issues. The course aims to better understand how economics can help resolve environmental problems caused by human activity. The course's overall purpose is to increase understanding of the role of economics in environmental policymaking. A variety of local, regional and global issues are examined. The topics explored include: the optimal level of pollution; the extinction of species; the economics of renewable resources (fisheries and forests); the role of taxes, property rights and regulations; the linkages between economic development, sustainable growth, population pressure, and habitat preservation.

### ECON 2005

#### Mathematical Economics II

- 4 units semester 1
- 2 lectures; 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 1004 Principles of Microeconomics I, ECON 1000 Principles of Macroeconomics I
- Assessment: exam, test

It is recommended that students intending to proceed to the Honours degree or Master of Economics successfully completed this course. This course concentrates on the basic mathematical methods that are required to understand current economics and to investigate economic models. Topics may include optimisation with and without constraints; linear models; matrix algebra and introductory game theory.

### ECON 2006

#### **Economic and Financial Data Analysis II**

- 4 units summer semester or semester 1 or 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: ECON 1008 Business Data Analysis I, or STATS 1000 Statistical Practice I or equiv.
- Assumed Knowledge: ECON 1004 Principles of Microeconomics I and ECON 1000 Principles of Macroeconomics I, Maths at least to level of ECON 1005 Mathematics for Economists I
- Restriction: cannot be counted with STATS 2002 Introduction to Mathematical Statistics and STATS 2003 Statistical Practice II

Assessment: tutorial participation, mid semester test and final exam

This course provides an introduction to the techniques used to analyse economic and financial data sets. It focuses on the ability to use and understand the methods involved. The first half of the course involve a revision of basic statistics and an introduction to simple and multiple regression analysis, which remains the most commonly used statistical technique in econometrics. In the second half of the course, we will consider several practical aspects of linear regression models such as the different functional forms of regression models commonly used in applied work, consider the consequences of violating some of the classical regression assumptions and suggest some remedial measures accordingly. Basic computing skills using Eviews will also be developed.

### ECON 2007

#### Australian Economic History II

- 4 units semester 1
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 1004 Principles of Microeconomics I and ECON 1000 Principles of Macroeconomics I
- · Assessment: tutorial work, essay and final exam

The course covers the development of the Australian economy viewed in a comparative perspective. Emphasis is given to topics which provide relevant background to Australia's recent economic performance and current policy issues. These include structural changes, economic growth and fluctuations, governments and markets, international economic influences and economic wellbeing.

### ECON 2009

#### **Consumers, Firms & Markets II**

- 4 units semester 1 or 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: ECON 1004 Principles of Microeconomics I
- Restriction: not available to students who have already passed ECON 2009 Microeconomics II
- · Assessment: mid semester exam and final exam

This course builds on the microeconomic principles studied in the Level I Economics courses and provides an analysis of the way in which the market system functions as a mechanism for coordinating the independent choices of individual economic agents. It develops a basis for evaluating the efficiency and equity implications of competition and other market structures, and a perspective on the appropriate role of government. Included are the study of consumer choice, production and cost, market structure, and market failure.

### ECON 2011

#### **Macroeconomic Theory & Policy II**

- 4 units semester 1 or semester 2
- · 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: ECON 1000 Principles of Macroeconomics I
- Assumed Knowledge: SACE 2 Mathematics or ECON 1005 Mathematics for Economists I
- Restriction: not available to students who have already passed ECON 2011 Macroeconomics II
- Assessment: mid semester exam and final exam

The first year macroeconomics course provided a broad overview of the subject area. In this course, the aim is to delve a little deeper into the subject. Macroeconomics is concerned with the behaviour of the economy as a whole. In particular it addresses the big issues which affect us on a day to day basis. As macroeconomists we want to know why some countries grow more quickly than others, why some experience high inflation while others have stable prices and why all countries experience recessions and booms. Furthermore, we want to know if government policy can have an impact on these factors.

The aim of this course is to provide these tools and give a deeper understanding of these issues. It is intended that this course leads on from the first year macroeconomics course and provides a smooth transition for those intending to pursue macroeconomics in later years.

### ECON 2012 Financial Economics II

- 4 units semester 1 or semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- · Quota will apply
- Assumed Knowledge: CORPFIN 2006 Business Finance II and ECON 1009 International Financial Institutions and Markets I
- Restriction: not available to students who have passed ECON 2008 Financial Economics II
- Assessment: assignments, mid-term test, final exam

This course provides an overview of quantitative methods used in finance, considers risk aversion in the context of utility theory, examines the implications of the term structure of interest rates, introduces the basic capital asset pricing model, introduces futures/forwards pricing with applications to financial contracts, and introduces option valuation pricing.

### Level III

### ECON 3003

#### **Resource & Environmental Economics III**

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2009 Consumers, Firms & Markets II
- Restriction: not available to students who have already passed ECON 3003 Economic Theory and the Environment III
- · Assessment: essays, exams, tutorials

This course aims to introduce students to key themes and debates in the management of natural resources in the process of development. The course will analyse some of the complex causes and environmental consequences of unsustainable development in the developing world. Topics that may be covered include: market and institutional failures, the trade-development-environment nexus, the role of forests and biodiversity in development and more generally the role of natural resources in development.

### ECON 3006

### **Development Economics III**

- 4 units semester 1
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2011 Macroeconomic Theory & Policy II, ECON 2009 Consumers, Firms & Markets II
- Assessment: mid semester exam, tutorial work, large assignment and final exam

The course is concerned with the economics of less-developed countries. Topics to be discussed include: the meaning and measurement of development, demographic change, industrialisation, trade, foreign aid and investment, poverty and income distribution, agricultural development and relevant growth theories.

### ECON 3013

### **Applied Econometrics III**

- 4 units semester 1
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: ECON 2006 Economic & Financial Data Analysis II or equivalent
- Restriction: not permitted to be undertaken with ECON 3023 Econometrics III
- · Assessment: mid semester exam and final exam

The course aims to develop an understanding of standard econometric methods, a capacity to formulate research problems so that they are amenable to quantification and a capacity to assess empirical research in economics critically. The first part of the course may include a review of statistics and multiple regression models, followed by an extension to model selection and discrete dependent variable models and then simultaneous equation models. Aspects of time series analysis and forecasting may also be covered. Other topics from econometrics may be included as will use of a statistical package. The emphasis will be on understanding econometric applications rather than the underlying formal theory.

# ECON 3016

### Strategic Thinking for Decision Making III

- 4 units semester 2
- 2 hour lecture, 1 hour workshop per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2005 Mathematical Economics II or equivalent
- Assessment: assignments & final exam

This course introduces students to an integrated approach to the question of "How to Think Strategically?" The real-world significance of game theory as well as its limitations are emphasised. Case studies of excellent strategic thinking will be presented, predominantly but not exclusively from the business world. Students should come away from this course with an enhanced sense of strategy, leadership, rational choice and its limitations, decision-making, and real-world games. Some technical tools in optimisation and in game theory will be provided.

### ECON 3017

### Labour Economics III

- 4 units not on offer in 2007
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2009 Consumers, Firms & Markets II
- Assessment: midterm, final exam, project

This course is designed to introduce students to economic models of the labour market both theoretical and empirical. Illustrations from current policy debates are used. After completing this course, students will be able to describe key features of the labour market, analyse models of the labour market in order to make predictions concerning the impact of public policy recommendations, and evaluate existing data relating to these predictions. Topics include the supply of labour and accumulation of human capital: demand for labour in competitive and noncompetitive markets: labour unions: the determination of equilibrium wages; wage discrimination; policies such as minimum wage laws, welfare reform, and trade.

### ECON 3018

### **Environmental Economics E III**

- 3 units semester 2
- 2 lectures, 1 tutorial per week
- Eligibility: Civil & Env. Engineering students only
- Prerequisite: C&ENVENG 3067 Environmental Science & Policy
- Assessment: project, essays, exam

This course is designed to demonstrate practical applications of economic analysis to a variety of environmental issues. The course aims to better understand how economics can help resolve environmental problems caused by human activity. The course's overall purpose is to increase understanding of the role of economics in environmental policymaking. A variety of local, regional and global issues are examined. The topics explored include: the optimal level of pollution; the extinction of species; the economics of renewable resources (fisheries and forests); the role of taxes, property rights and regulations; the linkages between economic development, sustainable growth, population pressure, and habitat preservation.

### ECON 3021

### **International Trade III**

- 4 units semester 1
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2011 Macroeconomic Theory & Policy II and ECON 2009 Consumers, Firms and Markets II
- Assessment: mid semester test & final exam

This course deals with the theory and practice of international trade and of trade-related policies. It focuses on analysing the gains from trade, the changing patterns of trade, the income distributional consequences of liberalising foreign trade, the relationship between trade, investment, and economic growth, and the reasons for and consequences of trade policies.

### ECON 3023 Econometrics III

- 4 units semester 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: Credit standard in ECON 2006
   Economic & Financial Data Analysis or equivalent
- Assumed Knowledge: ECON 2009 Consumers, Firms & Markets II or ECON 2011 Macroeconomic Theory & Policy II and MATHS 1011/1012 Mathematics I or MATHS 1013 Mathematics IM or ECON 2005 Mathematical Economics II
- Restriction: students undertaking this course are not permitted to undertake ECON 3013 Applied Econometrics III
- Assessment: tutorial work, mid semester exam & final exam

Students intending to proceed to the Honours degree or Master of Economics will be expected to have successfully completed this course. The aim of this course is for students to understand various aspects of estimation and inference for regression models. Particular attention is paid to the econometric theory, to the application of econometrics to real-world problem, and to the interpretation of the estimation results. Topics include probability theory and statistics for economist, linear regression models (simple and multiple) for cross-sectional data with emphasis on theory, multiple regression models with qualitative variables information (binary variables), and heteroskedasticity.

### ECON 3024

### **Public Economics III**

- 4 units semester 1
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2009 Consumers, Firms & Markets II
- Assessment: mid semester test and final exam

This course investigates the role of the public sector in the economic arena. We will attempt to explain why government intervention is needed, how it influences the behaviour of the private sector, what the welfare effects of such influences are, and so on. We will also survey political economy, which regards actions of the public sector as determined by a political process. Topics covered will include welfare economics, market failures, tax and expenditure, and political economy.

## ECON 3030

#### International Economic History III

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2009 Consumers, Firms & Markets II, ECON 2011 Macroeconomic Theory & Policy II (one may be taken concurrently)
- · Assessment: tutorial work, essay, exams

The course surveys the evolution of the international economy in the 20th century. Attention is given to the development of world trade and trade policies, the international monetary system, international capital movements, the interwar depression, the postwar boom and the first and second periods of 'globalisation'. An examination is made of selected topics from the historical experience of the major industrial economies, especially the United States, which are relevant to an understanding of their current economic problems.

#### ECON 3032

#### **International Finance III**

- 4 units semester 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2011 Macroeconomic Theory & Policy II, ECON 2009 Consumers, Firms & Markets II, and either ECON 2006 Economic & Financial Data Analysis II or both STATS 2002 Intro. to Mathematical Statistics II and STATS 2003 Statistical Practice II
- Assessment: tutorial work, final exam

This course deals with the analysis of two important and related macroeconomics issues in open economies: the exchange rate and the capital flows. The objectives of the course are two-fold: to introduce the main concepts, principles and models in the theory and empirical works in those two key areas of International Finance; to apply analytical tools to understand the relevant policy issues in the global markets. Based on additional reading materials, discussions on relevant current events from various parts of the globe will be carried out.

#### ECON 3034

#### **Economic Theory III**

- 4 units semester 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: Credit in ECON 2009 Consumers, Firms & Markets II and ECON 2011 Macroeconomic Theory & Policy II
- Assessment: mid semester test & final exam

This subject presents an introduction to the advanced treatment of economic theory covered in ECON 2011 Macroeconomic Theory and Policy II/ECON 2009 Consumers, Firms and Markets II. The focus will be advanced analytical techniques. Topics covered may include general equilibrium, open economy models, advanced analysis of the role of wealth, expectations, monetary and fiscal policy, game theory, and choice under uncertainty, insurance markets and risky assets.

#### ECON 3035

#### Money, Banking and Financial Markets III

- 4 units semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 2011 Macroeconomic Theory and Policy II or ECON 2012 Financial Economics II
- Assessment: mid semester test, final exam, assignments

This course links the fields of macroeconomics and finance. It provides coverage of economic principles that underlie the operation of banks and other financial institutions. The role of money in the economy and the impact of monetary policy on the macroeconomy are emphasised, as is understanding the foreign exchange market and international finance. More broadly, this course will develop simple economic tools which will allow students to systematically analyse some of the important monetary and financial problems and developments in the world economy (such as crises in emerging economies).

# ECON 3037

#### **Public Finance III**

- 4 units semester 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2009 Consumers Firms and Markets II
- Assessment: tutorial work, mid semester exam, final exam

This course seeks to introduce the advanced undergraduate to formal models of public finance and topics in public finance that are of particular relevance in the Australian context. The course begins with an introduction to welfare economics and the fundamental welfare theorems. Basic models of public goods, externalities and optimal taxes are then developed in order to familiarize the student with the main characteristics of these market failures and their respective solutions. Aspects of public choice will then be covered in order to introduce the student to the difficulties inherent in the design of optimal public institutions. Finally, issues of fiscal federalism will be covered with a strong emphasis on the Australian institutional and historical context These will be contrasted with current literature on fiscal federalism arising out of research inspired by issues concerning the European Union. This course is recommended for those students who wish to seek a career in government or the public sector and for those interested in further study in economics

# Honours

## ECON 4003

#### **Honours Economics**

- 24 units full year
- Contact hours to be advised- arrangements for classes will depend on enrolments and students are advised to communicate with the Honours Coordinator before February
- · Eligibility: Economic Honours students only
- Prerequisite: B.Ec. (or equiv) incl. ECON 3034 and either ECON 3023 or ECON 3013 (or equivs.), plus high standard in degree courses, credit or better in Economic Theory III, econometrics course, at least one other level III economics course
- Assumed Knowledge: students may proceed

without ECON 2005 Mathematical Economics II (or MATHS 1007A/B Maths I or MATHS 1000A/B Maths IM), only with approval of the Head of School or nominee

 Assessment: paper in each of Microeconomics, Macroeconomics [examined in June], papers in optional courses, [approx] 12000 word thesis

Honours students are required to undertake a research project and present a thesis. The thesis, to be commenced by the first week of February, counts for either 37.5% or 25% of the year's assessment, depending on whether 3 or 4 optional courses, respectively, are selected under clause (see below). The thesis is to be completed and presented, typed and bound, towards the end of second semester: the exact date is notified in February.

Arrangements are possible for joint honours combining Economics with study in another department/centre. Details are available from the Head of School or Honours Coordinator.

Students will be expected to present themselves for an oral exam on their thesis at a date towards the end of the University's November examination period. Each student is required to undertake the courses Microeconomics and Macroeconomics, given in first semester. Students will select 3 or 4 options from a range of courses which, subject to staff availability and sufficient enrolments, may include the following\*:

Econometrics Economic Development International Finance International Trade Labour Economics Long Run Growth Mathematical Economics Public Economics

\* classes in these courses take place in semester 1 or 2

# EDUCATION

# Level I

# **EDUC 1000**

#### **Primary School Interaction**

- 3 units semester 2
- 3 hours per week (or equiv.), including seminars, teaching placement
- Eligibility: B.Teaching students only
- Assessment: completion of observation journal, series of reflective exercises

This course will require students to complete the equivalent of 10 half days of observation and experience in a primary school selected for them. In addition, there will be 3 half-day compulsory seminars associated with this experience. These seminars are outside teaching weeks.

# Level II

# EDUC 2000

#### **Issues in Contemporary Education**

- 4 units semester 1
- 2 hours per week
- Eligibility: B.Teaching students only
- Prerequisite: Primary School Interaction
- · Assessment: case study, assignment, portfolio

This course will focus on understanding some of the important issues facing education today. It will also introduce student to theories which help to explain and provide practical approaches to dealing with these issues in the schools context.

# Level III

## EDUC 3000

#### **Secondary School Interaction**

- 2 units semester 2
- 3 hours per week (or equiv) including seminars & teaching placement
- Eligibility: B.Teaching students only
- Prerequisite: EDUC 1000 Primary Schools Interaction, EDUC 2000 Issues in Cont Education
- Assessment: observation journal, reflective exercises

This course will require students to complete the equivalent of 5 days observation and experience in a secondary school at a time and in a school to be negotiated. In addition there will be 3 half-day compulsory seminars associated with this experience which will be held outside normal teaching weeks.

# Level IV

#### EDUC 4308A/B

#### Accounting Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: Pass in 6 semesters of accounting course

#### EDUC 4309A/B

#### Adult Learner Curriculum & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only

#### EDUC 4310A/B

#### **Biology Curriculum and Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching Students only
- Prerequisite: pass in a Level III biological science course
- Corequisite: EDUC 4731 Junior Science Curriculum and Methodology
- Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school biology.

# EDUC 4311A/B

#### **Business Studies Curriculum & Method (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in six semesters of business degree

# EDUC 4312A/B

# **Chemistry Curriculum and Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in a Level III chemistry course
- Corequisite: EDUC 4329 Junior Science Curriculum and Methodology
- Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school chemistry.

# EDUC 4313A/B

# **Chinese Curriculum and Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: Pass at Level III Chinese or equivalent
- Corequisite: EDUC 4330 Language Methodology

## EDUC 4314A/B

## Classroom Music Curriculum & Methodology (UG)

- 3 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: degree in Music or pass in Level III music course

## EDUC 4315A/B

## **Economics Curriculum and Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in six semesters of economics degree

# EDUC 4316A/B

### English as a Second Language Curriculum & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching only
- Prerequisite: Four undergraduate linguistics courses or Adelaide University TESOL Cert. 4
- Corequisite: EDUC 4339 Languages Education for TESOL
- Assumed Knowledge: High level of English literacy competency
- Restriction: Linguistics study must have been in English

## EDUC 4317A/B

#### **Extended Specialist Curriculum (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Restriction: only with the agreement of Head of School

## EDUC 4318A/B

#### French Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass at Level III French or equiv.
- Corequisite: EDUC 4330 Language Methodology

# EDUC 4319A/B

#### **General English Curriculum & Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: four semesters of English literature

## EDUC 4320A/B

#### **Geography Curriculum and Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in six semesters of geography course - in certain circumstances students with four semesters of geography courses may be accepted
- Corequisite: EDUC 4334 Studies of Society and Environment

# EDUC 4321A/B

#### German Curriculum and Methodology UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass at Level III German or equiv
- Corequisite: EDUC 4330 Language Methodology

## EDUC 4322A/B

#### History Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in Level III history course. in certain circumstances students with Level II history courses may be accepted
- Corequisite: EDUC 4334 Studies of Society and Environment

#### EDUC 4323A/B

#### Indonesian Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: Pass at Level III Indonesian or equiv.
- Corequisite: EDUC 4330 Language Methodology

## EDUC 4324A/B

#### Information Technology Curric & Method (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: Prerequisite: pass at Level III
   Computer Studies
- Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school information technology.

#### EDUC 4325A/B

#### Instrumental Music Curriculum & Method (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: degree in Music, or pass in Level III music course, plus recognised instrumental qualifications
- Corequisite: EDUC 4314 Classroom Music Curriculum and Methodology

#### EDUC 4326A

#### Italian Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass at Level III Italian or equivalent
- Corequisite: EDUC 4330 Language Methodology

#### EDUC 4327A/B

#### Japanese Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass at Level III Japanese or equivalent
- Corequisite: EDUC 4330 Language Methodology

#### EDUC 4328A/B

#### Junior Mathematics Curric & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- · Prerequisite: pass in Mathematics I or equivalent

## EDUC 4329A/B

#### Junior Science Curric and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in two Level I physical and biological sciences courses
- Assessment: [any three] reflective journal, concept map, misconceptions, journal article, information brochure, innovative science plan (lesson)

This course is aligned with the SACSA Companion Document Series [www.sacsa.sa.edu.au/ companion] and is an introduction to the classroom applications and a study of the relationship of teachers and schools to the methods of teaching junior science. The course seeks to develop the knowledge, skills, and professional standards required to effectively instruct science at the junior- and middle-schools. Participants will be provided with insights into selecting and using a variety of instructional methods, resources and assessment strategies for teaching science to all learners. Workshop modules cover hands-on, inquiry, process and project-based approach to the teaching of science with a focus on conceptual teaching and learning. Knowledge of junior science content is emphasised throughout the course. The course content strongly reflects the curricular emphasis of DECS, and the standards articulated by the Australian Science Teachers Association [www.asta.edu.au/membership/ benefits/recognition/profstds].

## EDUC 4330A/B

#### Language Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in a Level III language other than English course

#### EDUC 4331A/B

#### **Physics Curriculum and Methodology (UG)**

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in Level III physics course
- Corequisite: EDUC 4329 Junior Science Curriculum and Methodology
- Assessment: essay, unit of work, online tasks, designing pracs & investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school physics.

## EDUC 4332A/B

#### Senior English Curriculum & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: six semesters of English literature
- Corequisite: EDUC 4319 General English Curriculum and Methodology

#### EDUC 4333A/B

#### Senior Mathematics Curriculum & Methodology (UG)

- 2 units full year
- · Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in Level III maths course
- Corequisite: EDUC 4328 Junior Mathematics Curriculum and Methodology

#### EDUC 4334A/B

#### **Studies of Society and Environment (UG)**

- 2 units full year
- · Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in six semesters Anthropology, Classical Studies, Economics, Geography, History, Law, Politics or other approved course - in certain circumstances four semesters may be accepted

#### EDUC 4335A/B

## Spanish Curriculum & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass at Level III Spanish or equiv.
- Corequisite: EDUC 4330 Language Methodology

#### EDUC 4336A/B

#### Other Language Curriculum & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass in the appropriate language at Level III or equivalent
- Corequisite: EDUC 4336 Language Methodology

## EDUC 4337A/B

#### Vietnamese Curriculum and Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: pass at Level III Vietnamese or equivalent
- Corequisite: EDUC 4330 Language Methodology

# EDUC 4338A/B

#### Modern Greek Curriculum & Methodology (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: Major in Modern Greek or equiv.
- Corequisite: EDUC 4330 Language Methodology
- · Assessment: practical assignments, essays

In this course, students will be introduced to current curriculum frameworks and learning methodologies in the teaching of Modern Greek from years 8 -12.

## EDUC 4339A/B

#### Languages Education for TESOL (UG)

- 2 units full year
- Eligibility: Bachelor of Teaching students only
- Prerequisite: Four undergraduate linguistics courses or Adelaide University TESOL Cert. 4
- Corequisite: EDUC 4316 ESL Curriculum & methodology
- Assumed Knowledge: High level of English literacy competency
- Restriction: Linguistics study must have been in English

Languages Education for TESOL aims to equip students with the knowledge, skills and understandings required for the effective teaching of ESL to middle and senior year students in South Australian schools. In particular, the course aims to develop skills in effective classroom communication. Whilst relating to students is the primary focus of the course, at a wider level the course emphasises the importance of communication with staff, parents and the wider community. Lectures will introduce students to a range of teaching strategies in the context of current language learning theories. Migration trends and indigenous populations will be considered in exploring school curriculum development and policy in relation to teaching English as a second or other language. The course will give students tools for lesson and unit planning using the South Australian Curriculum Standards and Accountability Framework Directed group work will allow students to work collaboratively in building resources, establishing contacts and networking with practicing teachers.

# EDUC 4340A/B

#### Psychology Curriculum & Methodology (UG)

- 2 units full year
- 2 hours per week
- Prerequisite: Major in Psychology or equivalent
- Assessment: practical assignments & essays

This course will introduce students to the new year 11 and 12 SACE Curriculum in Psychology and discuss appropriate learning methodologies for teaching it.

## **EDUC 4700**

#### Families, Schools & Students' Outcomes (UG)

- 2 units semester 2
- 2 hours per week
- Eligibility: Education students only
- Assessment: 2000 word essay

This course will examine family and school learning environments, as well as issues of gender and religion, as they affect students' learning outcomes at school.

## EDUC 4701

# Student-Teacher Interaction in the Classroom Pt 1 (UG)

- 2 units semester 1
- 3 hours per week
- Eligibility: B.Music Education students only
- Assessment: practical exercises, written assignments

This course introduces various psychological approaches used in secondary education. Connection is made between these approaches and the practical strategies required for competence in the classroom environment.

# EDUC 4702

#### **Teaching Practice I (UG)**

- 3 units semester 1 or 2
- Eligibility: B.Teach and B.Mus Ed students only
- Prerequisite: BMusEd at least one Curriculum and Methodology course - B.Tch - EDUC 1000, EDUC 2000, EDUC 3000
- Corequisite: at least one Curriculum & Methodology course
- Assessment: supervised teaching practice

Students will undertake one block of supervised teaching practice, and upon successful completion, are given a non-graded pass.

# EDUC 4703

#### **Teaching Practice II (UG)**

- 3 units semester 1 or 2
- Eligibility: B.Teach and B. Mus Ed students only
- Prerequisite: BMusEd at least one Curriculum and Methodology course - B.Tch - EDUC 1000, EDUC 2000, EDUC 3000
- Corequisite: at least one Curriculum and Methodology course
- Assessment: supervised teaching practice

Students will undertake one block of supervised teaching practice, and upon successful completion, are given a non-graded pass.

# EDUC 4704

## **Professional Practice & ICT for Teachers (UG)**

- 2 units semester 1
- 4 hours per week
- Eligibility: Education students only
- Assessment: ICT based assignment

This course introduces students to the various curriculum frameworks currently used for teaching in secondary schools in South Australia, as well as recent developments in State and National curricula. There is a special focus on the role of ICT in the planning and delivery of curriculum in the classroom.

# EDUC 4705

#### **Curriculum & Assessment of Learning (UG)**

- 2 units semester 2
- 3-4 hours per week
- Eligibility: Education students only
- Assessment: 1000 word essay or assignment, group presentation

This course will introduce students to examples of curriculum perspectives which are being put into practice in different schools. In the second part of the semester, they will be able to choose to focus on one theoretical and one practical topic from a number of options announced at the beginning of the semester.

#### EDUC 4706

# Student-Teacher Interaction in the Classroom Pt 2 (UG)

- 2 units semester 2
- 3 hours per week
- · Eligibility: Education students only
- Assessment: practical exercises, written assignments

This course deepens psychological understanding for secondary education in the areas of learning theory, student characteristics and the positive classroom environment

## EDUC 4707

#### **Culture, Education & Society (UG)**

- 2 units semester 1
- 2 hours per week
- · Eligibility: Education students only
- Assessment: 2000 word essay

This course will introduce students to different models of society and the way they influence educational policy. In particular, a consideration of various models of culture will lead to issues of cultural and linguistic pluralism in education.

# ENGINEERING

# Level I

# C&ENVENG 1000 Engineering Planning and Design

- 2 units semester 1 or 2
- 36 contact hours lectures, tutorials, project work, interactive computer assessed exercises throughout semester
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies, Specialist Mathematics, Physics
- Assessment: project 40%, exam 50%, coursework 10%

Introduction to engineering: engineering planning and design methodology: basic systems concepts; creative aspects of design; economic, environmental and social evaluation of engineering projects; decision theory; scheduling: engineering ethics; case studies.

#### C&ENVENG 1001

#### Statics

- 2 units summer semester or semester 1
- 34 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: Physics, Mathematical Studies, Specialist Mathematics
- Assessment: exam, quizzes further details available at beginning of semester

This course familiarises students with the principles of static equilibrium by applying Newton's laws of motion to solve engineering problems. Topics will be taken from: introduction to forces; 2D and 3D equilibrium of particles and rigid bodies; centre of gravity and centroids; distributed loading and hydrostatics; friction; analysis of structures including trusses, frames and machines; and drawing shear and bending moment diagrams. Emphasis is placed on drawing free-body diagrams and self-checking strategies.

## C&ENVENG 1002

#### **Civil and Environmental Engineering I**

- 2 units semester 2
- 36 hours lectures, tutorials, designs
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: material covered in C&ENVENG 1001 Statics, C&ENVENG 1000 Engineering Planning & Design
- Assessment: may include assignments, exam further details available at beginning of semester

This course provides an introduction to civil and environmental engineering design covering the sub-discipline areas of civil and environmental engineering: that is, environmental, hydraulic, hydrology, geotechnical and structural engineering. The course will also cover the basics of interpreting and producing civil engineering drawings. Students will work in small groups to produce designs, utilising basic theory and simple design procedures covered during the lectures.

# C&ENVENG 1003

# Engineering Modelling and Analysis I

- 2 units semester 2
- 36 hours lectures, tutorials, interactive computer assessed exercises throughout semester
- · Available for Non-Award Study
- Assumed Knowledge: Year 12 Mathematics
- Assessment: theory & practical exam 60%, practicals & tutorials 10%, projects 25%, practice quiz 5%

This course serves as an introduction to how engineers typically solve 'real world' and complex problems. In many cases mathematical or analytical solutions are not available and alternative approaches must be used. Often engineers have to seek solutions using computers, computer programming and numerical analysis. This leads to Engineering Modelling and Analysis. This course will introduce you to this important area and provide training in its fundamental components. These include: being comfortable with how a computer works and understanding different computing environments; to be able to program in at least two computer languages and write scripts to execute models and analyze engineering problems; learn the syntax of Fortran 90/95, Visual Basic in Excel (VBA) and Matlab; .understand the development of programs that are well-structured and can be easily maintained; to be introduced to some of the algorithms that you will study in more detail in later years for solving complex problems; have exposure to some civil engineering analysis programs.

# C&ENVENG 1006

### Introduction to Mining Engineering

- 2 units semester 1
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Assessment: Details at beginning of semester

This course provides an introduction to mining engineering including topics such as the design, operations, economics, ventilation and environmental aspects for both surface and underground mines. The course will include lectures from people involved in the mining industry and possible site visits to working mines during the mid-term break. Students will be assessed on individual tutorial submissions, an end-of-term exam, and their work in small groups to produce a design, utilising basic theory and simple design procedures covered during the lectures

#### C&ENVENG 1007

#### **Geology for Mining Engineering**

- 3 units semester 2
- 5 hours per week
- Available for Non-Award Study
- Assessment: details at beginning of semester

This course looks at the fundamentals of geology, geological processes and geological materials with special emphasis on bedrock stability and seismicity, the physical and chemical properties of rocks and minerals, exploitation and extraction of raw materials (clays, aggregates, water, minerals, petroleum), weathering, erosion, soils, brittle and ductile deformation and the major tectonic processes on planet Earth associated with earthquakes and volcanoes. The course involves lectures and practicals with assessment based on both.

## **CHEM ENG 1000**

#### **Process Systems**

- 2 units semester 1 or semester 2
- 30 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies, Specialist Mathematics, Physics
- Assessment: Written exam, performance in tutorial classes, class assignments full details advised at beginning of course

An introduction to process engineering and its uses in society, industry and the environment. Basic measurement and conservation principles for mass and energy are applied to solving simple scientific and engineering problems, eg in food processing, biotechnology, oil refining, burning fuels, electrical power generation, waste treatment and fluid flow.

# CHEM ENG 1002 Engineering Computing I

- 2 units semester 1 or semester 2
- 32 hours lectures, practical/tutorial classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

Assumed Knowledge: SACE Stage 2 Mathematical Studies and Specialist Mathematics, Physics

Assessment: written exam, tests; performance in computer-aided teaching suite; development & use of software for solving problems relevant to engineering

Introductory computing: Introductory Programming (ANSI'C'); introduction to engineering applicationsoriented software.

# CHEM ENG 1003

#### Materials I

- 2 units semester 2
- 30 hours lectures, laboratory
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and Specialist Mathematics, Physics
- Assessment: written exam, performance in laboratory classes details at beginning of course

The mechanical properties of materials, the distinction between elastic and plastic deformation of crystalline solids, the theoretical strength of crystalline solids, dislocations. Rheological properties of materials, models of viscoelastic behaviour. The formation of crystalline solids. Direct observation of the microstructure of materials. The Gibbs phase rule and its application to the interpretation of phase diagrams. Phase transformations under equilibrium and nonequilibrium conditions with particular reference to binary systems of special engineering significance. The failure of materials in engineering service. Polymers and composites.

#### **CHEM ENG 1004**

#### Introduction to Bio-Processing

- 3 units semester 1
- 3 hours lectures, 2 hours tutorials/practical classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Maths Studies, Chemistry
- Assumed Knowledge: SACE Stage 2 Physics
- Assessment: written exam, performance in tutorial classes & class assignments - complete details at commencement of course

Introductory computing and programming in ANSI C; the elements of databases; elementary concepts and tools used in bioinformatics. Simple process engineering concepts are introduced and their application in society, industry and the environment will be illustrated. Basic measurement and conservation principles for mass and energy are applied to solve simple problems e.g. in food processing, biotechnology, fuel combustion and energy generation, fluid flow and waste treatment.

# CHEM ENG 1005

## **Process Heat Transfer**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1000 Process Systems, Maths 1011/1012 Mathematics IA/IB
- Assessment: exam, up to 20% for class work

The study of heat transfer by conduction, convection and radiation in chemical process systems. The topics include problem solution by analytical as well as numerical methods. Theoretical and practical aspects of design are discussed.

# CHEM ENG 1006

#### Introduction to Pharmaceutical Engineering

- 3 units semester 1
- 48 hours lectures, tutorials, projects
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies
- Assessment: written exams, performance in tutorial classes; class assignments and projects
   full details advised at beginning of course

An introductory subject with emphasis on integrating the molecular and cellular biosciences with the quantitative, systems-oriented engineering analysis and synthesis approach

Topics include history of pharmaceuticals; introduction to the pharmaceuticals industry and its various sectors; engineering stages required for manufacture of active ingredients (primary manufacture) and its dosage forms (secondary manufacture) overview of economics (e,g bugs to \$s); overlap of molecular sciences with traditional engineering disciplines; need for interdisciplinary work; particular case studies or examples (e,g. drug delivery systems, bioactive molecules from GMOs, etc).

# ELEC ENG 1006

## **Electrical Engineering I**

- 3 units summer semester or semester 1
- 42 hours lectures, tutorials, up to 24 hours laboratory work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: written assignments, exam, performance in laboratory

Circuit analysis: Electrical circuit concepts: definitions, basic quantities and units. Models for simple circuit elements. Network topology and systematic methods of analysis. Steady state alternating current circuits and phasor methods. Analog electronics: Principles of electronic circuits. Models for diodes, Field Effect and Bipolar Junction Transistors. Simple amplifier circuits. Operational amplifiers. Digital electronics: Boolean variables and Boolean algebra. Combinational logic circuits and minimization techniques. Number representation and arithmetic operations. Introduction to synchronous sequential logic. Basic laboratory techniques including the construction and testing of simple electronic circuits.

# ELEC ENG 1007

# Engineering Planning, Design and Communication

- 3 units semester 2
- 24 hours lectures, 12 tutorials, 12 practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

Introduction to engineering; engineering planning and design methodology; basic systems concepts; creative aspects of design; economic, environmental and social evaluation of engineering; projects; decision theory; scheduling; engineering ethics; case studies.

The importance of effective technical communication; strategies for effective academic and professional writing and seminar presentations. Location and evaluation of appropriate sources of information. Differences in purpose, style and format.

## ELEC ENG 1008

#### **Electrical Engineering IM**

- 2 units summer semester or semester 1
- 42 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- · Assessment: written assignments, exam

This course will (a) introduce basic electrical concepts, (b) demonstrate how models can be developed to represent important electrical and electronic components and systems, (c) use these models to analyse and design electrical and electronic systems, and (d) provide a grounding in the theory and practice of logic design with particular reference to computers. Students will be introduced to a range of circuit design and analysis techniques, including phasor methods for the steady state analysis of circuits with sinusoidal excitation. Simple electronic circuits and principles underlying the theory of operation of electric motors will also be introduced.

# MECH ENG 1000

#### **Dynamics**

- 2 units summer semester or semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies, Specialists Maths and Physics
- Assessment: mid-semester test, assignments, exam

This course teaches students how to apply Newtonian physics to relatively simple physical situations. It follows on from the Statics course, but considers systems that are not in equilibrium i.e. with velocity and acceleration. Some of the topics covered are pure kinematics (a mathematical description of motion only), while others are kinetic (determine motion in problems involving the concepts of force and energy). The course restricts itself to 2-D (planar) mechanisms.

## MECH ENG 1001

#### **Design Graphics**

- 2 units semester 2
- 38 hours lectures, practical classes in design suite
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: continuous assessment, final exam further details at beginning of semester

The course introduces students to internationally accepted standards of graphical engineering communication. Students learn manual as well as computer aided drawing practices and are introduced to basic engineering design and manufacturing philosophies.

## **MECH ENG 1005**

# Engineering Planning, Design and Communication M

- 3 units semester 1
- 24 hours lectures, 18 hours seminar/workshops, 20 hours project work
- Eligibility: students in specified programs only check Academic Program Rules for details

- Available for Non-Award Study
- Assessment: assignments, project, exam

The course combines aspects of engineering planning and design, as well as aspects of communication. Students are introduced to the field of engineering, and provided with some tools for tackling real engineering problems - especially those centred on the preliminary stages of the planning and design process. Effective written and oral communication skills are an integral part of the course.

# PETROENG 1000

#### Introduction to the Petroleum Industry

- 2 units semester 1
- · Lectures, discussion/presentation sessions
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and Specialist Mathematics, Physics
- Assessment: written assignments, presentation, exam

Seminar-based overview of the petroleum industry: organisation in terms of technical groups, disciplines and teams; strategic business aspects and economic drivers; overview of technology, research and technical challenges; case histories of development projects and producing fields.

# PETROENG 1001

#### **Introduction to Rock and Fluid Properties**

- 2 units semester 2
- Lectures, tutorials/practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- Assumed Knowledge: SACE Stage 2 Math. Studies, Specialist Mathematics, Physics
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2
   Mathematical Studies and Specialist
   Mathematics, Physics
- Assessment: assignments, exam

Fundamental rock properties used in reservoir engineering calculations and formation evaluation.

Composition of petroleum fluids and the many uses of petroleum products. Basic physical and chemical properties of petroleum reservoir fluids related to reservoir processes and the production of oil and gas.

# PETROENG 1003

#### Introduction to Petroleum Geosciences

- 2 units semester 2
- · Lectures, tutorials/practicals, field trip
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies, Specialist Mathematics, Physics
- Assessment: assignments, exam

Fundamentals of geology and geophysics with emphasis on petroleum systems. Seismic principles and basic geological mapping and correlation. Introduction to depositional environments and geological modelling. Wellsite geology and introduction to petrophysics.

# Level II

# C&ENVENG 2001

# Stress Analysis (C)

- 2 units semester 2
- 32 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: exam, practical work, quizzes Further details available at the beginning of the semester

Topics relevant to chemical or petroleum engineering taken from: Mechanical properties of materials, stresses and strains, normal and shear, stress-strain relationships, temperature stresses, elastic theory. Beams; distribution of stress due to bending, moment-curvature relationships. Beams; shear stresses. Beams; composite bending stresses. Beams; deflections of simply supported and encastre beams by integration. Combined stresses, transformation of plane stresses, failure theories, stress concentration. Columns: buckling and stability. Experimental stress analysis to illustrate the above.

#### C&ENVENG 2006

#### **Geotechnical Engineering II**

- 2 units semester 2
- 32 hours lectures, tutorials, practicals, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 1001 Statics; MATHS 1011/1012 Mathematics IA/IB
- Assessment: exams 70%, exercises 30%

Introduction to the fundamentals of soil and rock mechanics. The overall objective is to provide an awareness of the types of problems encountered in this field and to cover a number of areas that are fundamental to more advanced study. Topics included are: the origin and composition of soils: processes that form soils; mineralogy; crystallography. The state of a soil: phase relationships and measurement; soil classification; in situ vertical total and effective stresses. The behaviour of soils: strength - shear strength of sands and clays, Mohr-Coulomb failure criterion, measurement; Compressibility - Introduction to settlement and consolidation; Permeability - Water flow and measurement; lateral earth pressure: Rankine states; basic retaining wall design calculations; expansive soils: Shrink/swell phenomena; soil suction; measurement; heave calculation; basics of residential footing design, cracking and articulation; soil improvement: compaction - concepts, measurement and field techniques; other techniques - briefly.

# C&ENVENG 2014

#### **Engineering Modelling and Analysis II**

- 2 units semester 2
- 32 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 1001 Statics; MATHS 10011/1012 Mathematics IA/IB
- Assessment: classwork 20%, final exam 80%, successful completion of computer practical sessions

Introduction to numerical methods in engineering: approximations and errors; sorting and searching arrays; linear algebraic equations; roots of equations; curve fitting; numerical differentiation and integration; ordinary differential equations; solution of a broad range of civil engineering numerical problems using one of the programming languages.

# C&ENVENG 2015

#### **Construction and Surveying**

- 2 units semester 2
- 32 hours lectures, tutorials, practical work, site visits
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- · Assessment: exam, assignments

Overview of the construction and engineering industries; Contracts; Specifications; Tendering; Occupational health safety and welfare; Industrial relations; Project management; Quality assurance; Environmental aspects of construction; Engineering ethics. Civil Construction - earthworks, embankments, foundations, retaining structures, pavements and tunnels. Construction in concrete, steel, timber, masonry. Residential construction. Construction of bridges, dams, tunnels, domes and skyscrapers. Introduction to civil engineering surveying: Linear measurement; Levelling

# C&ENVENG 2025

# **Strength of Materials IIA**

- 3 units semester 1
- 48 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: Pass (not Conceded Pass) in C&ENVENG 1001 Statics and MATHS 1011/1012 Mathematics IA/IB
- Assessment: exam, assignments

Topics to be chosen from: elastic and elasticplastic behaviour; plane stress and strain; constitutive relationships, principal stress and strain; failure criteria; stresses in thick cylinders; bending and shearing stresses in beams; deflections of beams; Euler buckling; short and long columns; torsion of solid and hollow circular sections; elastic axis; introduction to statical indeterminacy and simple redundant structures; work and strain energy concepts.

# C&ENVENG 2026

#### **Environmental Engineering II**

- 2 units semester 1
- 32 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: may include assignments and/or exam details available at beginning of semester

The course serves as an introduction to the field of environmental engineering. It covers fundamental principles such as environmental systems, environmental decision making and sustainable development, as well as topics selected from the following: Air quality - causes and types of air pollution, impacts of air pollution and air control/ Water quality - water quality parameters, water quality control / River health - river regulation, ecological barriers, environmental flows, stream bank erosion, blue-green algal blooms, salinity.

# **C&ENVENG 2032**

## Structural Design IIA

- 2 units semester 1
- 32 hours lectures, tutorials, design, quizzes, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 1001 Statics and C&ENVENG 2025 Strength of Materials IIA or C&ENVENG 2036 Strength of Materials IIE
- Assessment: may include 2 major projects, 3 quizzes - details available at beginning of course

Iterative nature of the design procedure developed through a truss design, construct and test project; limit states; gravity loads; axially loaded members; fundamental principles that govern the behaviour of reinforced concrete structures.

# C&ENVENG 2033

## Water Engineering II S1

- 2 units semester 1
- 32 hours lectures, tutorials, practical work, design, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

- Assumed Knowledge: C&ENVENG 1001 Statics; MATHS 1011/1012 Mathematics IA/IB or MATHS 1013/1014 Mathematics IMA/IMB
- Assessment: exam 75%, assignments & quizzes 5%, laboratories 7.5%, design 12.5%

An introduction to hydraulic engineering. Description and properties of fluids: hydrostatics; laws of inviscid flow; continuity, energy and momentum equations; dimensional analysis and model theory; steady uniform and non-uniform flows in closed conduits; flow of real fluids; Moody diagram; laminar flow; types of turbulent flow; viscous sublayer; flow measurement in pipes and open channels; steady uniform flow in open channels, hydraulic jumps.

# C&ENVENG 2034 Structural Design IIB

- 2 units semester 2
- 32 hours lectures, tutorials, design, quizzes and practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: Pass (not Conceded Pass) in C&ENVENG 1001 Statics, MATHS 1011/1012 Mathematics IA/IB (Pass Div I)
- Assessment: may include 2 major projects, 3 quizzes details at beginning of semester

Iterative nature of the design procedure developed through a preliminary design of a reinforced concrete frame; steel beam test; limit states; load paths; wind loads; buckling load of slender columns in a structural frame; deflection for inelastic beams; fundamental principles that govern the behaviour of steel and composite structures; design of steel connections.

# C&ENVENG 2035

## Water Engineering II S2

- 2 units semester 2
- 32 hours lectures, tutorial, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB or MATHS 1013/1014 Mathematics IMA/IMB

• Assessment: may include assignments and/or exam - details available at beginning of course

The course serves as an introduction to the field of engineering hydrology. It covers fundamentals such as the hydrological cycle, catchments, losses, hydrographs and hyetographs, as well as topics such as: flood frequency analysis, determination of design rainfall intensity and hyetographs, peak flow estimation, design hydrograph estimation (time-area method, unit hydrograph method, runoff-routing method), introduction to yield hydrology.

#### C&ENVENG 2036

#### **Strength of Materials IIE**

- 2 units semester 1
- 32 contact hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: Pass (not Conceded Pass) in C&ENVENG 1001 Statics, MATHS 1011/1012 Mathematics IA/IB
- · Assessment: exam, assignments

Topics to be chosen from: elastic and elasticplastic behaviour; plane stress and strain; constitutive relationships, principal stress and strain; failure criteria; stresses in thick cylinders; bending and shearing stresses in beams; deflections of beams; Euler buckling; short and long columns; torsion of solid and hollow circular sections; elastic axis; introduction to statical indeterminacy and simple redundant structures; work and strain energy concepts.

# CHEM ENG 2000

#### **Chemical Engineering Thermodynamics**

- 2 units semester 2
- 48 hours lectures, tutorials
- Eligibility: All BE(Chem) students, BE(Chem)/LLB, BE(Chem) combined with BEc, BFin, BSc, BSc.(Biotech), BE(Petrol.)
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1000 Process Systems
- Assessment: assignments, final exam

Conservation of mass and energy; entropy; thermodynamics properties of real gases;

multicomponent mixtures; phase equilibrium in mixtures; equilibrium for reacting systems; analysis of power and refrigeration cycles.

### CHEM ENG 2001

#### **Chemical Process Principles II**

- 3 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB, CHEM ENG 1000 Process Systems
- Assessment: assignments, final exam

Chemical process principles: process calculations (material and energy balance calculations); numerical solution of mass and energy balances.

#### CHEM ENG 2003

#### **Introductory Process Fluid Mechanics**

- 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Maths IA/IB, CHEM ENG 1000 Process Systems
- Assessment: exam, up to 20% for classwork

The statics and dynamics of fluids. Considerable emphasis is placed on the solutions of fluid flow problems frequently encountered in the process industries.

## CHEM ENG 2006

#### **Plant and Process Engineering**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: project report, exam

Lectures on the principles of process design and plant engineering, electrical safety, selection of

electrical machines and electrical distribution. An introductory design project, focussing on mass and energy balances, is undertaken.

## CHEM ENG 2007

#### **Essay and Seminar (Environmental)**

- 2 units semester 2
- Tutorials, discussion with supervisor
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: 4000 word essay 50%, presentation 50%

Essay to be researched and prepared on a topic relating to the environment assigned by the Department. Seminar presentation on essay topic.

#### **CHEM ENG 2008**

#### Essay and Seminar (Food, Wine & Biomolecular)

- 2 units semester 2
- · Tutorials, discussion with supervisor
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: 4000 word essay 50%, presentation 50%

Essay to be researched and prepared on a topic relating to the food, wine & biotechnology industries assigned by the Department. Seminar presentation on essay topic.

## ELEC ENG 2007

#### **Signals and Systems**

- 3 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I
- · Assessment: assignments, written exam

Classification of signals and systems: continuous and discrete, linear time-invariant (LTI) systems. Representation in terms of impulses, convolution. Causality and stability concepts. Block diagram representation. Fourier analysis of continuous-time signals and systems: representation of periodic and aperiodic signals. Properties of the Fourier transform; convolution and modulation. Frequency response of first-order and second-order systems. Bode plots. Fourier analysis of descrete-time signals and systems. Analysis and characterisation of LTI systems using Laplace transform methods: system transfer function, pole zero representation, difference equation characterisation, transfer function of interconnected systems.

# ELEC ENG 2008

#### Electronics II

- 3 units summer semester or semester 1
- 45 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I
- · Assessment: assignments, written exam

Linear circuits analysis: revision of circuit elements and analysis techniques. Differential equation description of circuits, response under different excitations. Laplace transform techniques and transfer function description. Analysis of mutual coupling. Electronics components: structure, characteristics and modelling of diodes, bipolar transistors and field-effect transistors. Single transistor amplifiers, differential multistage and power amplifiers. Ideal characteristics, practical limitations and applications of operational amplifiers.

#### ELEC ENG 2009

#### **Engineering Electromagnetics**

- 3 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I, Vector Analysis & Complex Analysis, Physics I
- Assessment: assignments, written exam

Dielectric materials and Capacitance. Magnetic fields and forces. Faraday and Ampere Laws.

Magnetic materials and hysteresis. Examples including motors, dynamos and transformers. Maxwell equations. Electromagnetic energy. Plane waves, dispersion and polarization. Reflection and refraction at an interface. Introduction to electromagnetic radiation.

# ELEC ENG 2010A/B

#### **Practical Electronic Design II**

- 3 units full year
- 78 hours lectures, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: ELEC ENG 2010A Practical Electronic Design II Part 1
- Assessment: laboratory performance, reports

Electrical Safety: the nature of electric shock, the hazards associated with electrical installations, safe working practices, protective devices, earthing. Experimentation: random and systematic errors, error propagation, precision, accuracy and repeatability, standards and calibration, the design, execution and recording of experiments. Practical considerations: frequency limitations, loading and waveform effects, techniques for minimizing noise. Practical circuit design, simulation and prototyping techniques. Practical work: familiarisation with laboratory facilities and instrumentation, common procedures and techniques. Experiments to augment Level 2 theoretical courses. Major system design project: Audio system.

## MECH ENG 2002

#### **Stress Analysis and Design**

- 3 units semester 2
- 60 hours lectures/tutorials, practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 1000 Dynamics, C&ENVENG 1001 Statics
- Assessment: assignments, quizzes, finite element labs, labs, exam

Concept of stress and strain, characterisation of stress-strain curves and failure of metals, plastics and wood, Hooke's law for tension/compression and shear, axially loaded members, non-linear deformation, statically indeterminate structures, thermal stresses, torsion of circular bars and tubes, bending, stresses in beams, combined loading, deflection of beams, buckling instability, analysis of stress and strain, Mohr's circle, generalized Hooke's law, strain energy, intro to plasticity, intro to theories of failure, intro to design of columns, shafts, pressure vessels, welded joints, fasteners and springs and intro to the Finite Element Analysis.

#### MECH ENG 2011

#### **Mechatronics IM**

- 2 units semester 2
- 36 hours lectures, tutorials, 4 hours laboratory classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1008 Electrical Engineering IM, MECH ENG 1000 Dynamics, MECH ENG 2021 Thermo-Fluids 1
- Assessment: assignments, in-class quizzes, laboratory experiments, exam

To provide an introduction to the application of electronic control systems in mechanical and electrical engineering. To give framework of knowledge that allows students to develop an interdisciplinary understanding and integrated approach to mechatronic engineering.

# MECH ENG 2015 Electronics IIM

- 3 units semester 1
- 36 hours lectures, tutorials, 12 hours laboratory classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1008 Electrical Engineering IM
- Assessment: practical work, assignments, tutorials, final exam

Amplifier models and imperfections. Operational amplifiers and their applications. Diodes, rectifier circuits, wave-shaping circuits, diode logic circuits and voltage regulator circuits. Characteristics of Transistors (BJTs and FETs), modelling transistors and circuits. Circuits analysis. Active filters, PSPICE, and Timer 555.

### MECH ENG 2018

#### **Design Practice**

- 4 units semester 1
- 20 hours lectures, 56 hours tutorials, 6 hours laboratory classes, 40 hours workshop practice (mid-year break)
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB, C&ENVENG 1001 Statics, MECH ENG 1000 Dynamics
- Assessment: assignments, achievement of design goals, concept report, final report, practicals, final exam

The design process; sources of design information; accuracy of engineering quantities; introduction to reliability and applications of statistics; tolerancing and fits; friction clutches and brakes; power transmission belts, gears and chains; rubbing, rolling element and hydrodynamic bearing selection and design. Group design/ build/ test project involving: conceptual embodiment and detail design; sources of design information; material selection; fabrication methods; troubleshooting; system development; group dynamics; project organisation.

In Workshop Practice component, organized during the semester break, students will become familiar with basic workshop practices, including machining and the use of hand tools.

## MECH ENG 2019

#### **Dynamics and Control I**

- 3 units semester 2
- 48 hours lectures, tutorials, 9 hours laboratory experiments
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 1000 Dynamics, APP MTH 2000 Differential Equations and Fourier Series, ELEC ENG 1006 Electrical Engineering 1
- Assessment: small tests, assignments, laboratory experiments, final exam

Students will be introduced to various applications of feedback control systems and develop fundamentals associated with modelling, analysis, design and simulation of automatic control systems. This course also aims to introduce the basic concepts of machine dynamics and their engineering applications, and deals with the analysis, design and application of a variety of mechanisms.

#### MECH ENG 2020

#### Materials and Manufacturing

- 3 units semester 1
- 48 hours lectures
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials 1
- Assessment: assignments, final exam

Introduction to materials selection. Structure of metals and alloys. Influence of mechanical properties on engineering design: elastic properties, yield, fracture, fatigue, creep. Oxidation and corrosion. Wear. Engineering materials: ferrous alloys, heat treatment of steels, nonferrous alloys, polymers, ceramics, composites. Manufacturing past, present and future; introduction to the manufacturing function. Introduction to manufacturing processes; economics of machine operations; theory of manufacturing processes. Introduction to design for manufacture.

# MECH ENG 2021

## Thermo-Fluids I

- 3 units semester 1
- 48 hours lectures, 4 hours laboratory experiments
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB, PHYSICS 1003 Physics IHE
- Assessment: assignments, final exam

An introduction to mechanical engineering thermodynamics dealing with the application of the first and second laws of thermodynamics to the thermodynamic design and performance analysis of typical thermo-mechanical plant using condensable vapours and gases as the working fluid. Basic fluid mechanics including: kinematics and dynamics of fluid flows; conservation laws applied to fluid flow; Euler, Bernoulli, Navier-Stokes equations; dimensional analysis; differential and integral flow analysis; flow visualisation.

# PETROENG 2001

#### **Reservoir Thermodynamics and Fluid Properties**

- 3 units semester 2
- · Lectures, tutorials/practicals/labs
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

Fluid properties and the application of mass and energy balances to a variety of petroleum systems. Introduction to phase behaviour and chemical reaction equilibria (flash calculations with k-values); and equation of state applications and modeling.

#### PETROENG 2005

#### **Sedimentology and Stratigraphy**

- 3 units semester 2
- · Lectures, tutorials/practicals, field trip
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

Applications of sedimentology and stratigraphy to petroleum exploration and development. Details of depositional environments and diagenesis; lithostratigraphy, and biostratigraphy methods of correlation, and elements of geochemistry. The class would undertake a field trip.

#### PETROENG 2009

#### Formation Evaluation, Petrophysics & Rock Properties

- 3 units semester 2
- · Lectures, tutorials/practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- · Assessment: assignments, exam

Practical understanding of the interpretation: wireline tools and techniques, open and some cased hole log analysis methods for the determination of lithology, porosity, fluid content and movement and net pay. Laboratory based conventional and special core analysis techniques. Both qualitative (quick look) and quantitative analyses methods are covered. An overview of dipmeter, MWD and some cased hole logs is also given.

The course covers logging operations and logging program design aspects. Practical examples, case histories and laboratory practical classes are used extensively.

## PETROENG 2010

#### **Drilling Engineering**

- 3 units semester 1
- · 45 hours lectures and practicals
- Assumed Knowledge: Higher Maths, Physics, Chemistry

The aim of the course is to provide the basic understanding in petroleum well drilling procedures, its mechanics, and design methodology. The course covers the overview of drilling rig operations and its equipments, offshore drilling and advanced drilling tools; drillstring design; directional and multilateral drilling, well trajectory calculations, drilling bit, bit economics and optimization, drilling hydraulics, drilling mud; pore pressure and fracture pressure, casing depth determination; basic well control; well planning and rig selections.

## Level III

# C&ENVENG 3001 Structural Mechanics IIIA

- 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: Pass (not Conceded Pass) in C&ENVENG 2025 Strength of Materials IIA
- Assessment: coursework, exam

This course is intended to provide students with a thorough understanding of the theory and application of structural analysis as it applies to trusses, beams and frames. Emphasis is placed on developing the student's ability to both model and analyse statically determinate and indeterminate structures and to provide realistic applications encountered in professional practice. Topics to be chosen from: Influence lines; Approximate methods of analysis; Calculation of deflections in statically determinate structures by the momentarea theorems, the conjugate beam method, the principle of virtual work and Castigliano's theorem; Force method of analysis for indeterminate structures; Displacement methods of analysis for indeterminate structures including the slopedeflection method, method of moment distribution, and the stiffness method; an introduction to finite element modelling; and plastic analysis.

#### C&ENVENG 3003

#### **Environmental Engineering III**

- 2 units semester 1
- 32 contact hours comprising lectures & tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1, C&ENVENG 2035 Water Engineering II S2
- · Assessment: exams, assignments

Water treatment processes; environmental geotechnics, groundwater processes and contamination.

#### C&ENVENG 3005

#### **Structural Design III (Concrete)**

- 3 units semester 2
- 48 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2032 Structural Design IIA, C&ENVENG 2034 Structural Design IIB, C&ENVENG 2025 Strength of Materials IIA and C&ENVENG 3001 Structural Mechanics IIIA
- Assessment: may include assignments and/or exam or quizzes - further details available at beginning of semester

Detailed design and retrofitting and rehabilitation procedures for multi-storey reinforced concrete structures including beams, slab systems and columns. Students will undertake substantial design projects to apply lecture material.

# C&ENVENG 3007 Structural Design III (Steel)

- 3 units semester 1
- 48 hours lectures, tutorials and project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2032 Structural Design IIA, C&ENVENG 2034 Structural Design IIB, C&ENVENG 2025 Strength of Materials IIA and C&ENVENG 3001 Structural Mechanics IIIA
- Assessment: may include assignments and/or exam or quizzes - further details available at beginning of semester

Detailed design procedures for multi-storey steel and composite structures including composite slabs, steel beams, composite beams and steel columns. Students will undertake substantial design projects to apply lecture material.

### C&ENVENG 3008

#### Engineering Modelling and Analysis III

- · 2 units semester 2
- 32 hours lectures, tutorials, computer practicals, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2014 Engineering Modelling & Analysis II, and APP MTH 2010 Differential Equations & Statistical Methods (Civil)
- Assessment: exam 90%, practicals & tutorials 10%

Probabilistic analysis; revision of basic probability concepts; jointly distributed random variables; common distributions including: normal, lognormal, gamma, extreme value distributions; transformations of data; empirical determination of distributions; parameter estimation; regression and correlation analysis; first order, second moment methods and reliability; Monte Carlo simulation; auto-correlation, cross-correlation, multiple regression; Markov processes; random number generation; Civil Engineering examples, computer session problems. Numerical methods; eigensystems; Fourier transform spectral methods; integration of coupled sets of ordinary differential equations; systems of non-linear equations; finite difference methods. Computing; advanced programming concepts, spreadsheet macros.

# C&ENVENG 3009

#### **Environmental Engineering and Design III**

- 3 units semester 1
- 48 hours lectures, tutorials, design
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1, C&ENVENG 2035 Water Engineering II S2
- Assessment: exam, assignments

Water treatment processes, environmental geotechnics, groundwater processes and contamination. In addition students will carry out an environmental design.

## C&ENVENG 3011

#### **Engineering Management and Planning**

- 2 units semester 2
- 32 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: may include assignments and/or exam - further details at beginning of semester

Time management and other self-improvement skills; management in organisations; communication skills; basic economic concepts; use of mathematical models and optimisation in the planning process; decision analysis; applications to civil engineering practice.

## C&ENVENG 3012

#### **Geotechnical Engineering Design III**

- 3 units semester 2
- 48 hours lectures, tutorials, practical work, design, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2006 Geotechnical Engineering II
- Assessment: exams 50%, coursework 50%

Analysis and design of foundations - changes in stresses, settlement, bearing capacity; analysis of seepage problems; site investigations, in situ testing; laboratory testing; slope stability; pavement design.

## C&ENVENG 3013

#### Water Engineering & Design IIIA

- 2 units semester 1
- 32 hours lectures, design work, practical work, project work, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1
- Assessment: may include exams, laboratory reports, design work, quizzes, projects & assignments - details at beginning of semester

Uniform and non-uniform flow in open channels, super and subcritical flows; hydraulic structures and dissipator design; flow measurement techniques; flood routing; flow in erodible channels, unsteady flow in open channels; rapidly varied flow in open channels; level pool routing; environmental factors affecting river basins.

## **C&ENVENG 3014**

#### Water Engineering & Design IIIB

- 2 units semester 2
- 32 hours lectures, design work, practical work, site visit, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1, APP MTH 2010 Differential Equations & Statistical Methods (Civil)
- Assessment: exam 75%, assignments/ laboratories/design 25%

Hydraulic engineering design. Elements of pipeline and network design; pipes in series; pipes in parallel; unsteady flow and water hammer in closed conduits; hydraulic machine basics and selection including pumps and turbines; water distribution system computer simulation modelling, EPANET.

### C&ENVENG 3066

#### **Engineering Communication and Language (ECL)**

- 3 units semester 1 or semester 2
- 36 hours lectures, workshops
- Eligibility: International students from NES backgrounds who present IELTS/TOEFL for admission, or who enter via Found.St.Prog or students resident in Australia with admission based on Yr 12 matric studies in a LOTE or were eligible to take an ESL unit in Year 11/12
- Corequisite: enrolment in an Engineering program
- Restriction: C&ENVENG 3000 Engineering Communication (EAL) (C) or PURE MTH 3016 Communication Skills (ESL) III or MATHS 3015 Communication Skills III
- Assessment: written assignments, formal oral presentations, discussion groups, attendance, participation, regular language work, project

Part A - This course provides language development in English as a second language for the purposes of oral and written communication in the context of the study of Engineering. It introduces linguistic principles as tools to assist communication in English as a second language and in cross-cultural settings. Class work is designed to develop the capacity of students for communication (in speaking, listening, writing and reading) and critical thinking relevant to their current studies and intended careers in the fields of engineering and computing. Language development tasks are project-based. Tasks and assignments are focussed on academic writing. researching and preparing reports, reading, informal academic discussion and formal oral presentation. Part B - A supervised written project extending English language skills developed in Part A.

## C&ENVENG 3067

#### **Environmental Science and Policy**

- 2 units semester 1
- 38 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM 1100 Chemistry 1A

 Assessment: Part A - 30 min. written exam 40%, written prac reports 30%, essay 30%; Part B written assignments & exam - details at beginning of semester

Part A - This course introduces fundamental aspects of bacterial structure, physiology and ecology. Topics covered include: characteristics and anatomy of bacterial cells; nutrition and design of growth media; fermentations; factors affecting growth of populations; sterilisation and disinfection; study of the interaction of bacteria with surfaces, and water quality and microbiology. Part B - Introduction to the principles of microeconomics.

# CHEM ENG 3001 Materials III(CH)

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Prerequisite: CHEM ENG 1003 Materials I
- Assessment: assignments, laboratory work, exam

Mechanical and rheological properties of materials. Role of dislocations and imperfections. Case studies in phase transformations. Polymers and composites. Fracture behaviour of materials. Merit indices and material selection. Electrochemical engineering including corrosion and corrosion prevention, electroplating, electromachining, fuel cells, energy storage and electrochemical synthesis. High temperature oxidation.

# CHEM ENG 3002

#### **Essay and Seminar**

- 2 units semester 2
- Tutorials, discussion with supervisor
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: 4000 word essay 50%, presentation 50%

Essay to be researched and prepared on a topic of general interest assigned by the Department. Seminar presentation on essay topic.

# CHEM ENG 3003A/B

#### **Chemical Engineering Projects III**

- 4 units full year
- 108 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: CHEM ENG 2001A/B Chemical Process Principles II and CHEM ENG 2004 Chemical Engineering Projects II(N)
- Corequisite: CHEM ENG 3015 Process Control & Instrumentation, CHEM ENG 3018 Fluid & Particle Mechanics, CHEM ENG 3017 Kinetics & Reactor Design, CHEM ENG 3006 Transport Phenomena
- Assumed Knowledge: CHEM ENG 2002 Process Heat Transfer, CHEM ENG 2003 Introductory Process Fluid Mechanics
- Assessment: project reports, assignments, final exam details at beginning of course

A laboratory program illustrating principles of transport theory, fluid mechanics, unit operations, process dynamics and control and kinetics and reactor design; and a lecture course on report writing, project and people management, and data analysis.

## CHEM ENG 3005

#### **Separation Processes**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 2001A/B Chemical Process Principles II
- Assessment: assignments, exam

Stage-wise and continuous contact processes; single and multi-stage operation; use of reflux; analysis and design. Processes considered include: liquid-liquid extractions, leaching, stripping, gas absorption, and distillation.

#### CHEM ENG 3006

#### **Transport Phenomena**

- 2 units semester 2
- · 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: 6 units of Level II Applied Mathematics
- Assessment: assignments, exam

An introduction to the transfer of momentum, thermal energy and mass by molecular means using shell balance and conservation equations. Turbulent transport and boundary layer methods are also discussed.

#### CHEM ENG 3007WA/WT

#### Winery Engineering III

• 3 units - semester 1

Application of engineering principles and practices to winemaking. Process calculations (mass and energy balances), process utilities (refrigeration, process heating and cooling), steam systems, electrical power systems, heat transfer and heat exchangers, must, juice and wine transfer methods, centrifugation and filtration, process control and instrumentation.

## CHEM ENG 3010

#### **Introduction to Biochemical Engineering**

- 2 units semester 1
- 45 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: exam, assignments

Introduction to the fundamentals of microbiology; proteins and enzymes; kinetics of enzymecatalysed reactions; applied enzyme catalysis; industrial enzyme processes.

#### CHEM ENG 3011

#### **Transport Processes in the Environment**

- 2 units semester 1
- 36 contact hours comprising lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1000 Process
   Systems
- Assessment: exam 80%, assignments 20%

Introduction and basic concepts. Environmental chemicals and properties. Thermodynamics and phase equilibria. Loss Mechanisms. Inter-media transport. Simple exchange models. Air pollution problems. Nuclear chemistry. Environmental modelling. Plume dispersion. Simple kinetic models.

## CHEM ENG 3014

#### **Process Design and Plant Engineering**

- 2 units semester 2
- 54 hours lectures, tutorial, 3 hour practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: CHEM ENG 2001A/B Chemical Process Principles II, CHEM ENG 2004 Chemical Engineering Projects II(N)
- · Assessment: project report, exam

Principles of process design and plant engineering. An introductory design project is solved using computer-aided process design techniques.

## CHEM ENG 3015

## **Process Control and Instrumentation**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: 6 units of Level II Applied Mathematics courses, CHEM ENG 2001A/B Chemical Process Principles II
- Assessment: assignments, exam

Control: introduction to linear process control, including analysis of first and second order process systems dynamics and control. Instrumentation: topics include commonly used primary sensing elements, signal transmission for digital and analogue systems, final control elements.

# CHEM ENG 3017

#### **Kinetics and Reactor Design**

- 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: 6 units of Level II Applied Mathematics courses, CHEM 2104 Chemistry IIAE, CHEM 2204 Chemistry IIBE
- Assessment: assignments, exam

The theory of simple and complex chemical kinetic systems and their application to the design of commercial-scale reactors.

#### CHEM ENG 3018

#### Fluid and Particle Mechanics

- 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: CHEM ENG 2003 Introductory Process Fluid Mechanics
- Assessment: assignments, exam

Description of particulate systems. Multiphase systems: fundamentals and application to design and analysis of physical separation and transport processes.

## ELEC ENG 3015

#### **Communications, Signals & Systems**

- 3 units semester 1
- 36 hours lectures, tutorials, assignments
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

- Assumed Knowledge: ELEC ENG 2007 Signals & Systems, ELEC ENG 2008 Electronics II, STATS 2004 Laplace Transforms & Probability & Statistical Methods
- Assessment: written exam, assignments

Random Signals and Systems: Review of probability, random variables, random processes, autocorrelation, power spectrum, linear time invariant systems, thermal and shot noise. Communication Systems: Radio communications, noise and distortion in communication systems, spurious signals, amplitude and frequency modulation, mixer and modulator circuits, superheterodyne receivers. Analog Filter Design: Impedance and frequency scaling, low pass prototypes, filter design and transformations, switched capacitor filters, active filters.

# ELEC ENG 3016 Control III

- 3 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2007 Signals & Systems, APP MATH 2000 Differential Equations & Fourier Series, APP MATH 2002 Vector Analysis
   & Complex Analysis, STATS 2004 Laplace Transforms & Probability & Statistical Methods
- Assessment: written exam, homework exercises

Transfer functions; stability; dynamic and steadystate performance; root locus diagrams; Bode and Nyquist plots; cascade compensation using root locus and frequency response techniques; minorloop feedback. Introduction to state-space modelling and analysis. Analysis and design of digital control systems.

# ELEC ENG 3017

# **Digital Electronics**

- 3 units semester 1
- 36 hours lectures, tutorials, computer laboratory exercises
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I and ELEC ENG 2008 Electronics II
- Assessment: written exam, assignments

Integrated Circuits - overview of implementation technologies and economics. Datapath design and arithmetic/logic units; adders and multipliers. State machine design - synchonous and asynchronous. Hardware description languages; introduction to modelling in VHDL. Field Programmable Gate Arrays - architecture, design flow, modelling and coding approaches, CMOS fabrication technology and CMOS Logic. Memory cells and memory design.

# ELEC ENG 3018

## **RF Engineering III**

- 3 units semester 1
- 36 hours lectures, laboratory/tutorial sessions
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2008 Electronics II and ELEC ENG 2009 Engineering Electromagnetics
- Assessment: written exam, tests

Basic concepts of electromagnetic radiation, propagation and antennas. Elementary transmission line theory. Radio Frequency systems and performance constraints. Tuned circuits and matching. High frequency transistor models. Tuned and broadband amplifiers. Oscillators and mixers. Modulation and demodulation. Introduction to phase locked loops. Miscellaneous analogue circuits.

# ELEC ENG 3019A/B

## Practical Electrical&Electronic Design III

- 3 units full year
- 78 hours lectures, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: ELEC ENG 2010A/B Practical Electronic Design II, ELEC ENG 3019A Practical Electrical & Electronic Design III Part 1
- Corequisite: ELEC ENG 3018 RF Engineering III, ELEC ENG 3016 Control III

 Assessment: practical exercises with informal reports, practical exercises with formal reports, laboratory & 2 written tests - each assessment component must be passed separately

Practical experiments in the key areas of: Radio reception, Signal processing & Control, Communications and Energy conversion. Practical electronic design, development of Report writing skills and measurement skills.

## ELEC ENG 3020

#### **Embedded Computer Systems**

- 3 units semester 2
- 24 hours lectures, tutorials, problem based learning project
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I and either COMP SCI 2000 Computer Systems or MECH ENG 3032 Micro-Controller Programming
- Assessment: written exam, assignments, project work

Review of computer architecture; organisation of microprocessor systems; memory types; input/output. Instruction set architecture and hardware interfaces. Address decoding and memory mapping techniques. Timing analysis. Interrupts and exceptions. Direct memory access. Microcontrollers and digital signal processors. Analog to digital and digital to analog conversion. Real time techniques. Development tools

## ELEC ENG 3021

#### **Electric Energy Systems**

- 3 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I and ELEC ENG 2009 Engineering Electromagnetics
- Assessment: written exam, assignments

Electric energy systems overview: Electric loads and energy pricing. Electric transmission and distribution networks. Conventional energy generation systems, sustainable/renewable energy sources. Energy storage. Economics, management and sustainability. Modelling and analysis of electric energy systems: single-phase and threephase circuits (real and reactive power, per-unit systems). Electromechanical energy conversion (construction, modelling and characteristics of induction and synchronous machines). Electric energy transmission and distribution (modelling of transmission lines, system analysis, control of voltage, power and frequency).

# ELEC ENG 3022

#### **Real Time Systems IV**

- 3 units semester 2
- 26 hours lectures, tutorials, programming exercises
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I, COMP SCI 2000 Computer Systems
- Restriction: ELEC ENG 4028 Real Time Systems
- Assessment: assignment, written exam

Time-critical computing, real-time kernels and development systems, scheduling periodic and aperiodic task techniques, intertask communication and synchronisation, rate monotonic analysis, real-time message transmission in distributed local area networks.

## ELEC ENG 3023

#### **Electric Energy Systems M**

- 2 units semester 2
- 24 hours lectures, tutorial
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1005 Electrical Systems AM or ELEC ENG 1006 Electrical Engineering I
- Assessment: written exam, assignments

Electric energy systems overview: Electric loads and energy pricing. Electric transmission and distribution networks. Conventional energy generation systems, sustainable/renewable energy sources. Energy storage. Economics, management and sustainability. Modelling and analysis of electric energy systems: single-phase and threephase circuits (real and reactive power, per-unit systems). Electromechanical energy conversion (construction, modelling and characteristics of induction and synchronous machines). Electric energy transmission and distribution (modelling of transmission lines, system analysis, control of voltage, power and frequency).

#### ELEC ENG 3024

#### **Project Management for Electrical Engineering**

- 3 units semester 2
- 32 hours lectures, tutorials, group project
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2007 Signals & Systems, ELEC ENG 2008 Electronics II
- Assessment: written exam, assignments, project work

Principles of project management as applied to engineering systems; leadership and team skills; group project work to exercise planning organisational and communication skills.

#### ENG 3002

#### **Engineering Communication ESL/EAL**

- 2 units semester 1 or semester 2
- · 24 hours lectures, workshops
- Eligibility: International students from NES background who present English language score (IELTS/TOEFL) for admission, or entered via Found.St.Prog or students resident in Australia with admission based on Yr 12 matric LOTE or eligible to take ESL unit in Yr 11/12
- Corequisite: students must be enrolled in an Engineering program
- Restriction: not to be counted together with PURE MTH 3015 Communication Skills III (ESL) or MATHS 3015 Communication Skills III
- Assessment: assignment 90%, attendance 10%

This course provides language development in English as a second language for the purposes of oral and written communication in the context of the study of Engineering. It introduces linguistic principles as tools to assist communication in English as a second language and in cross-cultural settings. Class work is designed to develop the capacity of students for communication (in speaking, listening, writing and reading) and critical thinking relevant to their current studies and intended careers in the fields of engineering and computing. Language development is taskbased. Tasks and assignments are focussed on academic writing, research and preparing evidence-based papers, reading, informal academic discussion and formal oral presentation.

#### MECH ENG 3014

#### Mechatronics II

- 2 units semester 1
- 12 hours lectures, tutorials, 24 hours laboratory classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2011 Mechatronics IM, MECH ENG 2019 Dynamics & Control 1
- Assessment: assignments, in-class quizzes, final exam

Advanced PLC programming and implementation, memory and data types, program structure, mathematic functions and PID control, Microcontroller system.

#### MECH ENG 3016

#### **Aeronautical Engineering I**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- · Assessment: assignments, final exam

The aim of the course is to equip students with the necessary knowledge and skills to understand and analyse the design and performance of modern aircraft. The course focuses on the fluid mechanical and thermodynamic aspects of aeronautical engineering as follows: it firstly introduces the basics of flight mechanics and aircraft performance as well as aircraft stability and control. This is followed by low and high Mach number aerodynamics where lift and drag mechanisms as well as design principles and requirements are described. Concluding the course are different methods of thrust generation as well as propeller theory and selection, followed by V/STOL flight.

#### MECH ENG 3017

#### **Engineering and the Environment**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, final exam

Engineering ethics, noise assessment and control, vibration assessment and control, air pollution assessment and control, water pollution assessment and control, sustainability, sustainable design and manufacture, sustainable buildings, Environmental impact statements, legislative requirements.

#### MECH ENG 3020

#### **Heat Transfer**

- 2 units semester 1
- 36 hours lectures, tutorials, 2 hours laboratory classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021
  Thermo-Fluids 1
- Assessment: assignments, practicals, final exam

An introduction to the three modes of heat transfer, ie conduction, convection and radiation. Analytical approaches will be stressed where appropriate, but emphasis will be placed on numerical and empirical techniques. Special topics might include heat exchanger applications, condensation, evaporation and boiling, mass transfer, heat transfer enhancement and solar radiation.

#### MECH ENG 3025

#### **Space Vehicle Design**

- 2 units semester 1
- · 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, final exam

The aim of the course is to introduce the students to the basic theories and design criteria of space vehicles. The first part of the course describes historical developments in space flight and the basic rocket equations, as well as the principles of rocket staging and its optimisation. This is followed by orbital theory, where two-body motion, manoeuvres and special trajectories are described.

A section about rocket propulsion focuses on performance, propulsion requirements and various propellant systems (monopropellant, bipropellant, solid, cold gas and non-chemical propellant systems). Concluding the course will be a description of current developments in space flight, such as the International Space Station and missions to Mars.

#### MECH ENG 3026

#### Aerospace Materials and Structures

- · 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials 1, APP MTH 2000 Differential equations & Fourier Series, APP MTH 2002 Vector Analysis, MECH ENG 2002 Stress Analysis & Design
- Assessment: assignments, final exam

The course examines the different types of materials used in the aerospace industry, including metals, ceramics and composites. Selection of the appropriate material for a variety of applications will be discussed in terms of the material properties, ease of manufacture and performance in the anticipated service environment. Case studies will be used to demonstrate the design principles used when using each of these materials for aerospace applications.

#### MECH ENG 3027

#### **Design and Communication**

- 3 units semester 2
- · 60 hours lectures, tutorial, design office
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- · Assessment: assignments, final exam

The course will cover all of the elements of the design process that are relevant to engineering projects. The various stages of the design process will be discussed including problem identification, concept generation, concept selection and design embodiment. Fundamentals of good design practices will also be covered including aesthetics, ergonomics and safety. The course also includes effective team work practices and project management. An essential aspect of engineering design is effective communication. Therefore the course provides written and spoken language development in the context of academic and professional engineering.

Class work is designed to develop the capacity of students for effective communication relevant to their current studies and intended professional careers. Areas covered include logical cohesion, writing a research paper, integrating evidence and the effective presentation of individual and group seminars. Particular attention is given to explicit engineering report writing skills.

#### MECH ENG 3028

#### **Dynamics and Control II**

- 3 units semester 2
- 48 hours lectures, tutorials, 4-6 hours laboratory experiments
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: 6 units of Level II Applied Maths courses, MECH ENG 2019 Dynamics & Control I
- Assessment: assignments, laboratory experiments, final exam

Dynamic systems are found everywhere, from musical instruments to transportation vehicles such as automobiles and aircraft. Even static civil structures such as bridges and buildings exhibit a dynamic response, which must be considered during design and construction of such systems. This course introduces the fundamental concepts of vibrating dynamical systems, from single degree of freedom systems through to continuous and multi-degree of freedom systems. Design of vibration control devices, such as vibration isolators and vibration absorbers, is also considered. Concurrently with the introduction to vibratory systems described above, this course also addresses how to control such dynamic systems using modern state-space control. This involves time domain descriptions of dynamic systems using state-space system models. The characteristics responsible for the dynamic response (poles, zeros, eigenvalues) are presented. Control laws using state-space are introduced, including specification of controller characteristics, controller design using pole placement and optimal (LQR) control (introduction). State observers are presented, including observer design using both pole placement and optimal (Kalman) observers (introduction). Finally, a computer aided control system design methodology is applied to a real MIMO Aerospace platform and several other unstable MIMO systems.

# MECH ENG 3029

#### **Manufacturing Engineering**

- 2 units semester 2
- · 36 hours lectures, tutorials, site visit
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, final exam

Plastics manufacturing, the design and control of advanced manufacturing systems. Techniques for the analysis and operation of manufacturing systems. Design for assembly, design for manufacture techniques. Quality management; design for quality statistical process control; quality techniques including quality function deployment and failure mode and effect analysis.

#### MECH ENG 3030

#### **Structural Design and Solid Mechanics**

- 3 units semester 1
- 60 hours lectures, tutorials, 8 hours laboratory classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2002 Stress Analysis and Design, 6 units of Level II Applied Maths courses
- · Assessment: assignments, final exam

Concepts of stress and strain tensor, elasticity, plasticity, viscoelasticity and creep, elementary solutions of theory of elasticity and plasticity, Airy's Stress Function, Principle of Minimum Potential Energy, Finite Element Analysis, waves in solids, into to Fracture Mechanics, properties and behaviour of structural materials and elements together with fabrication, construction and durability aspects, preliminary sizing of members, assessment of loads, analysis and design of structural members for load capacity and serviceability.

#### MECH ENG 3031

#### **Thermo-Fluids II**

- 3 units semester 1
- 48 hours lectures, tutorials, 4 hours laboratory classes
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021 Thermo-Fluids I, Level II Applied Mathematics courses with an aggregate value of 6 units
- Assessment: assignments, practicals, final exam

Flow of in viscid and viscous fluids; laminar and turbulent flow in pipes and boundary layers; forces on bodies, aerofoil theory; incompressible-flow machines. Vapour power cycles; refrigeration cycles; non-reacting mixtures; psychrometry; combustion.

#### MECH ENG 3032

#### **Micro-controller Programming**

- 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1002 Engineering Computing I, MECH ENG 2011 Mechatronics IM
- Assessment: assignments, final exam

The focus of this course is on the programming and use of micro-controllers in mechatronics applications. Assuming basic knowledge of the C programming language, the material is presented in a combination of lectures, tutorials and handson laboratory sessions. The build process of micro-controller software is examined in great detail thereby providing the language for understanding compiler handbooks, on-line publications and micro-controller datasheets. The newly developed skills are then applied in a number of practical case studies covering typical mechatronics applications including servomechanisms, sensor interfacing, real-time issues and inter-platform communication. Emphasis will be laid on the confident use of the C programming language using a variety of programming environments. Fault finding techniques will be introduced, ranging from low-level in-circuit debugging to source-level debugging on simulators and evaluation boards. Small-group projects and case studies will be used to provide important hands-on experience with microcontroller based projects.

#### MECH ENG 3033

#### Automotive Materials and Structures

- 3 units semester 1
- 48 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials

   APP MTH 2000 Differential Equations & Fourier Series, APP MTH 2002 Vector Analysis, MECH ENG 2002 Stress Analysis & Design
- Assessment: assignment, laboratory experiment, final exam

The course examines the different types of materials used in the automotive industry, including metals, ceramics and composites. Selection of the appropriate material for a variety of applications will be discussed in terms of the material properties, ease of manufacture and performance in the anticipated service environment. Case studies will be used to demonstrate the design principles used when using each of these materials for automotive applications.

#### MECH ENG 3034

#### Advanced Computer Aided Engineering

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

- Assumed Knowledge: MECH ENG 1000
   Dynamics
- Assessment: assignment, final exam

This course introduces the student to a variety of CAD, CAM and CAE packages that are currently available and in common use by the automotive industry. There will be hands on opportunities and the function and theories behind of each piece of software reviewed. Students will be encouraged to familiarise themselves with the operation of the software through problem based assignments.

#### MECH ENG 3035

#### **Automotive Combustion Technology**

- 2 units semester 2
- 36 hours lectures, practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021
  Thermo-fluids I
- Assessment: assignment, laboratory experiment, final exam

This subject introduces the students to internal combustion engines, their efficiency and pollutants emission. It looks at the various emerging power technologies in the automotive industry and the current and alternatives fuels and combustion processes. Choice of fuel and the design of efficient engine operating parameters and their by products will all be discussed.

#### MECH ENG 3036

#### **Automotive Power Train and Vehicle Dynamics**

- 2 units semester 2
- 36 hours lectures, tutorials, 3 hour laboratory class
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021 Thermo-fluids I, MECH ENG 2019 Dynamics & Control I
- Assessment: assignment, laboratory experiment, final exam

Powertrain: Engine design and performance parameters, Real engine operating characteristics, Transmission types and analysis, Driveline design, Hybrid powertrains. Vehicle Dynamics: Vehicle control stability and handling, tyre construction, tyre operation and analysis, steady state handling, 2 degree-offreedom model of vehicle dynamics, stability and control derivatives, steady state vehicle response and transient vehicle response.

#### PETROENG 3001

#### **Reservoir Simulation**

- 3 units semester 2
- · Lecture, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- · Assessment: assignments, exam

Fluid flow equations, numerical solutions to fluid flow equations, finite difference approximations, matrix techniques for simultaneous equations, iteration schemes, well models, simulation data and studies.

# PETROENG 3002 Economic Evaluation

- 2 units semester 1
- Lectures, tutorials & computerised worked examples
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, exam

Economic evaluations provide the main source of information by which investment and operational decisions are made regarding the most effective use of enterprise resources. There are many subtleties and assumptions that underlie the apparently straight-forward calculations that are often seen. Consequently, a fundamental understanding of the concepts behind economic evaluation and of techniques for performing them, are essential skills. Topics to be included are: economic and business concepts, cash-flows and fiscal regimes, time-value of money, discounted cash flow, net present value and other economic indicators, sensitivity analysis, real options and portfolio management, analysis of various project situations.

#### PETROENG 3005

#### **Reservoir Characterisation and Modelling**

- 3 units semester 2
- Lectures, tutorials
- Available for Non-Award Study
- Assessment: assignments, exam

Lectures on producing field situations: reservoir processes and performance; well design options and performance; production policies and government regulation; field monitoring and surveillance; facilities constraints and impact of alternative facilities concepts; uncertainties and risk. Concepts of reservoir characterisation; integration of major elements: seismic framework, geological model, rock properties; attribute analysis; geostatistical methods: distributions, sampling, estimation, variograms; upscaling; simulation and visualisation.

# PETROENG 3007

#### **Well Testing and Pressure Transient Analysis**

- 3 units semester 1
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

Well test objectives and concepts; fluid flow equation and fundamental solution; classical methods: drawdown and buildup analysis, bounded reservoirs; gas well testing; type curves and derivatives; complex systems: multi-layer, dual-porosity, hydraulic fractures; interference and pulse testing; test design.

## PETROENG 3018

#### **Drilling Engineering and Well Completion**

- 3 units semester 2
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

The course covers the fundamentals of drilling engineering and well completion. In the area of drilling; the following are covered: the drilling process; equipment and performance; well pressure control and buoyancy; fluid design; well casing design and cementing techniques; overview of drilling operations.

Well completions addresses: concepts and types of well completion design; overview of well performance; tubing string sizing and design; specialised components: wellheads, packers, expansion joints, subsurface safety valves etc; artificial lift design: beam pumping, gaslift, electric submersible pumps; introduction to well stimulation.

## PETROENG 3019

#### **Structural Geology and Seismic Methods**

- 3 units semester 2
- Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

Structural Geology: Basic concepts of stress (resolving stresses and Mohr Circle) and rock failure (friction, Coulomb); present-day stresses from oil field data: implications for wellbore stability and water flooding; basic concepts of structural geology; faults; folds; structural traps and fault seal analysis. Seismic Methods: Concepts in seismic analysis: seismic data acquisition: field-concepts, elements of data acquisition systems, marine data acquisition; seismic data processing: time series analysis, processing methods, seismic migration, inverse theory and applications; seismic data interpretation: seismic interpretation principles, structural styles, mapping, seismic stratigraphy, velocity modeling, attribute analysis.

## PETROENG 3020

#### **Production Engineering and Optimisation**

- 2 units semester 1
- Project discussions, project work, presentation
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, project [written & oral presentation]

This course involves minimal lecturing but rather hands-on experience with students working in teams on actual field data, using a range of software packages, with the aim of optimising field production situations. As such it is a practical component or design course. The course will address the following: reservoir performance, well performance and aspects of facilities optimisation, a total systems approach (nodal analysis).

# PETROENG 3021

#### **Petroleum Exploration and Management**

- 3 units not offered in 2007
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

The course illustrates geoscience and management concepts and methods that are used in petroleum exploration. Petroleum systems are reviewed with emphasis on source rock organic geochemistry and hydrocarbon generation, expulsion and migration. The concepts of petroleum plays and prospects are introduced and illustrated with examples from around Australia. Management strategies associated with hydrocarbon exploration and reserve estimation are also covered.

## PETROENG 3022

#### **Reservoir Engineering**

- 2 units semester 1
- Lectures, tutorials/practicals
- Available for Non-Award Study
- Assumed Knowledge: PETROENG 1001 Introduction to Rock & Fluid Properties
- Assessment: assignments, exam

Darcy's Law and Applications, Concepts of permeability, Relative permeability, Capillary pressure, Wettability, Material Balance Equations for Different Types of Reservoirs and Drives, Aquifer Behaviour and Water Influx, Immiscible Displacement, Buckley-Leverett theory, Gravity-Stable Displacement, Water and Gas Injection, Coning and Cusping.

# PETROENG 3023

#### Well Completion

- 3 units semester 2
- · 45 hours lectures and practicals
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: PETROENG 2010 Drilling Engineering
- Assumed Knowledge: Higher Maths, Physics, Chemistry
- Assessment: Assignments, exams

The objective of this course is to provide students the broad understanding of petroleum well completion process. The course covers the fundamental principles of the design and evaluation of well completions, casing design in various loading condition with various downhole situations, placement of casing, liners and well tubing; cementing techniques; perforation techniques; gravel packing; sand control and measurement, use of different sand control devices; fundamentals of fracturing including acid fracturing and hydraulic fracturing. This course also covers the broad overviews of various completion techniques, tools, and wellhead types, and their limitations.

# Level IV

## **C&ENVENG 4003**

# Civil and Structural Engineering Research Project

- 6 units full year
- 120 hours directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: all Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: evaluation of research including: research report, conference paper, literature review, poster & oral presentations

Students work in groups on a research project under the supervision of an academic staff member.

#### C&ENVENG 4005

#### **Civil and Environmental Research**

- 6 units full year
- 120 hours directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Environmental Engineering
- Assessment: evaluation of research including: research report; conference paper; literature review; poster & oral presentations.

Students work in groups on a research project under the supervision of an academic staff member.

## **C&ENVENG 4034**

#### **Engineering Management IV**

- 3 units semester 1
- 24 hours lectures, workshop sessions, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include assignments and/or exam - details available at beginning of semester

This course includes group decision-making; the development of the individual in the workplace; the importance of communication and interpersonal skills in an organisation. Students gain an understanding of work preferences and personal interactions through self-analysis. These skills are developed through group projects, presentations and a competitive project proposal.

## C&ENVENG 4037

#### Introduction to Environmental Law

- 3 units semester 2
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include assignments and/or exam - details available at beginning of semester

The course examines regulatory mechanisms that address environmental problems and focuses particularly upon regulation of development. Included are: a general introduction to the law and the legal system; the nature of environmental problems in Australia; constitutional responsibilities and powers with respect to environmental planning and protection; land-use planning and protection systems; environmental impact assessment; regulation of pollution and waste disposal; and environmental litigation.

# C&ENVENG 4066

# Composite Steel and Concrete Bridges and Buildings

- 3 units not available in 2007
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assumed Knowledge: undergraduate structural design principles.
- Assessment: two design reports and/or quizzes details at beginning of semester

The diagnosis, assessment and rehabilitation of existing composite steel and concrete bridges and buildings is a rapidly expanding growth area in structural engineering. This course covers the design of new composite bridges and buildings for both gravity and fatigue loads using fundamental principles that are applicable throughout the world. This is followed by the retrofitting and rehabilitation of composite structures in buildings, and then the fatigue design, assessment and retrofitting of composite bridge beams. Major contents consist of: insertion of service ducts in composite beams; strengthening composite beam; fatigue design of new bridge beams; fatigue assessment of the residual strength and residual endurance of existing composite bridge beams based on their asymptotic endurances.

### C&ENVENG 4069

#### **Advanced Reinforced Concrete**

- 3 units semester 2
- 25 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Corequisite: Students must be enrolled in an Engineering degree
- Assessment: design, tutorials, exam

This course is intended to provide students with a deeper fundamental understanding of the behaviour of reinforced concrete (RC) structures. Emphasis will be placed on inelastic behaviour of RC members. Topics covered will include: elastic and inelastic response of RC members; confinement of RC columns; behaviour of RC beams in shear; and use of new and advanced materials in RC

## **C&ENVENG 4070**

#### Structural Dynamics due to Wind and Earthquakes

- 3 units not offered in 2007
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: coursework 40%, final exam 60%

Students will learn in this course how the basic stiffness method of structural analysis for static loading is extended to analyse the dynamic response of structures subject to dynamic loading such as that caused by blast, wind and earthquake. Emphasis will be placed on practical elastic and inelastic analysis techniques. Importantly, simplified methods for characterisation of dynamic loads as "equivalent" static forces and the treatment of structural damping will also be covered.

#### **C&ENVENG 4071**

# Special Topics in Civil and Structural Engineering IV

- 3 units semester 1 or semester 2
- · 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Environmental Engineering
- Assessment: may include assignments and/or exam - details at beginning of semester

Advanced topics in civil and structural engineering.

# **C&ENVENG 4073**

#### Water Distribution Systems and Design

- 3 units semester 2
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: exam 60%, tutorial, project work 40%

Water distribution systems analysis. Steady state analysis of pipe networks. Alternative formulations of equations for pipe networks. Computer solution techniques. Water supplies for small communities. Optimisation of pipe networks using genetic algorithms. Water hammer analysis. Pump transients. Water hammer control methods.

## **C&ENVENG 4075**

#### Water Resources Optimisation and Modelling

- 3 units semester 2
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering

 Assessment: may include assignments, presentations, projects and/or exam - details at beginning of semester

Topics selection from: Optimisation and computer simulation techniques applied to the planning and management of water resources systems; multiobjective planning; assessment of risk, uncertainty and reliability; design project.

## C&ENVENG 4077

#### **Coastal Engineering and Design**

- 3 units not offered in 2007
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: exam 60%, design 30%, tutorials 10%

The course is based on waves and wave theories, tides, sediment transport, nearshore coastal processes, wave generation, ocean outfalls, coastal management.

## C&ENVENG 4079

#### **Deep Foundation Engineering and Design**

- 3 units semester 1
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: exam 50%, coursework 50%

Advanced topics in the design of deep foundations, including numerical methods: analysis and design of pile foundations for vertical and/or lateral loading; dewatering of excavations.

## C&ENVENG 4081

#### **Expansive Soils and Footing Design**

- 3 units not offered in 2007
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: coursework

The nature, behaviour and distribution of expansive soils in the urban environment. Soil suction and its measurement. The definition, measurement and accuracy of instability index and surface heave. Design of footings on expansive soils using the deemed-to-comply method, the Mitchell and Walsh computer models, and a probabilistic approach. The influence of trees and vegetation on expansive soil behaviour and footing design. Assessment of houses damaged as a result of expansive soil movement. Techniques to mitigate the influence of expansive soils. At the end of this course, students will be able to design residential footings to current practice.

## C&ENVENG 4085

#### **Traffic Engineering and Design**

- 3 units semester 1
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include assignments and/or exam details at beginning of semester

Elements of the road traffic system. Road hierarchy and functional classification. Design of urban road networks. Introduction to traffic impact analysis. Traffic control devices and systems. Traffic management principles and applications. Local area traffic management. Design of traffic systems. Traffic calming principles. Traffic flow and road capacity analysis.

## C&ENVENG 4087

## Environmental Modelling, Management and Design

- 3 units not offered in 2007
- 24 hours lectures, assignment, design and directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include assignments & exam details at beginning of semester

The course addresses the major steps in the development of engineering models, and how they are used for decision-making, with a particular emphasis on water quality. Topics to be covered include one or more of the following: model specification (environmental processes, model complexity, model application), model calibration (gradient methods, genetic algorithms, ant colony optimisation), model validation and stochastic modelling (types of uncertainty, random variables, risk-based performance measures and reliability analysis, including Monte Carlo simulation and the first-order reliability method), artificial neural network modelling, environmental decision-making.

## C&ENVENG 4090

## Special Topics in Civil and Environmental Engineering IV

- 3 units semester 1 or semester 2
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include assignments & exam details at beginning of semester

Advanced topics in civil and environmental engineering.

#### **C&ENVENG 4091**

#### Waste Management Analysis and Design

- 3 units semester 2
- · 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include assignments & exam details at beginning of semester

Generation, collection and disposal of solid waste; sanitary landfill; incineration; resource conservation and recovery; fuel recovery. Hazardous waste management; types of hazardous waste; treatment technologies; methods of disposal; design project.

## C&ENVENG 4092

#### Wastewater Engineering and Design

- 3 units semester 1
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: may include written assignments & exam - details at beginning of semester

Characteristics of wastewater; primary, secondary and tertiary treatment methods; sludge disposal; project: design of wastewater treatment plant.

#### **C&ENVENG 4094**

#### **High-Rise and Long-Span Steel Structures**

- 3 units not offered in 2007
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering

• Assessment: project work & tutorials - details at beginning of semester

This course consists of two parts. The first part is on tall building structures. Emphasis will be placed on horizontal load resistance systems, rigorous analytical methods and practical methods of design, and the structural behaviour of various tall building systems under lateral loading. The second part concerns space structures in which some of latest engineering constructions in space structures will be explored and various types of space structures will be introduced in terms of their behaviour under load, materials used and analysis methods. In particular, the design, analysis and construction of double-layer grids one of most popular forms of space structures will be addressed.

## C&ENVENG 4096

## **FRP** Retrofitting of Concrete Structures

- 3 units not offered in 2007
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: undergraduate structural design principles
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: 2 design reports and/or quizzes details at beginning of semester

The maintenance, upgrade, strengthening and stiffening of existing reinforced concrete structures is a large growth area in civil engineering. A new retrofitting technique using externally bonded plates, in particular fibre reinforced polymer (FRP) plates, is being developed and applied in practice worldwide and has been found to be convenient, inexpensive and unobtrusive. The fundamental principles behind this new retrofitting technique, the development of new design rules and their application in practice are described. The course covers: the use of all types of plates such as FRP and steel plates; externally bonded, near surface mounted and bolted plates; all debonding mechanisms; strength, stiffness and ductility of plated beams; plating for strength and serviceability; increasing the flexural and shear strength by plating; and examples of retrofitting of plating in practice.

## C&ENVENG 4097

#### **Analysis of Rivers and Sediment Transport**

- 3 units not offered in 2007
- 24 hours lectures, tutorials/design, practicals
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1 and C&ENVENG 2035 Water Engineering II S2, C&ENVENG 3013 Water Engineering & Design IIIA and C&ENVENG 3014 Water Engineering & Design IIIB or equivalent
- Assessment: exam 50%, tutorials/design 30%, practicals 20%

This course will examine advanced topics in open Channel Flow such as curvilinear flows, unsteady flow, super-critical transitions. These will be followed by an introduction to River Mechanics and modelling flow in 2D and 3D situations, such as meandering channels and flow around piers and other structures. The course will then introduce concepts in sediment transport and examine techniques to predict the threshold of motion, sediment transport rates as well as local scour and morphology changes. The lectures will be used to introduce topics and the students will be expected to gain a greater understanding of the material through the design and tutorials and through their own self study.

## C&ENVENG 4098

#### Water Resources Sustainability and Design

- 3 units semester 1
- 24 hours lectures, tutorials, design
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 2033 Water Engineering II S1 and C&ENVENG 2035 Water Engineering II S2, C&ENVENG 3013 Water Engineering & Design IIIA and C&ENVENG 3014 Water Engineering & Design IIIB
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: essay, short talk, design project, exam

Reliability and sustainability issues of water resources; drought assessment; multi objective evaluation of water resources projects; sustainability assessment and modelling; design project.

## C&ENVENG 4099

## **Structural Response to Blast Loading**

- 3 units semester 1
- 24 hours lectures
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: All Level I, II & III courses to be passed before entering Level IV except by permission of Head, Civil & Env.Engineering
- Assessment: Assessment: assignments and/or quizzes

With the increased world tension, terrorist bombing attacks are becoming a more and more realistic threat to society. These terrorist attacks usually target populated facilities such as office buildings and hotels, as well as diplomatic and military facilities, resulting in not only enormously economic loss, but also injuries and fatalities, social disruption and psychological impact to society. To reduce the consequences, it is essential to study characteristics of structural response to blast loading and to develop effective blast resistant systems that can be applied to protect the buildingøs occupants. In this course, theory of wave propagation in media is addressed first; then empirical formulae to estimate blast loads around a structure at difference scaled distances are described; after that material models for reinforced concrete and masonry under high strain rate are reviewed; later on characteristics of structural response to blast loading is analyzed and blast design procedures for structural members are introduced; finally retrofitting technologies are developed to strengthen RC and masonry structures against blast loading.

## CHEM ENG 4001

## **Special Studies in Chemical Engineering**

- 2 units semester 1 or 2
- 36 hours lectures, tutorials (or equivalent)
- Eligibility: students in specified programs only check Academic Program Rules for details
- Assumed Knowledge: as prescribed by Head, Chemical Engineering
- Assessment: may include written assignments and/or exam - further details available at beginning of semester

Special topics in Chemical Engineering as determined by the Head of the Chemical

Engineering School. This course may be offered from time to time and will be taught by visiting academic/s.

## CHEM ENG 4002A/B

#### **Chemical Engineering Research Elective II**

- 4 units full year
- · 200 hours practical work, seminar
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Restriction: by permission of Head, Chemical Engineering
- · Assessment: project report, seminar

Candidates are required to: complete satisfactorily a research project and submit a written report on a topic specified by the school; present a short seminar on their project results at the end of semester 2.

## **CHEM ENG 4003**

#### **Process Dynamics and Control**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 3015 Process Control & Instrumentation
- Assessment: assignments, exam

The principles of process dynamics, stability and design of process control loops, overall plant control, and digital control systems. The theory is developed to a stage where it may be applied to a wide variety of practical problems in design and operation of chemical process plant.

#### CHEM ENG 4004

## **Minerals Processing**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

The application of chemical engineering principles to minerals processing operations, including flotation, size reduction, gravity separation and hydrometallurgy

## **CHEM ENG 4005**

#### **Thermal Process Synthesis and Integration**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 2001A/B Chemical Process Principles II
- Assessment: assignments, exam

Design and synthesis of HEN (heat exchanger networks) including evolutionary and algorithmic methods. Integration of power, work, separation and energy systems. Flexibility and operability studies; retrofit situations.

## **CHEM ENG 4006**

#### **Special Management Studies**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, exam

Specialist management topics, including quality improvement through the application of statistical methods.

# CHEM ENG 4007

#### **AI Applications in Engineering Design**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

The application of artificial intelligence techniques to engineering design. Topics include: rule-based systems, forward and backward chaining; list processing; the elements of heuristic search.

# CHEM ENG 4008 Biochemical Engineering

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- · Assessment: assignments, exam

A review of fundamentals of microbiology; the growth curve; kinetics of substrate utilisation, product formation, bio-mass production in cell cultures and inactivation (death) of cells; design and analysis of biological reactors, bio-reactors, sterilisation reactors, applications; product recovery operations; bio-process economics.

## CHEM ENG 4009

#### **Advanced Chemical Engineering**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 3018 Fluid & Particle Mechanics; CHEM ENG 3006 Transport Phenomena
- Assessment: assignments, exams

Topics on advanced chemical engineering selected from the fields of reaction engineering and fluid and particle technology.

#### CHEM ENG 4010

#### Advanced Separation Techniques & Thermal Processes

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details

Available for Non-Award Study

Assumed Knowledge: material contained in Level I-III courses in B.E.(Chem.) program, CHEM ENG 3005 Separation Processes

Assessment: exam, classwork up to 20%

Application of fundamental principles to the analysis of chemical process unit operations for design and operational management.

## CHEM ENG 4011

#### **Reaction Engineering**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

The study of advanced kinetics and reactor design in chemical processing systems, including temperature and pressure effects in reactors and fundamental design strategies for heterogeneous reactor systems.

## CHEM ENG 4013

#### **Biomedical Engineering**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

An introductory course on the application of engineering knowledge and principles in the medical area. Topics include engineering in orthopaedics; biomechanics; tissue and spinal mechanics; materials; lasers, radiography; magnetic resonance imaging; nuclear medicine; medical ultrasound and image processing.

## CHEM ENG 4014

#### **Plant Design Project**

- 6 units semester 2
- 184 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Corequisite: CHEM ENG 4010 Advanced Separation Techniques & Thermal Processes
- Assumed Knowledge: CHEM ENG 3014 Process Design & Plant Engineering

#### Assessment: assignments, exam

Topics comprise sources and estimation of data, costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes (including utilities), project scheduling and control, and plant operation and safety considerations. Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated chemical product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

# CHEM ENG 4015

#### **Hydrocarbon Reservoirs**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 3018 Fluid & Particle Mechanics
- Assessment: assignments, exam

Introduction to broad concepts of petroleum geology, evaluation of the production capabilities of hydrocarbon reservoirs using well log data, geophysical basin characteristics and mathematical and physical models of porosity and permeability.

## CHEM ENG 4016

#### **Advanced Materials Engineering**

- 2 units not offered 2007
- 36 hours lectures, practical/tutorial work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials I, CHEM ENG 3001 Materials III(CH)
- Assessment: assignments, laboratory work, exam

The selection and fabrication of materials for engineering applications including corrosive and high temperature environments, structural and low alloy steels, the relation of structural variable sin polymers to their engineering properties, engineering properties of specific polymers. Processing and selection of plastics.

## CHEM ENG 4017

#### **Particulate Technology**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, exam

A course describing the behaviour of particulate systems. Topics include: particle size distributions; sampling; population balances; kinetics of growth, aggregation and breakage; mixing of particulates and stress distributions in granular solids.

## CHEM ENG 4018

#### **Industrial Economics and Management**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

The life cycle of a chemical processing system from the research and development behind the initial concept through process design construction and operations management. Topics covered include patents, capital investment evaluation, construction planning and control, cost planning and control, process optimisation, basic management principles and a general treatment of the structure and environment of industry.

## CHEM ENG 4020A/B

#### **Chemical Engineering Research Elective**

- 2 units full year
- 100 hours practical work/seminars
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

Candidates are required to: complete satisfactorily a research project and submit a written report on a topic specified by the school; present a short seminar on their project results at the end of semester 2.

# CHEM ENG 4021

#### **Combustion Processes**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- · Available for Non-Award Study
- · Assessment: assignments, exam

Basic principles which form the background to combustion phenomena. Topics include explosions in closed vessels, flames and combustion waves, detonation waves in gases, combustion of hydrocarbons, combustion in mixed and condensed phases, high explosives, heating applications, combustion and the environment

## CHEM ENG 4022

#### **Plant and Safety Engineering**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, exam

The course covers the management of safe operation and the care and maintenance of process-plant equipment in an integrated operational context. The studies will include the interpretation of industrial standards and legal requirements, in occupational health and safety, in environmental matters and in hazard and operability studies. Also covered are the techniques and methods for the quantitative assessment of plant reliability and availability and their effects on plant throughput.

# CHEM ENG 4024

#### **Environmental Engineering**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, exam

The study of air and water pollution; pollutant dispersion; control equipment; primary, secondary and tertiary waste water treatment; landfill and hazardous wastes.

## CHEM ENG 4025

#### **Chemical Engineering Projects IV**

- 2 units semester 1
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Corequisite: CHEM ENG 4010 Advanced Separation Techniques & Thermal Processes
- Assessment: project reports

Part A - 72 hours of practical work: candidates must undertake a series of projects based on lectures. Emphasis will be placed on teamwork and project management. Originality and quality of report writing and presentations are taken into account. Part B - lectures/tutorials/practical work and seminars equivalent to 120 hours: candidates are required to undertake a mixture of research project work and specialist lectures and tutorials, submit a written report (on a topic specified by the department) and present a short seminar on their project results at the end of semester 2.

## CHEM ENG 4026

#### **Chemical Engineering Research Project (H)**

- 2 units semester 2
- 120 hours investigations & seminars
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School; present a seminar/poster at the end of the semester summarising results.

## CHEM ENG 4027

#### **Chemical Engineering Research Project (N)**

- 2 units semester 2
- 120 hours investigations & seminars
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: project reports, seminar assessment

Candidates are required to complete satisfactorily an open-ended project and submit a written report on a topic supplied by the School, and present a seminar/poster at the end of the semester summarising results.

## **CHEM ENG 4028**

## Advanced Environmental Design & Cleaner Production

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 3014: Process Design & Plant Engineering
- Assessment: assignments, exam

Advanced environmental design topics such as environmental law, environmental auditing, environmental impact statements, waste minimisation, solid waste management; hazardous waste treatment & disposal; water network design & optimisation techniques; advanced oxidation processes; desalination; ultraviolet disinfection; biological nutrient removal, wastewater reclamation & reuse; and energy integration.

# CHEM ENG 4029

#### **Process Design Project (Environmental)**

- 6 units not offered 2007
- 184 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Corequisite: CHEM ENG 4010 Advanced Separation Techniques & Thermal Processes

- Assumed Knowledge: CHEM ENG 3014 Process Design & Plant Engineering
- Assessment: assignments, exam

Topics comprise sources and estimation of data. costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes (including utilities), project scheduling and control, and plant operation and safety considerations. Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated product in the environmental area, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety and environ-mental impact, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

## CHEM ENG 4030

## **Product Engineering and Development**

- 2 units not offered 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

In a products-centered chemical industry, the product is not clearly known ahead of time, but it comes as a result of an intricate process which involves, (a) identification of market trends, (b) translation of these trends to product specifications, (c) design of products meeting these specifications, and (d) design of a manufacturing system that will produce the desired product. This process is not sequential but iterative in nature, and it gives rise to a formidable process, which requires the cooperation and interaction of market analysts, and a variety of scientists (chemists, physicists, biologists), and engineers (chemical, materials, mechanical, electrical).

## CHEM ENG 4031

## Process Design Project (Food, Wine & Biomolecular)

- 6 units not offered 2007
- 184 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Corequisite: CHEM ENG 4010 Advanced Separation Techniques & Thermal Processes, CHEM ENG 4024 Environmental Engineering
- Assumed Knowledge: CHEM ENG 3014 Process Design a& Plant Engineering
- Assessment: assignments, exam

Topics comprise sources and estimation of data, costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes (including utilities), project scheduling and control, and plant operation and safety considerations. Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated chemical product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

## ELEC ENG 4004

#### **Electrical Engineering Research**

- 2 units not offered in 2007
- 46 hours lectures, project work, library research
- Available for Non-Award Study
- Assessment: project work, seminar presentation

Literature and patent searching techniques, the nature of innovation. Cross fertilisation and collaboration. The project will consist of critique of the literature on a particular topic and a further development or additional application of that topic.

## ELEC ENG 4032

#### Advanced Electromagnetics

- 2 units not offered 2007
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 4044 RF Engineering IV
- Assessment: written exam, within-semester quizzes, laboratory assignments

General electromagnetic engineering components, construction and uses. Reciprocal and nonreciprocal devices. Advanced waveguide theory. Losses in waveguides. Reciprocity, orthogonality and normal mode expansions. Hole coupling between waveguides. Microwave circuit theory. Review of scattering parameters. Impedance matching in microwave networks. Introduction of equivalent voltages and currents. Representations of n-ports. Reciprocal and non-reciprocal networks. Theorems on two, three and four port junctions; canonical forms for representation. Formal microwave network analysis.Resonant cavities. Construction, uses, cavity coupling systems and equivalent circuits. Cavity perturbation theory. Introduction to EMC and EMI concepts. Construction and performance of EMC measurement instruments. Practical exercises on measurement.

# ELEC ENG 4033

#### **Advanced Telecommunications**

- 2 units semester 2
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 4046
   Telecommunications IV
- Assessment: written exam, assignments

Third generation mobile systems: W-CDMA implementation and dimensioning. Core network evolution including 2.5G solutions. Orthogonal Frequency Division Multiplexing: principles and implementation including 802.11a OFDM PHY Adhoc networking: principles and implementation including 802.11 IBSS and Bluetooth. Consumer broadband distribution: principles and implementation including DSL and HFC. Satellite communications: principles and applications including link models, system parameters and multiple access (FAMA/DAMA). INTELSAT, Iridium, Globalstar.

## ELEC ENG 4035

#### **Communications IV**

- 2 units semester 1
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 3015 Communications, Signals & Systems
- Assessment: written exam, assignments

Frequency domain analysis, analogue signal transmission and reception, random processes, effect of noise on analog communication systems.Information sources and source coding, digital transmission in additive white Gaussian noise channel and bandlimited AWGN. Channel capacity and coding, fading multipath channels and spread spectrum communications.

# ELEC ENG 4036A/B

#### **Design Project**

- 6 units full year
- 240 hours practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: ELEC ENG 4036A Design Project Part 1
- Assessment: performance during project work, written reports, seminar presentations

Each candidate is required to conduct investigations involving the design, development and testing of hardware and/or software. The results are presented in written report form, by seminar and, where appropriate, demonstration of the completed work.

## ELEC ENG 4037

## **Digital Microelectronics**

- 2 units semester 1
- · 25 hours lectures, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2008 Electronics II and ELEC ENG 3017 Digital Electronics or equiv.
- Assessment: project work, written exam, tests during semester

Introduction: (4 lectures) - Fabrication processes and design rules (revisited); transistor models (revisited from third year electronics); layout issues; ASIC design flow - especially simulators and performance estimation. Digital Microelectronics (13 lectures including 2 quizzes) -Static and dynamic logic families; leaf cell design; VLSI techniques; system partitioning; floor planning; noise margins; interconnect and routing; clock distribution. BiCMOS and GaAs technologies. Project (8 hours) - Group project using layout and simulation tools.

# ELEC ENG 4038

## **Financial Management for Engineers**

- 2 units semester 2
- 24 hours lectures
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments

This course aims to provide engineers with an introduction to the fundamentals of business decision-making common to all forms of organisation. The course focuses on the requirements of project management, including the need to communicate complex financial arguments effectively. It is designed to provide students with a basic understanding of the fundamental principles of investment and financing decisions in both small and large organisations. The formation of business strategies and related management control functions are also addressed. The course provides students with the theoretical essentials for practical implementation of the main concepts covered.

# ELEC ENG 4039

#### **Honours Project**

- 6 units full year
- 240 hours practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Prerequisite: ELEC ENG 4039A Hons Project Pt 1
- Assessment: performance during project work, written reports, seminar presentations

Each candidate is required to conduct investigations involving theoretical surveys and the design, development and testing of hardware and/or software. The results are presented in written report form, by seminar and, where appropriate, demonstration of the completed work.

## ELEC ENG 4040

## Management and Professional Practice for Engineers

- 2 units semester 1
- 24 hours lectures
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments

Innovation: what is innovation; why it matters; sources of innovation; new product development as well as process innovation or continuous improvement; links between strategic planning and innovation. Human resource management: nature of today's organisations, links with corporate strategy and with the capacity to innovate and major human resource management activities. Legal and ethical issues: the nature of contracts, formation of contracts and personal and legal liability; protecting intellectual property; ethics.

## ELEC ENG 4041

#### **Optical Communication Engineering**

- 2 units semester 2
- 23 hours lecture, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Corequisite: ELEC ENG 4035 Communications I

- Assumed Knowledge: principles of transmission line propagation (ELEC ENG 4044 RF Engineering IV) and electronics (ELEC ENG 2008 Electronics II, ELEC ENG 3018 RF Engineering III) and communication (ELEC ENG 3015 Communications, Signals & Systems)
- Assessment: formal exam

Review of optics and lightwave propagation. Introduction to communication systems. Optical waveguides. Integrated optic waveguide. Dispersion and distortion effects. Single-mode and multi-mode optical fibres. Attenuation characteristics. Practical configurations. Light sources. Light emitting diodes. Laser operation. Laser diodes. Coupling considerations. Optical amplifiers. Light detectors. Photoelectric effects. PIN photodiodes. Avalanche photodiodes. Receiver circuits. Modulation. Analogue modulation formats. Digital modulation formats. Subcarrier techniques and multiplexing. Harmonic distortion and intermodulation. Noise and detection. Thermal and shot noise effects. Signal-to-noise ratios for digital and analogue systems. Thermal-noise limited and Shot-noise limited systems. Receiver design. System design. Analogue and digital pointto-point link design. Fibre distribution networks. Optical storage concepts. Dense Wave Division Multiplexing (DWDM), Compact Disc, DVD and other optical storage.

# ELEC ENG 4042

## **Power Electronics and Drive Systems**

- 2 units semester 2
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I or ELEC ENG 1005 Electrical Systems AM, ELEC ENG 2008 Electronics II or equiv.
- Assessment: written exam, quizzes, semester assignments

Power electronics: characteristics of power electronic devices and classes of power converters. Power supplies (uninterrruptible, switchmode). Hard and soft-switching, resonant circuits. Losses and thermal design.

Advanced energy-efficient motor drives: review of motor theory, power electronic control principles,

vector and servo drives (stepper, DC, induction, brushless PM and switched-reluctance). Motor and drive selection and application. System design, implementation and control. Computer interfacing, network communication.

## ELEC ENG 4043

#### **Power Quality and Condition Monitoring**

- 2 units semester 1
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2008
   Electronics II
- Assessment: quizzes, semester assignments

This course will address power quality issues and condition monitoring techniques used in industrial systems. A brief overview of power systems and three-phase machines will be given, and the course will cover various issues under two major sections. Power Quality: EMI in energy systems, types of power quality issues, regulations, standards, prevention techniques, measurements and analysis, case studies and real-time tests.

Condition Monitoring: Importance, history, types and features of faults, test methods, sensors and measurement techniques, traditional and advance diagnostic methods, case studies and real-time tests.

# ELEC ENG 4044 RF Engineering IV

- 2 units semester 1
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 3018 RF Engineering III
- Assessment: written exam, tests

Revision of transmission lines. Microstrip lines. The use of transmission lines for matching and filtering. S matrix circuit theory and amplifier design using S parameters. The design of power amplifiers. Revision of waves (including polarisation and dispersion). Introduction to propagation (reflection, refraction and diffraction). Elementary waveguide theory. Radiation fields. Wire antennas (including loops, dipoles and monopoles). The concepts of effective length, directivity and gain. The Friis equation. Influence of environment upon antenna performance. Broadband antennas. Introduction to array antennas (including the log periodic dipole array). Aperture antennas (including patch designs).

## **ELEC ENG 4045**

#### Signal Processing IV

- 2 units semester 2
- · 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2007 Signals & Systems
- · Assessment: written exam, in-term assessment

Discrete time signals, decimation, interpolation and analogue signal reconstruction. Discrete and fast Fourier transforms, windowing. stochastic processes, covariances and power spectrum. Principles of estimation and spectral estimation, averaging and smoothing and quantisation noise. Digital filtering principles, causality and stability, frequency domain filtering and convolutions. FIR digital filters, linear phase and group delay, frequency domain design of digital filters. IIR filters, bilinear transform from s to z plane and mapping analog filters to digital domain. Optimum Weiner filters, LMS adaptive filters and applications. Wavelet transforms, sub-band filters, frequency, scale and localisation and multiresolution.

## ELEC ENG 4046

#### **Telecommunications IV**

- 2 units semester 1
- · 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 3015 Communications, Signals & Systems
- · Assessment: written exam, assignments

Circuit-switched networks: performance, Signalling System #7, ISDN. Cellular networks: TDMA/FDMA cellular concepts, GSM mobility and network management, CDMA cellular concepts and IS-95 implementation. Network dimensioning. Packetswitched networks: queuing theory and packetswitched network theory, performance measures, TCP/IP operation and performance. Internet protocols, architecture and dimensioning. Wireless LAN: 802.11 implementation and 802.11b DSSS PHY. Broadband networks: SDH, ATM, broadband network traffic and resource management.

## ELEC ENG 4047

#### **Topics in Electrical and Electronic Engineering**

- 2 units not offered 2007
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: as prescribed by the Head of Electrical and Electronic Engineering
- Assessment: may include tests, written exam, assignment details at start of semester

Special topics in Electrical and Electronic Engineering, as determined by the Head of School.

#### ELEC ENG 4048

#### **Automotive Electrical and Electronic Systems**

- 2 units semester 1
- 36 hours of lectures, tutorials
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I and MATHS 1012 Mathematics IB
- Assessment: Quizzes and assignment

History and timeline of automotive electrical systems. Conventional automotive electrical systems including power sources, power generation and distribution, auxiliary instrumentations including sensors, control and protection circuits. Electric motors used in automotives, associated control systems, drive circuits and selection criteria. Advanced automotive systems: future energy resources including fuel cells, hybrid and all-electric automotives and drive systems, efficiency and performance comparisons, case studies of real and proposed cars, control bus with distributed power systems, advanced accessories including drive by wire and active suspension, torque control. Other Issues including principles of intelligent roads, line tracking, eye tracking.

## ELEC ENG 4049

#### **Analog Microelectronic Systems**

- 3 units semester 2
- 45 hours lectures, tutorials and practical work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 3017 Digital Electronics and ELEC ENG3018 RF Engineering III or equiv.
- Assessment: project work, written exam, tests during semester

Review of fabrication processes, design rules and transistor models. Layout issues; ASIC design flow; simulators and performance estimation; current sources and references; operational and transconductance amplifiers; current mode circuits; data conversion systems; switched capacitor systems; phase locked loops. A major project involving the design of a mixed signal microelectronic circuit

## ELEC ENG 4050

## **Systems Engineering**

- 2 units semester 2
- 30 hours lectures, tutorials
- Assessment: examination and assignment.

The principles of systems engineering. Specification, design, verification, implementation, integration, testing and though-life maintenance of complex systems as in interdisciplinary activity. Systems thinking. Relationship to project management.

# ELEC ENG 4051

#### **Introduction to Electronic Defence Systems**

- 2 units semester 2
- Assumed Knowledge: ELEC ENG 3018 RF Engineering III, ELEC ENG 2007 Signals and Systems and ELEC ENG 2009 Engineering Electromagnetics
- Assessment: tests, computer-based simulation, assignment

This subject aims to introduce student to the basic operating principles of electronic defence systems such as radar, electronic warfare and satellite navigation systems.

## MECH ENG 4002

#### **Combustion Technology and Emissions Control**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021
  Thermo-Fluids I, MECH ENG 3031 Thermo-fluids
  II, MECH ENG 3020 Heat Transfer
- Assessment: assignments, laboratory experiment, final exam

Combustion presently provides about 80% of global energy and is expected to be a major energy source for many years. At the same time combustion, particularly of fossil fuels, leads to serious pollution problems and is the primary source of human-derived greenhouse gas emissions. An important aspect of a transition to a more sustainable future is therefore to reduce the emissions from combustion-based plants, and to utilise alternative fuels, including bio-fuels. The aim of the course is to equip candidates with the knowledge and skills necessary to understand, analyse and design modern combustion systems for maximising output and minimising air pollution. Combustion involves both mixing of the fuel and oxidant and the subsequent chemical reactions. The course therefore involves consideration of both combustion aerodynamics and fuel properties. It covers fuel selection, alternative and waste fuels, the design principals involved in reducing pollutant emissions, modelling and safety.

## MECH ENG 4003

#### **Fracture Mechanics**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2002 Stress Analysis and Design, MECH ENG 3030 Structural Design & Solid Mechanics, APP MTH 2000 Differential Equations and Fourier Series.
- Assessment: assignments, FE project, final exam

The focus of this course is on the principles of linear elastic and elasto-plastic fracture mechanics and their application to engineering design. The material is presented in a conversational, yet rigorous, manner with the focus on basic concepts, models and techniques devised to solve specific engineering problems. The choice of the subject matter was determined largely by needs of aeronautical and mechanical engineering, although it is believed that the subject matter will be found just as useful for mechatronic, civil engineering and naval architecture.

#### MECH ENG 4004

#### **Engineering Acoustics**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: Level II Applied Mathematics courses with an aggregate value of 6 units, MECH ENG 3017 Engineering and the Environment
- Assessment: assignments, laboratory class, final exam

The fundamentals of sound wave description and propagation, the hearing mechanism, acoustic instrumentation, noise criteria, sound source types and radiated sound fields, outdoor sound propagation, sound power measurement techniques, sound in enclosed spaces, sound transmission loss, acoustic enclosures, mufflers, vibration reduction for noise control

## MECH ENG 4007

## **Mechanical Honours Project Level IV**

- 8 units full year
- 360 hours project work
- Eligibility: mechanical engineering students selected for honours
- Assessment: preliminary report, exhibition, seminar for presentation of results, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

## MECH ENG 4011

#### Advanced Automatic Control

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2019/3028 Dynamics & Control I/II
- Assessment: tutorials, assignments, laboratories, exams (written & Matlab)

Advanced topics in automatic control system design. Emphasis will be placed on techniques used to accommodate uncertainty in practical systems.

## MECH ENG 4013

#### Airconditioning

- 2 units Not offered in 2007
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 3020 Heat Transfer
- Assessment: assignments, practical, final exam

Vapour compression cycles; heat transfer in twophase flow; types, selection and operation of refrigeration plant; psychrometrics; climatic data and its use; load estimation and analysis; constant and variable air volume systems; human comfort and health; cooling and dehumidifying coils; controls; fans and duct systems; system balancing and stimulation; energy efficiency in buildings.

#### MECH ENG 4019

#### **Mechatronics Honours Project Level IV**

- 8 units full year
- 360 hours individual project work
- Eligibility: mechatronics engineering students selected for honours
- Assessment: preliminary report, exhibition, seminar for presentation of results & report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

#### **Advanced Vibrations**

- 2 units Not offered in 2007
- 36 hours lectures, tutorials, 6 hours laboratory experiments
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 3028 Dynamics & Control II
- Assessment: assignments, laboratory experiments, final exam

Advanced multi-degree of freedom system analysis; modal analysis; statistical energy analysis; use of vibration and principles of design of vibration equipment; mobility; reciprocity; finite element analysis.

## MECH ENG 4023

## **Advanced Topics in Fluid Mechanics**

- 2 units semester 2
- 36 hours lectures, tutorials, project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: C&ENVENG 1001 Statics, MECH ENG 1000 Dynamics, MECH ENG 2021 Thermo-fluids I, MECH ENG 3031 Thermo-fluids II
- · Assessment: assignments, project, final exam

The course provides an overview of modern flow measurement and analysis techniques and the methods used to interpret velocity and flow data. The course then introduces the concepts and techniques of flow topology and vortex dynamics, and uses these to describe the flow phenomena associated with fundamental flows, engineering flows and flows in nature. A project is undertaken by each student, involving a literature review, analysis or experiment. Projects are assessed on the basis of a short report and a presentation to the class.

## MECH ENG 4024

#### **Materials Selection and Failure Analysis**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials I
- Assessment: written exam 70%, assignments 30%

To introduce students to various tools that can be used to select the appropriate material for a given application. Examination of various failure modes to allow students to identify these modes in real samples and apply material selection and failure analysis techniques to failure prevention.

## MECH ENG 4025

#### **Topics in Welded Structures**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials I
- Assessment: assignments, laboratory class, final exam

This course presents the concepts behind welding and joining technology. These include welding and joining techniques, equipment and consumables, weldability of engineering materials, economics, standards, health and safety, testing and repair. The concepts are then applied to the design and fabrication of engineering components, process plant and structures. The importance of selecting the correct welding process and parameters for a particular application will be demonstrated by investigating several case studies. Since a weld/ioint can have a profound effect on the performance of a component depending on the inservice conditions it experiences, the influence of service environment will be investigated. At the end of the course students should have the concepts to assist in the selection of processes and parameters to make appropriately designed, sound joints, fit for service in the operating environment.

## **Environmental and Architectural Acoustics**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 3017 Engineering and the Environment
- Assessment: assignment, project, final exam

This course will provide an introduction to the use of computer modelling in environmental, architectural and the general noise level and acoustic performance prediction.

# MECH ENG 4027

## **Robotics M**

- 2 units semester 1
- 24 hours lectures, 12 tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB, MECH ENG 2019 Dynamics & Control I, MECH ENG Dynamics & Control II
- · Assessment: assignments, project, exam

Classification of robotic systems; transformation of coordinates; kinematics and inverse kinematics; Jacobians and robot dynamics; trajectory generation; robotic modelling; control loops for robots; mobile robots, machine vision basics

## MECH ENG 4028

#### **Mechatronics IIIM**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2015 Electronics IIM, MECH ENG 2011 Mechatronics IM, MECH ENG 2019 Dynamics & Control I, MECH ENG 3028 Dynamics & Control II
- Assessment: assignments, exam

Practice oriented course; design of advanced mechatronics systems; the use of Digital Signal

Processors (DSP) and Field-Programmable Gate Arrays (FPGA) in mechatronics applications; Artificial Intelligence (AI) algorithms and AI applications for robotics and mechatronics.

## MECH ENG 4033

#### **Mechanical Signature Analysis**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2011 Mechatronics IM, APP MTH 2000 Differential Equations and Fourier Series
- Assessment: assignments, final exam

Introduction to mechanical signature analysis; vibration measurement and instrumentation; signal processing and analysis; filtering; frequency domain analysis; vibration monitoring; introduction to condition monitoring and fault diagnosis: rotor balancing.

## MECH ENG 4034

#### Aerospace Navigation and Guidance

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignment, final exam

The fundamentals of navigation technology, coordinate frames, navigation principles, inertial navigation technology, radio navigation, satellite navigation, navigation error modelling, integrated navigation and Kalman filtering, aircraft flight planning, optimal launch and flight path planning.

## MECH ENG 4035

#### Aerospace Honours Project Level IV

- 8 units full year
- 360 hours project work
- Eligibility: aerospace engineering students selected for honours
- Assessment: preliminary report, exhibition, seminar for presentation of results, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

## MECH ENG 4036

## Aerospace Propulsion I

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignment, final exam

Basic principles of rocket propulsion and rocketry, propellant, nozzle theory and their influence on design of rockets, internal and external ballistics, combustion processes and instability.

Fundamentals of rocket motor components and design, solid rocket grain structural behaviour, and plume technology.

## MECH ENG 4037

## **Aerospace Propulsion II**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignment, final exam

Introduction to advanced rocket and air-breathing (gas turbines, ramjets, ducted rockets, scramjets) jet propulsion systems. Prediction of thrust, combustion reactions, specific fuel consumption and operating performance. Aerothermodynamics of inlets, combustors, nozzles, compressors, turbines.

#### MECH ENG 4038

## **Engineering Management** and Professional Practice

- 2 units semester 1
- 40 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, final exam

Management of people, management of technical risk, management of safety and environmental risk, management of economic and financial risk, marketing, business engineering, legal issues and responsibilities, ethics and project management.

## MECH ENG 4039

#### **Finance for Engineers**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments

This course aims to provide Engineers with an introduction to the fundamentals of business decision-making common to all forms of organisation. The course focuses on the requirements of project management, including the need to communicate complex financial arguments effectively. It is designed to provide students with a basic understanding of financial statements, capital budgeting, cost behaviour and costing systems.

#### **MECH ENG 4040**

#### **High-Speed Aerodynamics**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, final exam

The aim of this course is to introduce students to the fundamentals and practical aspects of supersonic and hypersonic flows and the design and operation of high-speed vehicles. The course deals with the theory of compressible flow; flow in pipes, variable-area ducts and engine intakes; supersonic external flow around wings and bodies; hypersonic flows theory and the flow around hypersonic vehicles, including re-entry vehicles.

## **Mechanical Design Project Level IV**

- 8 units full year
- 360 hours project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Restriction: not for students undertaking an honours degree
- Assessment: preliminary report, exhibition, seminar for presentation of results & final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with a primary emphasis on engineering design. Emphasis will also be placed on management and effective communication.

## MECH ENG 4042

#### **Fire Engineering**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: project, practical class, assignments, final exam

The lectures will cover the following topics: building fire safety fundamentals, basic concepts of fire and explosion, zone and field fire modelling, the history and philosophy of fire related building legislation, the Building Code of Australia, legal issues, fire load, fire development and design calculations, smoke management systems and design calculations, occupant egress and fire brigade access, fire suppression systems, fire brigade intervention, fire induced building collapse, human behaviour at time of fire and performance based fire engineering design solutions.

## MECH ENG 4043

#### **Automotive NVH and Aerodynamics**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- · Assessment: laboratory, assignment, final exam

Introduction to Vehicle Refinement, Characteristics of sound, Exterior noise and control, Interior noise and control, Vehicle ride improvement, Introduction to and fundamentals of road vehicle aerodynamics, aero-acoustics, vehicle aerodynamic design, Special topics and Industry lectures.

## MECH ENG 4044

#### Automotive Safety

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: laboratory, assignment, final exam

This subject will cover vehicle and road safety topics and teach impact dynamics from a crash safety perspective. Students will be able to solve problems involving impact dynamics.

#### MECH ENG 4045

#### Advanced Manufacturing and Quality Systems

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignment, final exam

The course will cover the principles of quality management and continual improvement, including: Justification for quality management and continual improvement, Overview of quality management system types, TQM, Lean Systems and The Six-Sigma Process, Advanced Product Quality Planning, Design Failure Mode Effect Analysis (DFMEA), Process Failure Mode Effect Analysis (PFMEA), Design Verification Plan and Report (DVP&R) and Case Studies.

## Computation Technique for Engineering Applications

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignment, final exam

The course will equip the students with the necessary knowledge to use advance computational techniques to solve problems related to flow and solid mechanics. In particular, students will have hands on experience in using computational fluid dynamics and finite element analysis to solve engineering problems.

# MECH ENG 4047

## **Automotive Honours Project Level IV**

- 8 units full year
- 360 hours project work
- Eligibility: automotive engineering honours students only
- Assessment: preliminary report, exhibition, seminar for presentation of results, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with emphasis on project management and effective communication.

## MECH ENG 4048

#### **Automotive Design Project Level**

- 8 units full year
- 360 hours project work
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Restriction: not for students undertaking an honours degree
- Assessment: preliminary report, exhibition, seminar for presentation of results, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with a primary emphasis on engineering design. Emphasis will also be placed on management and effective communication.

# MECH ENG 4050

## **Mechatronics Design Project Level IV**

- 8 units full year
- 360 hours project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Restriction: not for honours students
- Assessment: preliminary report, exhibition, seminar for presentation of results, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with a primary emphasis on engineering design. Emphasis will also be placed on management and effective communication.

## MECH ENG 4051

## **Aerospace Design Project Level IV**

- 8 units full year
- 360 hours project work
- Eligibility: students in specified programs only check Academic Program Rules for details
- Restriction: not for honours students
- Assessment: preliminary report, exhibition, seminar for presentation of results, final report

The aim of the project is to provide solutions to engineering problems related to industry or to school research, with a primary emphasis on engineering design. Emphasis will also be placed on management and effective communication.

## MECH ENG 4053

#### **Advanced Digital Control**

- 2 units semester 2
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, final exam

Design and analysis of mechatronic systems; microcontroller and high end processors for mechatronic system control; artificial intelligence algorithms and their applications, digital statespace control design.

## Introduction to Biomedical Engineering

- 2 units semester 1
- 36 hrs Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments

Some important transport processes in the human body, major differences in transport phenomena in engineering and physiology. Momentum, heat and mass transfer equations, applications and summary of transport-rate and equations of state, bioheat transfer processes, body temperature regulation, energy expended in respiratory gases, mixing of two gas samples, Heat exchange between two bodies,flow of energy in biological world. Material balances in living systems, material balances around a normal lung, and around an artificial kidney.

## MECH ENG 4055

## **Stresses in Plates and Shells**

- 2 units semester 2
- 36 hours Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: APPMTH 2000 DEFS, APPMTH 2002 Vec Analysis, prob and stats
- Assessment: assignments

The primary goal of the course is to provide students with the skills and knowledge required to analyse stress, strain and failure in various structures and machine parts made up with plates and shells. On completion of the course, students should be proficient with basic fundamental principles in stress analysis of plate and shell components; have been exposed to understanding of real life failures of such structures; be familiar with the use of different approaches to design against failure; be able to use simple analytical solutions and the Finite Element Method to predict deformations, stresses and failure of plate and shell components; be gaining the physical intuition necessary to idealize a complicated practical problem and have developed appreciation of the importance of appropriate but simple assumptions; have an

understanding of the responsibility of engineers for safe design of engineering structures and unfortunate consequences of failures, and loss of human lives

## MECH ENG 4057

#### **Biomechanical Engineering**

- 2 units semester 2
- 36 hrs lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments

This course will provide an introduction to the fundamentals of the structure and mechanics of the musculoskeletal system with application of mechanics to bone, tendon, cartilage, ligaments and other biological materials. The structure and function of the major joints in the body will be covered, such as the hip, knee and spine as well as multiple joint systems such as the shoulder, wrist and hand. Experimental and analytical methods used to understand the function of joints and artificial joints will be discussed throughout the course. At completion of this course, students will understand the concept of joint biomechanics and their function, and how artificial joints function, why they fail, as well as their limitations and emerging new technologies in the biomechanics field.

## MECH ENG 4058

## Aeronautical Engineering II

- 2 units semester 1
- 36 hours lectures, 12 hours practicals
- Assumed Knowledge: MECHENG 2021 Thermo-Fluids 1, MECHENG 3031 Thermo-Fluids 2, MECHENG 3016 Aeronautical Engineering 1
- Assessment: assignment, lab report, final exam

The aim of the subject is to equip students with the necessary knowledge and skills to understand and analyse the design and performance of modern aircraft. The subject builds on the basic knowledge introduced in 'Aeronautical Engineering 1' and expands into important areas as follows: firstly it introduces the basics of aircraft systems engineering, which is a vital area for future Aerospace Engineers. This will be followed by aircraft and aerospace design aspects respectively. Aircraft safety and reliability will also be covered extensively in 'Aeronautical Engineering 2'. Concluding the subject are different aspects of rotor based aircraft and more general V/STOL flight vehicles

## MECH ENG 4059

#### **Finite Element Analysis of Structures**

- 2 units semester 1
- 36 hours lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assumed Knowledge: CIV ENG 1001 Statics, MECH ENG 1000 Dynamics, MECH ENG 2002 Stress Analysis and Design, MECH ENG 2021 Thermo-Fluids 1, APP MTH 2000 DEFS
- Assessment: Assignments, projects, final exam

The course will equip the students with the necessary knowledge to use computational techniques to solve problems related to solid mechanics. In particular, students will have handson experience in using finite element analysis to solve realistic engineering problems.

# PETROENG 4002

#### **Enhanced Oil Recovery**

- 3 units semester 1
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

This course will cover theory and applications of various EOR processes. Also, students will be exposed to IOR techniques. Application aspects will be demonstrated through exercises and one large assignment that will require use of a commercial simulator.

# PETROENG 4003 Development Geology

- 2 units semester 1
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, exam

This course will provide participants with a working knowledge of the main techniques (qualitative and quantitative), used by Development geologists in evaluating subsurface reservoir properties. Geological controls on porosity, permeability, relative permeability, and capillarity are discussed. Case histories review conventional methods of determination of net pay in a reservoir and demonstrate some improved techniques using data from core, sidewall core, cuttings, conventional plug measurements (porosity and permeability) in conjunction with capillary pressure data. The course focus will be on conceptual understanding and practical applications using hands-on exercises.

## PETROENG 4004

## **Petroleum Engineering Honours**

- 6 units full year
- 240 hours minimum: project work & discussions, project work presentation
- · Eligibility: Honours students only
- Assessment: major research/study assignment & written report, presentation of project students are expected to work a minimum four weeks on projects

Honours students will choose a research project from a list of available topics. A written report and an oral presentation is expected at the conclusion of various projects. The honours projects are intended to give students a taste for research and will prepare them in part to carry on their studies for a higher degree.

## PETROENG 4007

#### **Oil and gas Resources and Reserves**

- 2 units semester 1
- Lectures & tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study

This course explains the strength and weaknesses of various reserves estimating methodologies, including the difference between resources and reserves. Exploration and development views will be covered, as are deterministic and probabilistic methods, with the aim of gaining a thorough understanding of various reserves levels and their equivalence in both systems, in terms of proved, proved plus probable, and proved plus probably plus possible. Methodologies of different countries will be covered. Statistical software will be used to demonstrate important concepts and to handle complex scenarios. The course will cover alternative estimation methods such as volumetrics, material balance and decline curve analysis. An appreciation will be gained of data limitations and uncertainty and how this is reflected in final volumes and hence risk. The course also covers management and commercial issues and regulations.

## PETROENG 4009

#### **Integrated Reservoir Management**

- 2 units semester 2
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

This course is aimed at bringing together learnings from geology, geophysics, formation evaluation reservoir engineering, wellbore engineering and surface facilities engineering. It will discuss a wide variety of reservoir description, surveillance, interpretation, studies, reserves determination, production forecasting and operational considerations which together constitute Integrated Reservoir Management. It focuses on providing a basis for practical development and implementation of integrated Reservoir Management and Reserves Optimisation programs with emphasis on cost effectiveness and economic justification.

## PETROENG 4020

#### **Petroleum Engineering Design Project**

- 6 units full year
- 320 hours minimum: project work & discussions, project work presentation
- Eligibility: students in specified programs only check Academic Program Rules for details
- Assessment: major research/study assignment & written report, presentation of project

Students will be assigned a group design project using available field data. A written report and an oral presentation is expected at the conclusion of various projects. Students are expected to work a minimum of eight weeks on their projects.

## PETROENG 4022

## Integrated Field Development and Economics Project

- 3 units semester 2
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, project (written & oral presentation)

Field Development Planning for oil and gas fields, gives an overview of the process and methods for developing an optimum plan for developing a petroleum deposit. Key project drive indicators are discussed and it is shown how various disciplines interact in their quest for maximising the value of a project. The course covers all aspects of field development planning, commencing with screening studies, after discovering hydrocarbons, to project sanction. In particular, it is shown that this development phase has the potential to add maximum value, when compared to all other phases of the life cycle, as such it is most critical. Critical aspects are presented in detail in terms of actual case histories. It is shown how a proper balance has to be struck among key elements: reservoirs, wells and facilities, not to mention the balance between minimising costs and maximising recovery. Other key essentials, such as flexibility and risk management are also covered.

The project is based on an actual data set involving an offshore project. The aim is to study the exploration results and to develop a recommendation for the optimum field appraisal plan. When the actual plan and data is revealed, the second part of the project involves the feasibility and derivation of the optimum development plan. Participants work in small teams and have to submit written plans and give presentations in front of a panel.

## PETROENG 4024

## **Decision Making Under Uncertainty**

- 2 units semester 2
- Intensive short course of integrated lectures & computer based worked examples
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exam

This course teaches the skills required for a key management role - creating value by making decisions that yield optimal returns on the allocation of human and financial resources. The many uncertainties inherent to the oil and gas business (estimating current 'states-of-the world/nature' and predicting future events) create considerable uncertainty in the value that can be realised from resource-allocation decisions. Consequently, there will be a strong emphasis on evaluating the impacts of uncertainty, managing its resultant risks and planning to exploit its up-side potential. Topics to be addressed are the decisionmaking process, multi-objective decision making, decision-tree analysis, decision criteria, Monte Carlo simulation, attitudes to risk and some of the psychological and judgemental aspects of how people respond to uncertainty. The techniques learned in this course will also be useful in making personal decisions.

## PETROENG 4026

#### **Petroleum Exploration and Management**

- 2 units semester 1
- · Lectures, tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Assessment: assignments, exams

The course illustrates geoscience and management concepts and methods that are used in petroleum exploration. Petroleum systems are reviewed with emphasis on source rock organic geochemistry and hydrocarbon generation, expulsion and migration. The concepts of petroleum plays and prospects are introduced and illustrated with examples from around Australia. Management strategies associated with hydrocarbon exploration and reserve estimation are also covered.

## PETROENG 4027

## Advanced Managerial Decision Making and Risk Analysis

- 3 units semester 2
- · Intensive 45 hours Lectures and tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- Available for Non-Award Study
- Restriction: Cannot be taken in combination with PETROENG 4024, Decision Making Under Uncertainty
- Assessment: Assignments, group discussions  $\ensuremath{\mathfrak{s}}$  exam

This course is an extension to PETROENG 4027, Decision Making under Uncertainty.

In addition to the material cobered in Decision Making under Uncertainty, this course introduces the application of economics and decision analysis to valuing managerial flexibility using real options analysis, and to portfolio management decisions

## PETROENG 4028

#### **Project Management**

- 2 units semester 2
- Lectures & tutorials
- Eligibility: students in specified programs only check Academic Program Rules for details
- · Available for Non-Award Study
- Assessment: assignments, exam

This course will give students an understanding of all major aspects of project management, dealing with internal (company) and external requirements (government, partners, contractors etc). In particular, the course emphasizes the core requirements for major projects, from planning to scheduling and control, including management of uncertainty and risk. Participants will be introduced to the large diversity of jargon and terms, covering such important areas as the engineering Basis of Design (BoD), and project processes such as Tollgating' and Project Implementation Review (PIR). Guidelines and standards, as well as 'best practice' will be demonstrated by numerous examples and case histories will be used throughout to demonstrate important learnings, particularly where projects have fallen short from expectations.

## PETROENG 4029

#### **Reservoir Geology & Geophysics**

- 2 units semester 1
- Intensive short course of lectures, tutorials & seminars
- · Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Development Geology provides a working knowledge of the main qualitative and quantitative techniques used by development geologists in evaluating subsurface reservoir properties. Commencing with the geological structure and depositional environments, the course covers such practicalities as mapping and well correlation. Geological control is discussed, and case histories review various methods of estimating hydrocarbon volumes. While concentrating on concepts, some state-of-the-art topics, such as seal evaluation, will also be discussed. Practical applications are incorporated in hands-on exercises.

The geophysics component provides a basic understanding of the principles of reflection seismic, such as wave propagation, convolution and seismic velocity and resolution. The acquisition segment covers hardware elements used to acquire data and survey design, including 2D versus 3D, and marine versus land surveying. Data processing includes de-convolution, velocity analysis, stacking and migration. The mechanics of interpretation outlines data display, synthetics, picking, and auto-tracking, velocity anomalies and depth conversion. Sequence stratigraphy is dealt with in conjunction with inversion and seismic attribute analysis. More recent advances are also outlined: reservoir fluids and their movement, e.g. DHIs and AVO, and time lapse seismic. Emphasis is on 3D seismic, with numerous illustrations and case histories.

# ENGLISH

# Level I

## ENGL 1101

#### Introduction to English: Ideas of the Real

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- · Restriction: English IB
- Assessment: participation, assignment, essay, exam

This course will introduce students to a number of texts that deal with issues of reality and its representation. These texts will include a variety of genres: fiction, drama, short fiction, poetry and film. Students will gain an understanding of the terms Realism, Modernism and Postmodernism, as well as an introduction to contemporary approaches to English studies. The course is designed to introduce students to a range of interpretive practices, and to increase students' skills in critical reading, analysis, writing and research.

## ENGL 1102

#### Introduction to English: Gothic

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Restriction: English IA
- Assessment: participation, assignment, essay, exam

The course provides an introduction to a number of key texts and films in the gothic mode. Students are encouraged to engage in a variety of contemporary approaches to examples of fiction, poetry, short fiction and film. Introduction to English: Gothic aims to increase students' skills in critical reading and viewing, analysis, writing, research and referencing.

#### **ENGL 1104**

#### **Professional English (ESL)**

- 3 units semester 1
- Lecture online, 2 hour workshop per week, provision for individual consultations
- Quota may apply

- Restriction: Not available to students who have completed SACE Stage 2 HESS English Restricted or General (or equiv.), English for Professional Purposes (ESL), English for Professional Purposes at levels I, II or III
- Assessment: participation, written assignments, in-class writing exercises, exam

Professional English (ESL) is a practical course for students who are still developing fluency in written and spoken English, and who wish to improve their expression in the context of business communications. It is appropriate for students whose first language is not English. Common business documents are studied, as well as grammar, syntax and style. Workshops focus on: business letters; electronic communication; job application packages; informative summaries and analysis; academic writing skills; grammar, tone and fluency.

## ENGL 1105

## **Film Studies**

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Restriction: ENGL 1105 Media Studies
- Assessment: essay, participation, exam

Film Studies provides an introduction to the analysis of narrative films. The course explores a range of aspects of film, including origins, techniques, industry, genre, narrative, and audience. The course examines examples from various film industries, including Australia, America (Hollywood) and other international cinemas.

# Level II

## ENGL 2006

#### **Contemporary Australian Film**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation, seminar paper, exam

This course examines recent Australian films through a cultural studies framework, introducing students to a range of theoretical approaches to film. The course has a particular focus on the way that contemporary Australian films deal with questions of gender, class, race, sexuality and national identity.

# ENGL 2016

#### **English for Professional Purposes**

- 4 units semester 2
- Lectures online, 2 hour tutorial per week
- Prerequisite: 6 units Level I in any discipline
- Restriction: Professional English (ESL), English for Professional Purposes (ESL)
- Assessment: participation, class exercises, written assignments, exam

This is a developmental course for students wishing to achieve greater linguistic competence in written expression and/or to enhance fluency and style in the context of professional and business communications. Common business documents are studied, as well as grammar, syntax, the construction of an argument and editing.

# ENGL 2018

#### **Renaissance Writing**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essay, exam, class work, portfolio

This course is a close study of plays, poetry and prose works from the early modern period. The course considers some of the conditions of reading and writing for men and women in the period, and it introduces debates about the importance of early modern ideas for understanding contemporary models of history, nation and identity.

# ENGL 2022

## World Literature in English

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- · Assessment: participation, seminar paper, essay

In this course students will consider a range of new texts that span diverse cultural traditions and are representative of writing that has helped shape a new literary landscape. The main focus of the course will be on the multiplicity of literatures in English with a particular emphasis on writing that asserts difference, both in culture and genre, and demonstrates the interrelatedness of identity, place, history, gender and race in postcolonial writing. Students will have the opportunity to analyse and respond (in presentations and in writing) to works by writers such as Salman Rushdie, Michael Ondaatje, JM Coetzee, Lesley Marmon Silko (North American Indian), Kerri Hulme (NZ), Ben Okri (Nigerian), and others.

## ENGL 2025

#### **Telling Tales**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation, essay, exam

This course aims to broaden students' understanding and appreciation of narrative as a particular form of representation bound up with sequence, space, and time. It will also consider the relation between storytelling and ideas of selfhood. Students will be introduced to a range of texts from British, American and other twentieth century writers chosen to reflect critical periods in human life from adolescence through to maturity. Varying notions of the self will be considered in connection with questions of meaning and interpretation.

## ENGL 2028

## The Short Story: Introduction to Creative Writing

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation exercises including short story drafts, polished short story and exegesis

This course is designed as an introduction to the craft and culture of short fiction and prose. Students will be introduced to a range of contemporary and some earlier short texts from American, Australian, British, European and other literatures. The course aims, through creative writing and reading, to broaden students' understanding and appreciation of the range of writing in short forms. The short story is particularly appropriate for encouraging comparative analysis between literary cultures and phases of literary development. Students will be encouraged to use short texts as models for their own creative explorations. An anthology of short texts, especially tailored for the course, will be made available to students.

#### ENGL 2036

#### Chaucer

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation, assignment, portfolio, essay, exam

Whether or not Geoffrey Chaucer was the "father of English poetry", he certainly wrote some of the most enduring, funniest, and sometimes strangest literature of the Middle Ages or indeed any other period. This course will provide an in-depth study of his poetry and his cultural milieu. We will master the basics of his language, now called Middle English, and then focus on the circumstances in which some of his great works were produced: Troilus and Criseyde, a tragic tale of star-crossed love; the bizarre dream vision The House of Fame; some "legends of good women" (written to appease readers who had been offended by his portrayal of Criseyde); and some Canterbury Tales, both bawdy and religious. We will take full advantage of advances in digital technology, encountering his poetry not just in print editions, but also electronically via the digital facsimile edition of the earliest manuscript of the Canterbury Tales. No previous knowledge of Middle English necessary.

#### ENGL 2037

#### **Body Language**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation, online discussion, seminar paper, take-home exam

The broad aim of this course is to look at texts and topics that raise issues around embodiment and identity using contemporary theories and methodologies from literary and cultural studies. The course is organised around literary texts and cultural topics and the primary focus is on examining these texts and topics. However, students are expected to read widely in literary and cultural studies and to situate their analyses of texts and topics by engaging with theories, methodologies and debates that are introduced in the course. These theories, methodologies and debates will be concerned with identities and how they are constructed in relation to some or all of the following notions as they relate to the body: race (including whiteness); indigeneities; gender; sexualities (both heterosexualities and nonheterosexualities); body modifications (including sickness, weight, image, fitness, muscularity, transgender, tattooing and religious significations) and the ways in which these interact.

## ENGL 2038

#### Icons of Decadence: British Fiction, 1880 - 1910

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation, essay, exam

This course examines a number of novels and short stories published in the period 1880-1910, many of which have had a continuing life in popular culture through films, television adaptations, and rewritings. Students will have an opportunity to explore these texts in their historical and social contexts, including the important concept of 'decadence,' sexualities, the rise of scientific explanation for human behaviours, the emergence of psychoanalysis, and 'moral panics' about gender roles, immigration, and disease. There will be opportunities to consider the reasons for the continuing influence and popularity of these texts. Additionally, the course will introduce some elements of narrative theory and its relation to historical contexts.

#### ENGL 2039

## Haunted Histories: Australian/South African Writing

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: ENGL 2004/3004 Australian Colonial Visions
- Assessment: participation, seminar paper, essay, take-home exam

This course will introduce students to the representations of colonial history and its after effects in the trans-national context of Australian and South African writing. Drawing on a range of texts in a comparative framework, students will analyse the ways in which these literary histories reveal the development of Australian and South African national culture over the nineteenth and twentieth centuries, and the nature of national revisions in post-Mabo Australia and postapartheid South Africa. The course will particularly address the representation of race relations within shifting concepts of national identity, and the ways in which fraught histories can haunt understandings of the present. As well as fiction. texts will include explorer narratives, historical records and visual art. The course aims to introduce students to a range of interpretive practices through reading in different literary genres, and to increase their skills in critical analysis and research in a comparative framework.

#### **ENGL 2104**

#### **Professional English (ESL)**

- 4 units semester 1
- Lectures online, 2 hour workshop per week, provision for individual consultations
- Quota may apply
- Prerequisite: 6 units Level I in any discipline
- Restriction: not available to students who have completed SACE Stage 2 HESS English Restricted (or equiv.), Professional English (ESL), English for Prof. Purposes (ESL), English for Prof. Purposes at levels I, II or III. May not be counted for major in English.
- Assessment: participation, written assignments, in-class writing exercises, exam

Professional English (ESL) is a practical course for students who are still developing fluency in written and spoken English, and who wish to improve their expression in the context of business communications. It is appropriate for students whose first language is not English. Common business documents are studied, as well as grammar, syntax and style. Workshops focus on: business letters; electronic communication; job application packages; informative summaries and analysis; academic writing skills; grammar, tone and fluency.

## ENGL 3006

## **Contemporary Australian Film**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation, seminar paper, essay, exam.

This course examines recent Australian films through a cultural studies framework, introducing students to a range of theoretical approaches to film. The course has a particular focus on the way that contemporary Australian films deal with questions of gender, class, race, sexuality and national identity.

# ENGL 3016

## **English for Professional Purposes**

- 6 units semester 2
- · Lectures online, 2 hour tutorial
- Prerequisite: 8 units Level II in any discipline
- Restriction: Professional English (ESL), English for Professional Purposes (ESL)
- Assessment: participation, class exercises, written assignments, exam

This is a developmental course for students wishing to achieve greater linguistic competence in written expression and/or to enhance fluency and style in the context of professional and business communications. Common business documents are studied, as well as grammar, syntax, the construction of an argument and editing.

# ENGL 3018

#### **Renaissance Writing**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- · Assessment: essay, exam, class work, portfolio

This course is a close study of plays, poetry and prose works from the early modern period. The course considers some of the conditions of reading and writing for men and women in the period, and it introduces debates about the importance of early modern ideas for understanding contemporary models of history, nation, difference and identity.

# ENGL 3022

## World Literature in English

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation, seminar paper, essays

In this course students will consider a range of new texts that span diverse cultural traditions and are representative of writing that has helped shape a new literary landscape. The main focus of the course will be on the multiplicity of literatures in English with a particular emphasis on writing that asserts difference, both in culture and genre, and demonstrates the interrelatedness of identity, place, history, gender and race in postcolonial writing. Students will have the opportunity to analyse and respond (in presentations and in writing) to works by writers such as Salman Rushdie, Michael Ondaatje, JM Coetzee, Lesley Marmon Silko (North American Indian), Kerri Hulme (NZ), Ben Okri (Nigerian), and others.

# ENGL 3025

#### **Telling Tales**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation, essay, exam

This course aims to broaden students' understanding and appreciation of narrative as a particular form of representation bound up with sequence, space, and time. It will also consider the relation between storytelling and ideas of selfhood. Students will be introduced to a range of texts from British, American and other twentieth century writers chosen to reflect critical periods in human life from adolescence through to maturity. Varying notions of the self will be considered in connection with questions of meaning and interpretation.

## ENGL 3028

## The Short Story: Introduction to Creative Writing

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation exercises including short story drafts, polished short story and exegesis

This course is designed as an introduction to the craft and culture of short fiction and prose. Students will be introduced to a range of contemporary and some earlier short texts from American, Australian, British, European and other literatures. The course aims, through creative writing and reading, to broaden students' understanding and appreciation of the range of writing in short forms. The short story is particularly appropriate for encouraging comparative analysis between literary cultures and phases of literary development. Students will be encouraged to use short texts as models for their own creative explorations. An anthology of short texts, especially tailored for the course, will be made available to students..

## ENGL 3036

#### Chaucer

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation, assignment, portfolio, essay, exam

Whether or not Geoffrey Chaucer was the "father of English poetry", he certainly wrote some of the most enduring, funniest, and sometimes strangest literature of the Middle Ages or indeed any other period. This course will provide an in-depth study of his poetry and his cultural milieu. We will master the basics of his language, now called Middle English, and then focus on the circumstances in which some of his great works were produced: Troilus and Criseyde, a tragic tale of star-crossed love; the bizarre dream vision The House of Fame; some "legends of good women" (written to appease readers who had been offended by his portrayal of Criseyde); and some Canterbury Tales, both bawdy and religious. We will take full advantage of advances in digital

technology, encountering his poetry not just in print editions, but also electronically via the digital facsimile edition of the earliest manuscript of the Canterbury Tales. No previous knowledge of Middle English necessary.

## ENGL 3037

#### **Body Language**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation, online discussion, seminar paper, essay, take-home exam

The broad aim of this course is to look at texts and topics that raise issues around embodiment and identity using contemporary theories and methodologies from literary and cultural studies. The course is organised around literary texts and cultural topics and the primary focus is on examining these texts and topics. However, students are expected to read widely in literary and cultural studies and to situate their analyses of texts and topics by engaging with theories, methodologies and debates that are introduced in the course. These theories, methodologies and debates will be concerned with identities and how they are constructed in relation to some or all of the following notions as they relate to the body: race (including whiteness); indigeneities; gender; sexualities (both heterosexualities and nonheterosexualities); body modifications (including sickness, weight, image, fitness, muscularity, transgender, tattooing and religious significations) and the ways in which these interact.

## ENGL 3038

## Icons of Decadence: British Fiction 1880 - 1910

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation, seminar presentation, essay, exam

This course examines a number of novels and short stories published in the period 1880-1910, many of which have had a continuing life in popular culture through films, television adaptations, and rewritings. Students will have an opportunity to explore these texts in their historical and social contexts, including the important concept of 'decadence,' sexualities, the rise of scientific explanation for human behaviours, the emergence of psychoanalysis, and 'moral panics' about gender roles, immigration, and disease. There will be opportunities to consider the reasons for the continuing influence and popularity of these texts. Additionally, the course will introduce some elements of narrative theory and its relation to historical contexts.

## ENGL 3039

# Haunted Histories: Australian/South African Writing

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: ENGL 2004/3004 Australian Colonial Visions
- Assessment: participation, seminar paper, comparative essay, take-home exam

This course will introduce students to the representations of colonial history and its after effects in the trans-national context of Australian and South African writing. Drawing on a range of texts in a comparative framework, students will analyse the ways in which these literary histories reveal the development of Australian and South African national culture over the nineteenth and twentieth centuries and the nature of national revisions in post-Mabo Australia and postapartheid South Africa. The course will particularly address the representation of race relations within shifting concepts of national identity, and the ways in which fraught histories can haunt understandings of the present. As well as fiction, texts will include explorer narratives, historical records and visual art. The course aims to introduce students to a range of interpretive practices through reading in different literary genres, and to increase their skills in critical analysis and research in a comparative framework.

#### **ENGL 4401**

#### **Honours English**

- 24 units full year
- Prerequisite: UG degree, high credit average in courses contributing to major in English or equiv. approved by English Honours Sub-Committee
- Assessment: coursework (2 topics), 15000
   word thesis

Students wishing to take Honours English should consult the Honours Coordinator prior to commencing Level II to ensure that appropriate course choices are made in preparation for Honours.

The work for the Honours year consists of two courses (topics) and the writing of a thesis. A list of topics for 2007 will be available from the English Office late in 2006 and students should consult the English Honours Handbook.

In some circumstances Honours English can be studied part-time over two years or can be combined with Honours in another discipline.

#### ENGL 4402

#### **Honours Creative Writing**

- 24 units full year
- Prerequisite: UG degree, high credit average in courses contributing to major in English or equiv. approved by Creative Writing Honours Sub-Committee; presentation of a suitable portfolio of creative writing - see Creative Writing Coordinator for details
- Assessment: coursework (2 topics), major piece of creative writing 15000 words

Students wishing to take Honours Creative Writing should consult English and/or Creative Writing Coordinator(s) prior to commencing level II to ensure that appropriate course choices are made in preparation for Honours.

The Honours year in creative writing allows students to extend skills in creative writing demonstrated in the portfolio which is a prerequisite for the course. The portfolio may include creative writing developed and presented in undergraduate studies in English. The work for the year consists of two courses: one a creative writing workshop and the other a course that focuses on the reading and analysis of literary texts, exploring the cross-flow between critical and creative writing and reading. In second semester students complete a major piece of creative writing. A Handbook for Creative Writing Honours will be available from the English Office late in 2006.

In some circumstances Honours Creative Writing can be studied part-time over two years.

# ENVIRONMENTAL BIOLOGY

# Level I

## ENV BIOL 1002

## **Ecological Issues**

- 3 units semester 1
- 3 lectures, 3 hours practical/tutorial per fortnight, 2 field trips per semester
- Eligibility: Not available to BSc students
- Restriction: ENV BIOL 1002/1002RW Environmental Biology I
- Assessment: exam, written assignments

The principal aim of this course is to provide students with the knowledge that will enable them to participate actively in a rational debate about environmental problems. It introduces the 'scientific method' and illustrates its use via laboratory and field practicals that are written up as reports. The lectures cover the significant environmental issues of: resource utilisation and waste, ecosystem services and ecological footprints, global cycles, Australian landscapes and soils, biodiversity, grazing and indigenous knowledge, agricultural problems, invasive species, pests and quarantine, freshwater and marine ecosystems, conservation biology and adaptive management. There is the opportunity to discuss problems via tutorials.

# ENV BIOL 1002RW

#### **Ecological Issues**

• 3 units - semester 1

The principal aim of this course is to provide students with the knowledge that will enable them to participate actively in a rational debate about environmental problems. It introduces the 'scientific method' and illustrates its use via laboratory and field practicals that are written up as reports. The lectures cover the significant environmental issues of: resource utilisation and waste, ecosystem services and ecological footprints, global cycles, Australian landscapes and soils, biodiversity, grazing and indigenous knowledge, agricultural problems, invasive species, pests and guarantine, freshwater and marine ecosystems, conservation biology and adaptive management. There is the opportunity to discuss problems via tutorials.

# Level II

# ENV BIOL 2000

## Zoology EB II

- 4 units semester 2
- 3 lectures per week, 1 practical per week
- Assumed Knowledge: Six units of approved Level I Biology courses or permission of Head of Discipline
- · Assessment: practical work, exam

The course begins with the relationship between structure and function. Topics in animal physiology relevant to both vertebrates and invertebrates will include the flow of energy through organisms, the process of respiration and the function of the nervous and sensory systems as well as muscle function. We then introduce the concepts of phylogeny and examine the diversity of animals in a phylogenetic framework. We will include the major events in animal evolution as demonstrated by adaptations to parasitism, the marine environment and life on land. The section on invertebrate diversity will be concluded with a state-of-the-art lecture on the extraordinary discoveries that are still being made currently of new species and even new groups and how scientists determine where they fit in the tree of life. The biology of the vertebrates will follow groups from fishes to terrestrial vertebrates. including the amphibians, reptiles, birds and mammals, as well as the evolution of the hominids. We will flavour these with interesting lectures on animal adaptations and some of the major evolutionary hurdles in vertebrate evolution such as flight and airbreathing.

# ENV BIOL 2001/2001RW Evolutionary Biology EB II

- 4 units semester 1
- 3 lectures per week, 1 practical per week
- Assumed Knowledge: 6 units of approved Level I Biology courses or permission of Head of Discipline
- Assessment: practical work, seminar presentations, exam

This course addresses key components of evolutionary biology from the perspective of molecular evolution, from the perspective of individual organisms evolving attributes to cope with and exploit spatially and/or temporally variable and different environments, and from a macro-evolutionary perspective. Natural selection. sexual selection, kin selection and inclusive fitness are used to develop an understanding of the behavioural, morphological and physiological adaptations of individual organisms to their environments, as well as an understanding of the interactions and co-evolutionary processes that occur between organisms both intra- and interspecific (reproductive strategies, mating systems, competition, predator-prev, plant-herbivore, hostparasite, mutualisms, facilitation). Molecular evolution and population genetics provide the mechanics for evolution. Knowledge of these and biogeographic changes are used to develop the ideas of species and speciation, to construct phylogenies, and to interpret the fossil record and patterns of extinction.

## ENV BIOL 2003

#### Ecology EB II

- 4 units semester 2
- 3 lectures, 1 practical per week, 4-day field camp (first week of mid-semester break)
- Assumed Knowledge: Six units of approved Level I Biology courses or permission of Head of Discipline
- Restriction: ENV BIOL 2901A/B Botany II, ENV BIOL 2005 Plant Ecology E
- · Assessment: practical/field work, exam

This course aims to teach students the core principles of modern ecology, to provide basic skills for the conduct of field studies, and to foster the development of scientific analysis of ecological systems. The topics are integrated into a conceptual framework that will allow students the analysis of real situations. Topics include the description and study of biological populations and communities, the factors that determine their properties and dynamics, the properties of fragmented systems, the patterns and consequences of species diversity, and the biotic and abiotic factors that control the dynamics of ecological systems. Case studies are used to illustrate the underlying theory, and the application of the ecological theory to the management of natural resources for exploitation and conservation. The course is relevant for students interested in furthering their understanding of the basic ecological principles, in the management of rangelands, fisheries, forests, and human made systems, and in the conservation of natural ecosystems.

# ENV BIOL 2005

## Ecology E

- 3 units semester 2
- 3 lectures per week, 2 tutorials per semester, 3-4 day field camp (first week of mid-semester break)
- Eligibility: Available to Engineering students only, or by special permission of the Course Coordinator.
- Restriction: ENV BIOL 2901A/B Botany II, ENV BIOL 2005 Plant Ecology E, ENV BIOL 2003 Ecology EBII
- Assessment: assignments and/or exam further details available at beginning of semester

This course aims to teach students the core principles of modern ecology, to provide basic skills for the conduct of field studies, and to foster the development of scientific analysis of ecological systems. The topics are integrated into a conceptual framework that will allow students the analysis of real situations. Topics include the description and study of biological populations and communities, the factors that determine their properties and dynamics, the properties of fragmented systems, the patterns and consequences of species diversity, and the biotic and abiotic factors that control the dynamics of ecological systems. Case studies are used to illustrate the underlying theory, and the application of the ecological theory to the management of natural resources for exploitation and conservation. The course is relevant for students interested in furthering their understanding of the basic ecological principles, in the management of range-lands, fisheries, forests, and human made systems, and in the conservation of natural ecosystems.

## ENV BIOL 2006

#### **Botany II**

- 4 units semester 1
- 3 Lectures, 4 hour practical per week
- Assumed Knowledge: Biology I: Organisms; Biology I: Molecules Genes & Cells
- Restriction: Agricultural Botany; Botany EBII, Biology of Plants & Animals

The course gives a general introduction to the biology of plants. The first half of the lectures and practicals cover physiology and basic biochemistry, plant nutrition and responses to environmental stress. The lectures in the second half explore plant structure, classification, plant diversity and evolutionary influences. The related practicals cover plant anatomy and plant identification. The course provides a valuable background for further plant-related courses.

# Level III

# ENV BIOL 3002

#### Australian Biota: Past, Present and Future

- 3 units semester 2
- 2 lectures, 4 hours practical/project work/tutorial work per week
- Assumed Knowledge: ENV BIOL 2001 Evolutionary Biology EB II
- Restriction: Biodiversity and Evolution of Plants III
- Assessment: exams, tutorials, practical assignments, field excursion

This course examines the origins and evolution of Australia's unique flora and fauna, and the way it has been shaped by historical and more contemporary events. Topics will include continental connections and isolation; past climates and geology; past vegetation assemblages and 'ancient' habitats; the unique Tertiary fauna; the Pleistocene megafauna; the Quaternary 'filter' and how it has shaped the present day biota; composition of the present day flora including the impact of poor soils and fire; the dominance of Myrtaceae and Proteaceae, and their pollination systems; origins and unique aspects of the vertebrate fauna; Australian marine organism, the impact of aboriginal people and the effect of European settlement on the continent's biota. Several major themes will be explored in detail throughout the course, in particular the evolution of pollination systems; adaptations among plants and animals to arid and marine environments, and the evolution of vertebrate reproductive strategies.

# ENV BIOL 3003 Ecophysiology of Animals III

- 3 units semester 2
- 2 lectures, 1 tutorial, 4 hours practical work per week
- Assumed Knowledge: 8 units of Level II Environmental Biology courses, SACE Stage 2 Chemistry and/or Physics
- Assessment: quizzes, practical work & essay

This course covers the intersection between three biological fields - physiology, ecology and behaviour, and examines some of the ways animals are adapted to the environments in which they live. In many cases, these are adaptations to severe environments such as deserts, polar regions, high altitude and deep sea, where nature poses apparently insurmountable problems to survival. The primary approach is to examine the biophysical exchanges between the animal and its environment. Another approach is to look at the physiology of animals with different life styles, and examine their evolutionary strategies for locomotion, digestion, reproduction, thermoregulation, osmoregulation, circulation and respiration.

# ENV BIOL 3004

## Freshwater Ecology III

- 3 units semester 1
- 2 lectures, 4 hours practical work per week
- Assumed Knowledge: 8 units of Level II Environmental Biology courses (Science students), ENV BIOL 2005 Plant Ecology E, or approval of Head for B.Eng students
- Restriction: Aquatic Plant Biology, Freshwater Ecology
- Assessment: 2 assignments 25% each, written test 50%

The course provides theoretical understanding and practical implications of the ecology and restoration of freshwater habitats. It distinguishes habitats of lakes, wetlands, streams and rivers by varying circulation types, nutrient cycles and food webs. Complementary practicals will be conducted in order to provide skills for the identification of algae, zooplankton and water plants as well as for monitoring, assessment and management of drinking water reservoirs, urban and floodplain wetlands, and rivers.

## ENV BIOL 3006

## **Research Methods in Environmental Biology III**

- 3 units semester 1
- 2 lectures, 1 tutorial, 4 hours practical work per week
- Assumed Knowledge: 8 units of Level II Environmental Biology courses, STATS 1000 Statistical Practice I or STATS 1003 Biomathematics, and Statistics or equiv.
- Restriction: Research Methods in Ecology
- Assessment: practical work, exam, review assignment

An introduction to systematic methods of collection, analysis and reporting of field and laboratory data, and basic experimental design. Lectures outline the nature of research and the value of experimental methods. Some knowledge of basic statistics is required. Experimental design will be emphasised, and the elements of statistical tests, particularly analysis of variance, will be considered in a biological context. Practical work involves use of computers and software, and generally will complement methods introduced in lectures.

# ENV BIOL 3008

#### **Conservation and Restoration**

- 3 units semester 2
- 2 lectures, 3 hours practical work per week, 4-5 days fieldwork (during semester or mid semester break)
- Assumed Knowledge: ENV BIOL 2003 Ecology EBII or equivalent
- Restriction: ENV BIOL 3023 Conservation Biology, ENV BIOL 3008 Ecological Management and Restoration
- Assessment: exams, practical & project assignments

This course will examine theoretical and practical aspects of conservation biology, ecological management and restoration of natural systems. The course will focus on terrestrial systems. It will cover the effects of introduced herbivores, carnivores, competitors, pathogens, vegetation clearance, habitat fragmentation, habitat degradation, disturbances (e.g. fire) and remedial actions (e.g. revegetation) on Australian flora, fauna and ecological processes (e.g. dryland salinisation, pollination, gene flow, animal dispersal). Edge effects, corridors, succession, endangered species management, conservation genetics, abundant species management, biological and mechanical control of unwanted species, rehabilitation, re-introduction and translocation biology will also be covered. Establishing adequate and effective monitoring programs, reserve design and risk assessment, as well as social and political factors in decision making will provide a practical element to the course. Students will be expected to conduct a small research project on some current conservation or restoration issue as part of the course.

# ENV BIOL 3009

## **Ecophysiology of Plants III**

- 3 units semester 2
- 2 lectures, 4 hours practical work per week, 3 day field trip
- Assumed Knowledge: ENV BIOL 2006 Botany EB II or PLANT SC 2001WT Agricultural Botany
- Restriction: Ecophysiology of Plants, Terrestrial Plant Ecophysiology, Ecophysiology of Terrestrial Plants
- Assessment: exam & continuous assessment

This course explores interactions between plants and their environment from a physiological perspective. It will consolidate and extend knowledge of the processes involved in the acquisition and transport of resources by plants and use this knowledge to examine the ways plants have adapted to a range of environments. some of which can be considered as extreme. The course will also look at how plants respond to environ-mental challenges such as climate change, ozone depletion, salinisation and heavy metal toxicity. Interactions with other organisms will also be examined including mycorrhizas and parasitic plants. Practical work will include small group experiments and a field trip in the mid-semester break.

## ENV BIOL 3010

#### Marine Ecology III

- 3 units semester 2
- 2 lectures, 4 hours practical work per week, 5 day field trip
- Assumed Knowledge: 8 units of Level II Environmental Biology courses (or equiv.), ENV BIOL 3006 Research Methods in Environmental Biology III advantageous

Assessment: exam, assignments, field
 trip report

This course will provide an understanding of the patterns of abundance and diversity of marine plants and animals and the processes that structure these patterns. Emphasis is placed on the challenges and solutions to understanding the complexity of marine systems. This course will demonstrate the use of coherent logical procedures and rigorous experimental design to provide practical evidence for the development of theory and solutions to environmental and conservation problems in coastal habitats. The habitats and organisms used to illustrate lectures are derived from ecological studies of subtidal rocky and coral reefs, intertidal rocky reefs, mangrove forests, salt marshes, seagrass meadows, urban structures and pelagic habitats.

## **ENV BIOL 3011WT**

#### **Evolution and Diversity of Insects**

- 3 units semester 1
- 2 lectures, 4 hours practical work per week, 2 day field camp
- Assumed Knowledge: ENV BIOL 2000 Zoology EB II or equivalent
- Restriction: ENV BIOL 3011WT Biology and Diversity of Insects
- Assessment: exams, tutorials, practical assignments, field excursion

After a brief review covering the internal anatomy of insects and the processes involved in metamorphosis, excretion and reproduction, a number of specific topics will be explored in more detail, including: morphological and biological characteristics of the major insect orders; life histories of selected pest and beneficial species; sociality, caste formation and nest building in termites; sound production methods and functions; feeding mechanisms; adaptations and biology of vertebrate ectoparasites; insects as disease vectors of plants and animals; production and function of silk in insects and arachnids; mimicry and defensive adaptations; sociality and parasitism in the Hymenoptera.

The practical component will examine collecting techniques, identification of adult insects to family level, identification of immature stages and feeding damage. A requirement of the course is the presentation of a well-curated insect collection and attendance at a compulsory field trip during semester.

## ENV BIOL 3012WT

#### **Integrated Catchment Management III**

- 3 units semester 2
- 24 lectures, 48 practicals in field & laboratory
- Assumed Knowledge: ENV BIOL 2003 Ecology EBII or SOIL&WAT 2005WT Soil Resources or AGRONOMY 2000ARW/BRW Principles of Sustainable Agriculture
- Assessment: theory 50%, practicals/assignments 50%

This course provides students with an understanding of ecological and hydrological processes governing catchment systems and concepts for the assessment and management of catchment systems. Catchments are characterised by their geology, soils, land use, hydrology and water quality. Management of catchments considers changed land use and vegetation, soil treatment, riparian wetlands, water quality management and environmental flows. A multidisciplinary team of lecturers jointly teach the course. Field practicals are conducted in the Bradbury Catchment of the Mt. Lofty Ranges.

# ENV BIOL 3121 Concepts in Ecology EBIII

- 3 units semester 1
- 2 lectures, 2 hours practical/tutorial per week, 4 day field trip
- Corequisite: ENV BIOL 3006 Research Methods in Environmental Biology III
- Assumed Knowledge: ENV BIOL 2003 Ecology EB II or equivalent
- · Assessment: exams, practical assignments

This course aims to provide advanced insights into the fundamental ecological principles that underpin the understanding of the ecology of specific systems, and the application of ecology to the management of natural resources and conservation of biodiversity.

## ENV BIOL 3122

## **Evolution and Palaeobiology III**

- 3 units semester 1
- 2 lectures, 3 hours practical per week, 1 day field trip
- Eligibility: BSc, B.A, BSc (Evol. Biol.), BSc (Sust.Env.)
- Assumed Knowledge: ENV BIOL 2001 Evolutionary Biology EBII or equivalent
- Assessment: exams, tutorials, practical assignments, field excursion

This course aims to provide advanced understanding of fundamental principles and modern advances in techniques for systematics, evolution and the fossil record, and the application of these to the study of the evolution and conservation of biodiversity. Topics discussed will include: Evolution, phylogeny and evidence; Human evolution; ancient DNA; Evolution of Life History data, adaptations and co-evolution; marine biogeography, palaeoceanographic transformation and environmental forcing of evolution; stratigraphy, extinction and the origin and diversification of major animal groups; methods for assessing evolutionary relationships, particularly cladistics; molecular approaches to systematics; constructing the tree of life; measuring biodiversity at different scales; phylogenetic approaches to understanding life history and ecology; importance of fossils for understanding relationships and major evolutionary events; bioinformatics; systematics and biogeography.

## ENV BIOL 3123

## **Issues in Evolutionary Biology**

- 3 units semester 2
- 4 6 hours project work/seminars per week
- Eligibility: BSc (Evolutionary Biology)
- Assessment: Essays, project assignments

This course comprises advanced level project work and a series of seminars by invited speakers that covers the latest issues as they relate to the two majors in the degree: paleontology/ systematics and molecular evolution.

# ENV BIOL 3124

# Frontiers in Marine Biology

- 3 units Not offered in 2007
- 1 x 2 hour lecture; 1 x 2hour tutorial
- Eligibility: BSc (Marine Biology) students only
- Assumed Knowledge: Level I and II BSc (Marine Biology) or equiv.
- Assessment: tutorials, assignments

This course is about contemporary frontiers in marine biology, which will be presented by researchers that are actively pushing these boundaries. Each researcher will provide several research examples relating to their particular frontier (lectures and reading material) that will form the basis of lively discussion (tutorials). The exact identity of frontiers change as new issues and government priorities arise, hence topics will change frequently but are likely to include the science and politics of marine protected areas, novel approaches to fisheries biology and management, use of marine parasitologists in improving multi-million dollar aquaculture and fisheries ventures, new possibilities in use of molecular techniques, and the emerging crisis of coastal water pollution locally (South Australia) and globally.

## ENV BIOL 3220

## **Issues in Sustainable Environments**

- 3 units semester 2
- 2 hour seminar/discussion, 3-4 hours of project/tutorial per week
- Assumed Knowledge: Level I & II BSc (Sust.Env.) or equiv.
- · Restriction: not available to BSc students

This course comprises a series of seminars by invited speakers that covers the latest issues as they relate to the three majors in the BSc (Sustainable Environments) program: Conservation and Wildlife Ecology, Land and Water Management and Deep Earth Resources

## ENV BIOL 3221

## **Research Methods in Marine Biology**

- 3 units Not offered in 2007
- 2 hour lecture, 2 hour tutorial, 4 hour laboratory
- Eligibility: BSc (Marine Biology) students only
- Assumed Knowledge: Level I and II BSc (Marine Biology) or equiv.
- Assessment: Research reports and a poster

This course demonstrates fundamental approaches and specialist techniques required of contemporary investigations in marine biology and ecology. It promotes an awareness of modern research programs of governmental and nongovernmental agencies and demonstrates key analytical techniques, many of which are not taught at Australian universities at any undergraduate or postgraduate level. The course combines current thinking (theory) and practical measurement (practice) used to understand natural influences and human domination of topdown processes (e.g. Marine Protected Areas and fishing) and bottom-up processes (e.g. waste water treatment, catchment management) that maintain and disrupt ecosystem function and sustainability. Particular emphasis is placed on temperate coasts for which the Australian population is largest and most dense, coastalocean problems most expensive and intense, and career opportunities most diverse and numerous.

# Honours

## **ENV BIOL 4000**

## **Honours Environmental Biology**

- 24 units full year
- Prerequisite: credit standard in 9 units of Level III courses offered by Environmental Biology or related disciplines, agreement from supervisor appropriate for research project
- Assessment: research thesis, seminar 55%, literature review, research proposal 20%, 2 essays 25%

Candidates are expected to study Environmental Biology more deeply in a research exercise and to present the results in a written thesis. In addition to the thesis, students will be assigned essays and a research proposal, all designed to broaden the learning experience relevant to environmental science. There will be emphasis on developing written and oral communication skills that are expected of an environmental scientist.

Interested students should consult the Honours Coordinator during the final year of the degree program. The Honours program normally commences at the beginning of first or second semester.

## ENV BIOL 4001

## Honours Bachelor of Environmental Science (Environmental Biology)

- 12 units full year
- Prerequisite: credit or higher in at least 2 Level III Environmental Biology or related courses approved by Head of Discipline, agreement from supervisor appropriate for research project
- Assessment: project 60%, average of coursework result 40%

Honours Environmental Science (Environmental Biology) students extend their study of Environmental Biology by embarking on a research project that is mutually agreed upon with an appropriate supervisor. The results of this study are presented as a written thesis, incorporating a literature review and a seminar. During the year, students also enrol in 12 units of Level III courses relevant to Environmental Science.

Interested students should consult the Honours Coordinator during the final year of the degree program. The Honours program normally commences at the beginning of first or second semester.

# ENV BIOL 4002 Honours Botany and Geology

- 24 units full year
- · Assessment: thesis, exams, seminar

The course allows students who have completed at least 6 units of both Botany and Geology at a credit standard or better to undertake an honours project unique to their skills. Students undertake a major research project in Botany and undertake minor components (eg coursework, minor projects, essays) in Geology and Geophysics. The program may be particularly relevant to students interested in palaeobotany, plant/mineral interactions or minesite reclamation/rehabilitation.

Intending candidates should consult the Head of Discipline and potential supervisors during the

final year of the degree and be prepared to begin studies in early February or August.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the degree and be prepared to begin studies in early February or August.

## **ENV BIOL 4010**

#### Honours Environmental Biology (B.NRM)

- 24 units full year
- Prerequisite: credit standard in 9 units of Level III Environmental Biology or related disciplines, agreement from a supervisor appropriate for research project
- Assessment: research thesis and seminar 55%, literature review and research proposal 20%, 2 essays 25%

Candidates are expected to study Environmental Biology more deeply in a research exercise and to present the results in a written thesis. In addition to the thesis, students will be assigned essays and a research proposal, all designed to broaden the learning experience relevant to environmental science. There will be emphasis on developing written and oral communication skills that are expected of an environmental scientist.

Interested students should consult the Honours Coordinator during the final year of the degree program. The Honours program normally commences at the beginning of first or second semester.

# EUROPEAN STUDIES

## Level I

## EUST 1000

#### **Modern Imagination in Europe**

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1200 word essay 30%, 1500 word essay 35%, journal 10%, participation based on class contrib. 10%, 2 class presentations 15%

This course introduces students to the expression of the modern condition in major nineteenth- and twentieth-century works of European prose, poetry, and the visual arts. Each of the works/ artistic movements is representative, in both its form and content, of the modern predicament. We will explore such themes as realism, nihilism, absurdism, the boredom and alienation of urban life, fascism, the Holocaust, existentialism and new modes of representation. In the visual arts, we will be looking at French impressionism, German expressionism, cubism and abstractionism, and New Wave cinema. We will be reading classic works such as Camus' The Outsider, Sartre's Nausea, Flaubert's Madame Bovary and Kafka's The Trial. In poetry, we will be studying Baudelaire's Flowers of Evil, a selection of Surrealist poems (Breton, Desnos), and Holocaust poems by Paul Celan, Nelly Sachs and Gertrud Kolmar.

## Level II

## EUST 2004 Great Literary Texts of Western Civilisation

- 4 units semester 2
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 2 x 2500 word essays 70%, class presentation 20%, seminar participation 10%

This course explores a sample of the Great Literary Texts of Western Civilisation. All the genres will be represented, so that students may appreciate the intricacies of prose, theatre and poetic language. We shall work with one text per fortnight. The texts and themes will be varied and will include works by authors chosen from the following list: , Sophocles, Homer, Dante, Rabelais, Shakespeare, Cervantes, Goethe, Stendhal, Dostoyevsky and Proust. The survey of Great Texts will cover the themes and the place in literary history of these writers, but also their innovations in terms of technique (form, texture of the language).

## EUST 2011

#### **Opera as Idea and Ideal**

- 4 units semester 1
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 1000 word seminar discussion paper 20%, 1500 word journal 30%, 2500 word research essay 50%

Since the moment of its inception in 16th century Italy, opera has been one of the most fiercely

contested sites of European culture. Its texts and its music, its stars and its extravagance, its perceived power to subvert morals or undermine the political status quo, all have been the subject of bitter controversy at different times in its 400 vear existence. Within the historical framework of the development of opera in the German-speaking countries from the time of Mozart, this course investigates key aspects of its social and cultural impact, its role in reflecting and constructing national and gender identities and its ability to seduce its audience with a sense of higher ideals beyond the immediate world of physical reality. Composers whose works will be discussed in more detail include Mozart, Beethoven, Weber, Wagner, Strauss, Berg and Weill and for comparative purposes reference will also be made to developments in other European countries in the same period. Lectures will be in English. translations will be provided for all German texts and no previous knowledge of music is assumed.

## Level III

## **EUST 3004**

## **Great Literary Texts of Western Civilisation**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2 x 3500 word essays 70%, class presentation 20%, seminar participation 10%

This course explores a sample of the Great Literary Texts of Western Civilisation. All the genres will be represented, so that students may appreciate the intricacies of prose, theatre and poetic language. We shall work with one text per fortnight. The texts and themes will be varied and will include works by authors chosen from the following list: Sophocles, Homer, Dante, Rabelais, Shakespeare, Cervantes, Goethe, Stendhal, Dostoyevsky and Proust. The survey of Great Texts will cover the themes and the place in literary history of these writers, but also their innovations in terms of technique (form, texture of the language).

## EUST 3011 Opera as Idea and Ideal

- 6 units semester 1
- · 3 contact hours per week
- Prerequisite: 8 units Level II Music/Humanities/ Social Sciences
- Assessment: 1500 word seminar discussion paper 20%, 2500 word journal 30%, 4000 word research essay 50%

Since the moment of its inception in 16th century Italy, opera has been one of the most fiercely contested sites of European culture. Its texts and its music, its stars and its extravagance, its perceived power to subvert morals or undermine the political status quo, all have been the subject of bitter controversy at different times in its 400 year existence. Within the historical framework of the development of opera in the German-speaking countries from the time of Mozart, this course investigates key aspects of its social and cultural impact, its role in reflecting and constructing national and gender identities and its ability to seduce its audience with a sense of higher ideals beyond the immediate world of physical reality. Composers whose works will be discussed in more detail include Mozart, Beethoven, Weber, Wagner, Strauss, Berg and Weill and for comparative purposes reference will also be made to developments in other European countries in the same period. Lectures will be in English, translations will be provided for all German texts and no previous knowledge of music is assumed.

## Honours

## EUST 4401

#### **Honours European Studies**

- 24 units full year
- Prerequisite: major sequence in European Studies with Level III credit standard, at least one full year of a European language
- Assessment: 2 x 7000 word seminar papers 25% each, thesis (approx. 15000 words) 50%

A thesis topic would normally be drawn from the central themes explored in European Studies at undergraduate level and would be supervised by a staff member teaching in an area of European Studies. Students also do two seminars in the area of European Studies.

# FINANCE

# Honours

## **ECON 4005**

## **Honours Finance**

- 24 units full year
- · Contact hours to be advised
- Eligibility: Finance Honours students only
- Prerequisite: B.Fin (or equiv), ECON 3023
   Econometrics III, high standard in courses
   presented for degree
- Assessment: coursework, papers, research project, thesis

Requirement: (a) Honours students are required to undertake a research project and present a thesis. The thesis, part of the final honours examination, counts for between 25% and 50% of the year's assessment; (b) each student will select compulsory and optional courses from a range of Honours level courses from various Schools (it will be assumed usually that students will have appropriate prerequisites for these courses)

Detailed arrangements for classes will depend on enrolments and students are advised to communicate with the Honours Coordinator before February. Students may express an interest of admission in writing to the Honours Coordinator and will be admitted by invitation in November. Students admitted to the program will be given a handbook with full details of expectations and details of courses.

Arrangements are possible for joint honours combining study in Finance with study in another Department/School. Details are available from the Honours Coordinator.

# FOOD SCIENCE

# Level I

# FOOD SC 1000RG

## Introduction to Food Technology

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assessment: written exam, laboratory reports, assignments, report of industry visits

This course provides an overview of the food processing industry at local national and international levels. Emphasis is at the local (South Australian) level and covers many of the key areas of responsibility of a food technologist. A nationally accredited short course - Hygiene for Food Handlers - is included. Food processing techniques, particularly techniques for analysing and preserving food and processing meat, cereals, milk, fruit and vegetables are described. Management operations including total quality management, plant hygiene and sanitation, occupational health, safety and welfare, HACCP, ISO, and legislation are overviewed. The course includes industry tours and guest lectures by industry representatives.

# FOOD SC 1001

## **Consumers, Food and Health**

- 3 units semester 1
- 2 lectures, 2 hours tutorial per week
- Assessment: assignments, student diary, student led discussion, participation, exam

Overview, social, cultural and economic influences, mass media models, consumers, consumer lifestyles, market segmentation, consumer perceptions of foods, consumers' food concerns, cuisines and population food consumption patterns, the food system, food policies and agencies, food shopping, food labels, biological and social psychological influences on food consumption, appetite mechanisms, satiety, taste aversions.

Healthy eating, food composition, dietary guidelines, food groups, functions of principal nutrients, vegetarianism, dietary supplementation, weight control practices, under nutrition, the nutrition transition, obesity and non-communicable disease.

## FOOD SC 2001RG

## **Food Engineering Principles**

- 2 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: CHEM ENG 1001
   Introduction to Process Engineering
- Assessment: to be advised

Hydronic systems, refrigeration systems, cold storage, psychrometrics, heat loads, heat sterilisation systems, boilers and heat exchange systems, compressed air and vacuum systems, food process engineering principles, corrosion principles, material selection, food processing equipment, programmable controllers, Newtonian and non-Newtonian fluids, food rheology, process mass and energy balances, and safety associated with food engineering systems. Visits will be made to food processing and storage facilities to illustrate the application of food engineering principles.

## **FOOD SC 2002WT**

## Nutrition II

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOCHEM 2106
  Biochemistry II A (Agriculture)
- Assessment: to be advised

The role of fats, carbohydrates, dietary fibre, vitamins, minerals, alcohol and water in human nutrition is studied and current trends analysed. Students will have the opportunity to examine their own diet using computerised food composition tables, dietary assessment methods and Australian RDI's. Functional foods are considered and students will prepare a presentation on a food that they have modified to include a functional ingredient

# FOOD SC 2003RG Food Microbiology II

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: APP ECOL 2003WT General Microbiology; PLANT SC 2004WT General Microbiology
- Assessment: to be advised

This course aims to provide instruction in the general principles of food microbiology. It is assumed that students will have received adequate introduction to microbiology per se. The course covers the biology and epidemiology of foodborne microorganisms of public health significance, including bacteria, yeasts, fungi, protozoa and viruses, and food spoilage microorganisms; the microbiology of food preservation and food commodities; fermented and microbial foods; principles and methods for the microbiological examination of foods; microbiological quality control, and quality schemes.

## FOOD SC 2105RG

## Food Preservation and Packaging A

- 4 units semester 1
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Eligibility: B.Food Sc. & Tech. students only
- Assumed Knowledge: FOOD SC 1000RG Introduction to Food Technology
- Restriction: FOOD SC 3003RG Food Preservation and Packaging
- Assessment: written exam, laboratory reports, assignments/presentations

Advanced food preservation and packaging: heat and cold preservation including chilling, freezing, freezing systems, retorting, pasteurisation, sterilisation and heating processes. Preservation by fermentation, concentration, drying and dehydration, by chemical agents and ionizing radiation. Shelf life and nutritional consequences of preservation. Principles of flexible and rigid packaging of foods. Selection of packaging and packaging permeability.

Passive and active packaging including modified atmosphere packaging and controlled atmosphere storage. Reuse, disposability and printing of packaging. Labelling techniques and legislation.

## FOOD SC 2205RG

## **Plant Food Processing A**

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Eligibility: B.Food Sc. & Tech. students only
- Assumed Knowledge: FOOD SC 2105RG Food Preservation and Packaging A
- Restriction: FOOD SC 3026RG Plant Food
   Processing
- Assessment: written exam, assignments

Fruit and vegetables: definition, structure, ripening and composition of fruit and vegetables. Harvesting and storage techniques.

Microbiological, chemical and physical causes of spoilage. Processing techniques. Fruit and vegetable products. Edible fats and oils: sources, chemical composition and reactivity. "Plasticised" fats. Processing techniques, storage and handling. Confectionary and sugar technology: sugars and sweeteners. Products and manufacturing techniques. Beverages: Variety of beverages. Raw material selection. Manufacturing techniques. Testing procedures. Cereal and baking technology: variety, structure and composition of cereal grains. Production techniques. Functions of leavening agents, gluten and other ingredients of bread, cakes and pastry. Product development. HACCP programs and Food Regulation. Students will produce a variety of foods that contain plant tissue and extracts.

# Level III

# FOOD SC 3011RG

## **Food Chemistry**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOCHEM 2106WT Biochemistry II (Agriculture) A
- Assessment: to be advised

The chemistry and analysis of food and its components: water, amino acids, peptides and protein, sugars, polysaccharides, lipids, vitamins, minerals. Reactions of food components during processing: Maillard reaction, enzymic browning. Non-microbial contaminants such as heavy metals and pesticides, colour pigments, aroma compounds, sugar and fat replacers.

# FOOD SC 3014RG

## **Food Quality and Regulation**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: FOOD SC 2105RG Food Preservation and Packaging A
- Assessment: to be advised

The principles of quality assurance, management and total quality management, HACCP (hazard analysis of critical control points) system implementation, flow charts and identification of hazards and critical points, ISO and NATA accreditation. Hygiene and sanitation, including good manufacturing practices, chemistry and application of cleaners and sanitisers, verification of sanitiser action, equipment design to minimise process failure and health risk. Product recall and national and international food legislation including role of FSANZ, Food Standards Code, legislation hierarchy and audit.

## FOOD SC 3020AWT

# Research Project A (Food Technology & Management)

- 6 units semester 1
- Assessment: thesis, a supervisor mark, final presentation
- A research project on a food related topic.

# FOOD SC 3020BWT

# Research Project B (Food Technology & Management)

- 12 units full year
- Assessment: thesis, a supervisor mark, final presentation
- A research project on a food related topic.

## FOOD SC 3021RG

## **Food Product Development**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: FOOD SC 2105RG Food Preservation and Packaging A
- Assessment:t be advised

Product Development: Scale of new product development in market place, concept generation, consumer testing, quality function deployment. Research and Development process. Trends and new techniques in processing, for example extrusion, sous vide, high pressure, electrical and magnetic fields, light pulses, minimal processing, home meal replacements, hurdle technology. Food ingredients and their functions.

# FOOD SC 3027WT

## **Sensory Evaluation of Foods**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assessment: to be advised

The role of sensory evaluation in marketing of food and beverages, physiological and psychological factors affecting sensory perception, relationships between sensory properties and product acceptability, measurement of sensory perception, design and conduct of sensory evaluation experiments, difference testing, preference testing, panel selection procedures, taste and aroma profiling, texture profiling, shelf life determination, sensory quality control, product development and optimisation, strategies for developing sensory evaluation programs. A range of food and beverage products will be assessed using the techniques and principles present in the lecture program.

# Honours

## FOOD SC 4000WT

## **Honours Food Science & Technology**

- 24 units full year
- 40 hours a week
- Prerequisite: Credit or higher in 2 relevant Level III courses in B.Food Sc.& Tech.

• Assessment: thesis, seminars, research proposal; remainder as deemed appropriate to the student's program.

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Discipline of Plant and Food Science, two seminars on that topic, and coursework, essays or other assignments deemed appropriate tot he individual student's honours program.

# FRENCH STUDIES

# Level I

## **FREN 1002**

## French IA: Beginners' French

- 3 units semester 1
- 5 contact hours per week
- Available for Non-Award Study
- Restriction: not available to students who have obtained more than 14/20 in SACE Stage 2 French (or equiv)
- Assessment: regular assignments, tests, exam

This course introduces students to the language and culture of contemporary France. In addition to intensive language training in the four basic skills listening, speaking, reading and writing - various aspects of French society and culture will be introduced through audio and video extracts and short texts. The emphasis throughout will be on communicative skills, both oral and written

## **FREN 1003**

## French IB: Beginners' French

- 3 units semester 2
- 5 contact hours per week
- Available for Non-Award Study
- Prerequisite: FREN 1002 French IA: Beginners' French
- Assessment: regular assignments, tests, written exam

This course continues the intensive language training undertaken in French IA. In the second half of the semester, the language laboratory class will be replaced by a class devoted to the development of reading skills.

## **FREN 1011**

## French ISA: Language and Culture

- 3 units semester 1
- 5 contact hours per week
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 French with scaled score of higher than 14/20 (or equiv)
- Assessment: regular tests, language assignments, essays, language exam

This course is designed for students who have studied French at high school to Year 12 level (or equivalent). It consolidates the language skills already acquired and develops reading and research skills in the area of cultural studies. Students will acquire knowledge of current issues in French society, as well as develop critical and analytic skills to apply to their reading and analysis of different kinds of texts and other cultural artefacts.

# FREN 1012

## French ISB: Language and Culture

- 3 units semester 2
- 5 contact hours per week
- Available for Non-Award Study
- Prerequisite: FREN 1011 French ISA: Language & Culture/French I: Language & Culture Pt 1) or equiv.
- Assessment: regular tests, language assignments, essays, language exam

This course continues the intensive language training undertaken in French ISA and introduces other aspects of French and Francophone culture and society. Students have a choice of two cultural studies options: Varietes du francais or Le Roman policier.

# Level II

## **FREN 2002**

## French IIA: Language and Culture

- 4 units semester 1
- 5 contact hours per week
- Prerequisite: FREN 1003 French IB: Beginner's French (Pass Div 1) or FREN 1012 French ISB: Language and Culture (Pass Div 2)

 Assessment: regular written assignments, oral exercises, written class tests, essays, oral exam, language exam

This course builds on and consolidates the language skills acquired in the first year beginners' course. In addition to the study of the language, students will acquire knowledge of French culture and develop critical and analytic skills through the study of various texts and resources.

# FREN 2003

#### French IIB: Language and Culture

- 4 units semester 2
- 5 contact hours per week
- Prerequisite: FREN 2002 French IIA: Language & Culture/French IIA: Language & Culture Pt 1
- Assessment: regular written assignments, oral exercises, written class tests, essays, oral exam, language exam

This course continues the intensive language training undertaken in French IIA and introduces other aspects of French and Francophone culture and society. Students have a choice of two cultural studies options in common with French ISB: Varietes du francais or Le Roman policier.

## **FREN 2007**

## French Studies II

- 4 units semester 1 or semester 2
- Culture topic 2 contact hours per week, Language topic - 5 contact hours per week
- Prerequisite: Culture Topic FREN 1012 French ISB: Language and Culture (Pass Div 1) or FREN 2003 French IIB; Language Topic - sem 1, 6 units Level I Humanities/Social Sciences; sem 2 -French Studies II: Language Topic (Semester 1)
- Restriction: Language Topic not available to students who have studied French at any level
- Assessment: Culture topic tutorial papers, essays, tests; Language topic - regular assignments, tests, exam 60%, 2000 word essay in English on French culture 40%

#### Culture

The Culture topic involves an individual research project (topic to be negotiated with the course coordinator) and a cultural studies option. In semester 1 the option will be either Short Stories or Autobiographical Fiction; and in semester 2 students choose from either Mediaeval France or Cinema of the Nouvelle Vague. Students can do either Semester 1 or 2, or both semesters.

## Language

The Language topic offers the opportunity for students in second year to undertake an introductory French language and culture course, but at a more intensive level than at first year. It is particularly appropriate for prospective postgraduates needing reading skills in French and/or students wishing to do an Honours degree in the area of European Studies who are not majoring in a European language but who need to develop reading ability in the French language for research purposes. The research essay component of the course enables students to choose a topic in line with their own research interests. Students will be required to read selected French texts, although they will write their essay in English. Students intending to do Semester 2 of the language topic, must first complete Semester 1.

## **FREN 2011**

#### French IISA: Language and Culture

- 4 units semester 1
- 6 contact hours per week
- Prerequisite: FREN 1012 French ISB: Language and Culture (Pass Div 1)
- Assessment: regular oral & written exercises, class tests, end of semester exam for language; tutorial papers, essays, tests for cultural studies component

Language training in the speaking and writing of French builds on the skills and knowledge acquired in first year. The language programme will include grammar exercises, written expression, grammar commentary and translation. The cultural studies component is based on a wide range of texts: one option to be chosen (either Short Stories or Autobiographical Fiction).

## **FREN 2012**

#### French IISB: Language and Culture

- 4 units semester 2
- 6 contact hours per week
- Prerequisite: FREN 2011 French IISA: Language and Culture/French II: Language and Culture Pt 1
- Assessment: regular oral & written exercises, class tests, end of year 3 hour exam, oral interview for language; tutorial papers, essays, tests for cultural studies component

Language training in the speaking and writing of French builds on the skills and knowledge acquired in first semester. The language programme will include grammar exercises, written expression, grammar commentary and translation. The cultural studies component is based on a wide range of texts: one option to be chosen (either Mediaeval France, Cinema of the Nouvelle Vague, or Adelaide High School Mentoring Scheme).

## Level III

## **FREN 3002**

#### French IIIA: Language and Culture

- 6 units semester 1
- 6 contact hours per week
- Prerequisite: FREN 2003 French IIB: Language and Culture
- Assessment: oral & written exercises, class tests, end of semester exam for language; tutorial papers, essays, tests for cultural studies component

Language training in the speaking and writing of French builds on the skills and knowledge acquired in second year (beginners' stream). The language programme will include grammar exercises, written expression, grammar commentary and translation. The cultural studies component is based on a wide range of texts: one option to be chosen (either Short Stories or Autobiographical Fiction).

## **FREN 3003**

#### French IIIB: Language and Culture

- 6 units semester 2
- 6 contact hours per week
- Prerequisite: FREN 3002 French IIIA: Language & Culture / French IIIA: Language & Culture Pt 1
- Assessment: oral & written exercises, class tests, end of year 3 hour exam, oral interview for language; tutorial papers, essays, tests for the cultural studies component

Language training in the speaking and writing of French builds on the skills and knowledge acquired in semester 1. The language program will include grammar exercises, written expression, grammar commentary and translation. The cultural studies component is based on a wide range of texts: one option to be chosen (either Mediaeval France Cinema of the Nouvelle Vague, or Adelaide High School Mentoring Scheme).

## **FREN 3007**

#### **French Studies III**

- 6 units semester 1 or semester 2
- Culture topic 2 contact hours per week, Language topic - 5 contact hours per week
- Prerequisite: Culture topic consult Course Coordinator; Language topic - sem 1, 8 units Level II Humanities/Social Sciences, sem 2, French Studies III: Language Topic
- Restriction: Language Topic not available to students who have studied French at any level
- Assessment: Culture tutorial papers, essays, tests; Language - regular assignments, tests, exam 60%, 3000 word essay in English on French culture 40%

#### Culture

The Culture topic involves an individual research project (topic to be negotiated with the Course Coordinator) and a cultural studies option. In semester 1 the option will be either Short Stories or Autobiographical Fiction; and in semester 2 students choose from either Mediaeval France or Cinema of the Nouvelle Vague. Students can do either Semester 1 or 2, or both semesters.

#### Language

The Language topic offers the opportunity for students in third year to undertake an introductory French language and culture course, but at a more intensive level than at first or second year. It is particularly appropriate for prospective postgraduates needing reading skills in French and/or students wishing to do an Honours degree in the area of European Studies who are not majoring in a European language but who need to develop reading ability in the French language for research purposes. The research essay component of the course enables students to choose a topic in line with their own research interests. Students will be required to read selected French texts, although they will write their essay in English. Students intending to do semester 2 of the language topic, must first complete Semester 1.

## FREN 3011 French IIISA: Language and Culture

- 6 units semester 1
- 4 contact hours per week
- Prerequisite: FREN 2012 French IISB: Language and Culture
- Assessment: oral & written exercises, class tests, end of semester exam for language; tutorial papers, essays, tests for cultural studies component

This course comprises two strands - language acquisition and cultural studies - which have in common an emphasis on the acquisition of research skills. The language strand gives tuition in stylistics, advanced grammar and syntax, through regular assignments and class exercises (oral and written). The cultural studies strand involves choosing one cultural studies option (either Short Stories or Autobiographical Fiction).

## **FREN 3012**

## French IIISB: Language and Culture

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: FREN 3011 French IIISA: Language & Culture /French IIIA: Language & Culture Pt 1
- Assessment: oral and written exercises, class tests, end of year 3 hour exam, oral interview for language; tutorial papers, essays, tests for the cultural studies component

This course comprises two strands - language acquisition and cultural studies - which have in common an emphasis on the acquisition of research skills. The language strand gives tuition in stylistics, advanced grammar, translation and syntax, through regular assignments and class exercises (oral and written). The cultural studies strand involves choosing one cultural studies option (either Mediaeval France, Cinema of the Nouvelle Vague or Adelaide High School Mentoring Scheme).

## **FREN 3103WT**

#### **Technical French (Oenology)**

- 3 units semester 2
- 5 contact hours per week
- Eligibility: B.Science (Oenology) students only
- · Assessment: assignments, exams

This is an intensive French course for beginners, which has been specifically designed for students of oenology. The language component will be taught using a conventional language textbook, which will enable students to acquire basic skills in conversation and comprehension, and additional vocabulary lists will be supplied to assist students in acquiring elements of the language of wine culture in France. The reading component will focus on the language of wine production in France and Australia, looking at such topics as winegrowing areas, grape varieties and characteristics, soils and climates, and the wine industry. Students are welcome to suggest areas of interest and documents they wish to study.

## Honours

## **FREN 4401**

## **Honours French Studies**

- 24 units full year
- Prerequisite: BA degree, Cr.average in courses contributing to major in French Studies or equiv., approved by Head of Discipline
- Assessment: continuous assessment in language program 25%, cultural studies 25%, thesis and oral interview 50%

The content of Honours French Studies is as follows: Language - two hours per week in semesters 1 and 2 focusing on literary translations and advanced written and oral skills; Cultural Studies - two hours per week in semester 1 on a cultural topic (to be negotiated with the Honours coordinator); a 12,000 word thesis in French and an oral interview on the thesis topic. Students enrolling in French Honours from French III (beginners' stream) may choose to write a 15,000 word thesis in English.

In some circumstances Honours in French Studies can be studied part-time over two years or can be combined with Honours in another discipline.

# GENDER, WORK & SOCIAL INQUIRY

## Level I

## GWSI 1001/1001EX Social Sciences in Australia

- 3 units semester 1
- 3 contact hours per week/online
- · Available for Non-Award Study
- Assessment: tutorial participation, assignments; 1001EX: online tutorial participation, assignments

The social sciences (sociology, history, political economy etc) challenge everyday and media assumptions concerning Australian society. We explore the ways in which our identities are formed through the influences of youth, gender, class and ethnicity. We examine the different experiences of place according to the changing nature of nation states in a globalising world. The spatial differences and inequalities apparent within and between Australian cities as well as the spatial realms of home and work are considered. Finally, we discuss how issues, such as refugees or indigenous autonomy, come to be represented in particular moral and political terms, comparing their representation in the media with social science understandings.

## **GWSI 1002**

#### Image, Text and Representation

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: lecture, tutorial participation & tutorial exercises, approx. 2000 word analysis of magazine/cover advertisement, 2000 word take home exam

Advertising images are some of the most ubiquitous and influential elements in our everyday lives. Everywhere we go we encounter these images. This course studies the interrelationships of image and text in advertising and information genres on a global stage. It introduces students to a range of theories, analytical perspectives, and critical skills that inform the fields of media and communication studies. Students will develop an understanding of key concepts and approaches in contemporary media analysis from semiotics,

discourse theory, theories of representation and approaches to audience response. They will develop skills to read media images and texts critically, particularly in relation to advertisements. the news, and information media in local and alobal contexts. They will explore processes of the production and reading of texts, images, and the relationships between them that produce meaning in different ways, for different audiences, in different contexts. Topics will include image and representation: popular culture and globalisation: reading and decoding magazines and advertisements; 'us' and 'them' in the news; mythmaking, stereotypes and resistances to them: media concentration and ownership: changing strategies in advertising production; and transnationals and information media

## **GWSI 1003**

#### Gender, Work and Society

- 3 units semester 2
- · 3 contact hours per week
- · Available for Non-Award Study
- · Assessment: essays, other written work

This course explores how work in Australia and in all countries is gendered, how the specific experiences of women and men are different and are shaped by the changing nature of work and of gender. It aims to equip students with a set of analytical tools and perspectives to enable them to understand their own experience of work, its treatment in public life and the various approaches that exist in understanding and interpreting it, and of gender itself. It will explore the gendered impact of recent policies such as 'Work Choices' and 'Welfare to Work'

#### **GWSI 1004**

#### **Introduction to Gender Studies**

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: workshop/tutorial participation, written work

The course examines contemporary gender relations in Australian society, in the school, the workplace and the home. To what extent can we explain these relations in terms of women's and men's choices and to what extent in terms of masculinities and femininities, laws and institutions and the distribution of power and resources in Australian society? In a brief overview of the history of the women's and men's movements in Australia, we ask who has been excluded and who included by feminist activists, for example Aboriginal people, migrants, young men and women?

## Level II

## GWSI 2005/2005EX

#### Gender in a Postcolonial World

- 4 units semester 2
- 3 contact hours per week/online
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 2 written pieces of work, 1 based on seminar discussion, 1 major essay based on 'class debate' or presentation of different perspectives concerning a course topic/2005EX: 2 written pieces of work, online tutorial participation

The course examines theories and issues of western feminism from the perspective of the 'other', from women writing beyond the Englishspeaking west, for example women in Asia or South America. While the course explores the experiences of women in other cultures, the focus will be on how we think of western feminist issues differently when they are viewed from beyond Anglo-feminist frameworks. We will explore the issues of human rights, reproductive choices and sexualities. This course will be available through flexible delivery, for those who cannot attend any or all of the on-campus workshops.

#### GWSI 2006/2006EX

#### Life Stories: Australia 1850-1980

- 4 units semester 2
- 3 contact hours per week/online
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: major & minor essays, reports, oral presentations/2006EX: major & minor essays/reports, online tutorial participation

This course draws on biographical and autobiographical writing between 1850 and 1980 in order to explore the lives of Australian men, women and children in their social context. Key concerns will be masculinity, femininity, class and ethnicity. The course is structured into six units where each explores a particular tradition of life writing and analyses the life story of a particular individual or group as a window onto the sociocultural history of a specific decade. We will examine the conventions of secular hagiography detailing the work of constitutional and political figures of the 1890s. We will look at the lives of those deemed 'prohibited immigrants' under the White Australian Policy. Exploring the traditions of social history, we will consider lives potentially lost to history in the 1930s and 1950s and examine lifewriting as a political strategy in the 1970s/ 1980s.

## **GWSI 2007**

#### **Risk and Moral Panic in Australia**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: research exercises, essay, research project, preparation & participation in lectures & tutorials

The concept of risk and risk minimisation currently pervade public discussions of a wide range of social issues. The concept of risk both to individuals, and to broader society, typically underpin 'moral panics' about a wide range of social issues and personal practices. The course will explore, as case studies, several current debates in Australia such as those surrounding: HIV/AIDS, terrorism, the crisis in masculinity, assisted reproduction, the application of gene technology, infertility, border protection, the falling birth rate and relationship violence. The course will introduce key sociological and feminist approaches to the analysis of these public issues, in particular students will investigate the ways in which gender, sexuality, religion, ethnicity and class are mobilised within these morally charged discourses. The course provides the opportunity to learn and apply social research methods and offers a degree of student choice in the topic of the research assignment.

## GWSI 2011/2011EX

#### Youth, Work and Other Catastrophes

- 4 units semester 1
- · 3 contact hours per week/online
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: written assignment, seminar participation, group presentation, research project/2011EX: written assignment, online tutorial, research project

This course examines political, sociological and economic approaches to youth; the changing relationship and experiences of young people and social institutions (the labour market, the state, education, the family and the law) and young people's experience of and involvement with the state through labour market and key social policy measures. This course consists of three interrelated modules. The first module examines the development and shaping of young people's sense of self and identity within the context of formative influences such as class, gender, race, sexuality and ethnicity. The second module focuses on how young people are constructed as a category in public policy through discussions of contemporary challenges facing young people such as 'workplace citizenship', employment, education and training, youth homelessness and the law. The third module is run concurrently in modules one and two and will involve students working on a team-based research project involving policy analysis and group presentation.

#### **GWSI 2015**

#### **Social Research**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: may include practical assignments (incl. preparation & participation for seminars), critical review, textual analysis and survey research assignment

Most of us, during our lives both at work and outside it, will be making use of research whether as consumers of research understanding our communities, social, political and scientific worlds, or as employees reading and interpreting research results, or preparing them. This course gives students a solid grounding in the values, ethics and methods of social science research. It explores a range of approaches to research and their theoretical bases. The course requires active participation in weekly seminars where practical exercises and research simulations, provide the means whereby students learn the basic principles of different research methods, including interview and survey techniques, grounded theory, discourse and content analysis. Each student will undertake two research assignments, one utilising existing textual data and the other a primary data collection study using survey/interview techniques. The course will develop and assess student's skills

in all stages of the research process as well as in interpreting and evaluating research findings (i.e. research 'literacy').

## Level III

# GWSI 3005/3005EX

## Gender in a Postcolonial World

- 6 units semester 2
- 3 contact hours per week/online
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2 written pieces of work, 1 based on seminar discussion, 1 major essay based on 'class debate' or presentation of different perspectives concerning a course topic/3005EX: 2 written pieces of work, online tutorial participation

The course examines theories and issues of western feminism from the perspective of the 'other', from women writing beyond the Englishspeaking west, for example women in Asia or South America. While the course explores the experiences of women in other cultures, the focus will be on how we think western feminist issues differently when they are viewed from beyond Anglo-feminist frameworks. We will explore the issues of human rights, reproductive choices and sexualities. This course will be available through flexible delivery, for those who cannot attend any or all of the on-campus workshops.

## GWSI 3006/3006EX

## Life Stories: Australia 1850-1980

- 6 units semester 2
- 3 contact hours per week/online
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: major & minor essays, reports, oral presentations/3006EX: major & minor essays/ reports, online tutorial participation

This course draws on biographical and autobiographical writing between 1850 and 1980 in order to explore the lives of Australian men, women and children in their social context. Key concerns will be masculinity, femininity, class, race and ethnicity. The course is structured into six units where each explores a particular tradition of life writing and analyses the life story of a particular individual or group as a window onto the socio-cultural history of a specific decade. We will examine the conventions of secular hagiography detailing the work of constitutional and political figures of the 1890s. We will look at the lives of those deemed 'prohibited immigrants' under the White Australian Policy. Exploring the traditions of social history, we will consider lives potentially lost to history in the 1930s and 1950s and examine life-writing as a political strategy in the 1970s and 1980s.

## **GWSI 3007**

#### **Risk and Moral Panic in Australia**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: research exercises, essay, research project, preparation & participation in lectures & tutorials

The concept of risk and risk minimisation currently pervade public discussions of a wide range of social issues. The concept of risk both to individuals, and to broader society, typically underpin 'moral panics' about a wide range of social issues and personal practices. The course will explore, as case studies, several current debates in Australia such as those surrounding: HIV/AIDS, terrorism, the crisis in masculinity, assisted reproduction, the application of gene technology, infertility, border protection, the falling birth rate and relationship violence. The course will introduce key Sociological and Feminist approaches to the analysis of these public issues, in particular students will investigate the ways in which gender, sexuality, religion, ethnicity and class are mobilised within these morally charged discourses. The course provides the opportunity to learn and apply social research methods and offers a degree of student choice in the topic of the research assignment.

## GWSI 3011/3011EX

## Youth, Work and Other Catastrophes

- 6 units semester 1
- 3 contact hours per week/online
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: written assignment, seminar participation, group presentation, research project/3011EX: written assignment, online tutorial, research project

This course examines political, sociological and economic approaches to youth; the changing relationship and experiences of young people and social institutions (the labour market, the state, education, the family and the law) and young people's experience of and involvement with the state through labour market and key social policy measures. This course consists of three interrelated modules. The first module examines the development and shaping of young people's sense of self and identity within the context of formative influences such as class, gender, race, sexuality and ethnicity. The second module focuses on how young people are constructed as a category in public policy through discussions of contemporary challenges facing young people such as 'workplace citizenship', employment, education and training, youth homelessness and the law. The third module is run concurrently in modules one and two and will involve students working on a team-based research project involving policy analysis and group presentation.

## **GWSI 3015**

## **Social Research**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: may include practical assignments (incl. preparation & participation for seminars), critical review, textual analysis and survey research assignment

Most of us, during our lives both at work and outside it, will be making use of research whether as consumers of research understanding our communities, social, political and scientific worlds, or as employees reading and interpreting research results, or preparing them. This course gives students a solid grounding in the values, ethics and methods of social science research. It explores a range of approaches to research and their theoretical bases. The course requires active participation in weekly seminars where practical exercises and research simulations provide the means whereby students learn the basic principles of different research methods, including interview and survey techniques, grounded theory, discourse and content analysis. Each student will undertake two research assignments, one utilising existing textual data and the other a primary data collection study using survey/interview techniques. The course will develop and assess students' skills in all stages of the research process as well as in interpreting and evaluating research findings (research 'literacy').

## Honours

## **GWSI 4401**

## Honours Gender, Work and Social Inquiry

- 24 units full year
- Prerequisite: UG degree, minimum Cr. average in courses contributing to major in Gender, Work and Social Inquiry, or equiv. approved by the Discipline
- Assessment: 2 coursework topics with written work of approx. 6500-7500 words 25% each, 15000-18000 word thesis 50%

Students wishing to take Honours should consult the Honours Coordinator prior to commencing level III to ensure appropriate course choices are made in preparation for Honours.

The Honours program consists of two seminar courses and an Honours thesis. A list of Honours seminar courses is available from the Honours Coordinator. We encourage students who are eligible for honours in more than one discipline to consider a joint Honours program with the approval of the Heads of Discipline on advice from their respective Honours Coordinators.

In some circumstances this course can be studied part-time over two years.

# **GENERAL PRACTICE**

# Level II

# GEN PRAC 2000HO Indigenous Health II

- 3 units semester 1 or 2
- 3 hour session per week
- · Eligibility: MBBS students only
- Assessment: oral presentation 10%, written tutorial assignment 30%, group presentation 10%, final essay assignment 50%

This course aims to introduce students to an analysis of Indigenous health that draws on interdisciplinary theoretical frameworks from the social sciences and humanities, including reference to frameworks developed by Indigenous social scientists, writers and artists. Students will explore historical, social and cultural contexts and their application to an analysis of particular Indigenous health problems. The will also gain an understanding of issues connected to identity and cultural diversity as they relate to developments in the relationship between the health professional and the indigenous subject. Furthermore, students will complete the elective with an increased understanding of some of the underlying historical, social and cultural issues, and their relationship to health and wellbeing as defined by Indigenous people.

## GEN PRAC 2001H0

## **Indigenous Health IIHS**

- 4 units semester 1 or 2
- 3 hour session per week
- Eligibility: B.Hlth.Sc. students only
- Assessment: oral presentation 10%, written tutorial assignment 30%, group presentation 10%, final essay assignment 50%

This course aims to introduce students to an analysis of Indigenous health that draws on interdisciplinary theoretical frameworks from the social sciences and humanities, including reference to frameworks developed by Indigenous social scientists, writers and artists. Students will explore historical, social and cultural contexts and their application to an analysis of particular Indigenous health problems. The will also gain an understanding of issues connected to identity and cultural diversity as they relate to developments in the relationship between the health professional and the indigenous subject. Furthermore, students will complete the elective with an increased understanding of some of the underlying historical, social and cultural issues, and their relationship to health and wellbeing as defined by Indigenous people.

## Honours

## **GEN PRAC 4000**

## **Honours Primary Health Care**

- 24 units full year
- Eligibility: B.Med.Sc. students. appropriately qualified B.Hlth.Sc. students, or permission of Head of Department
- · Assessment: to be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible

# GENETICS

# Level II

## **GENETICS 2100**

## **Genetics IIA: Foundation of Genetics**

- 4 units semester 1
- 3 lectures, 1 tutorial, 1 practical per week
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101 Biology I: Molecules, Genes & Cells A or BIOLOGY 1102 Biology I: Molecules, Genes & Cells B
- Restriction: GENETICS 2102 Genetics IIA (Mol. Biol.), GENETICS 2106 Genetics IIA (Biomed. Sc.)
- Assessment: exam, tutorial & practical component assessment

This course aims to provide a broad understanding of some of the foundation concepts of genetics. We begin with examining different patterns of inheritance and the nature of linkage and genetic recombination, move onto discussing the nature of mutations, their use in analysis of biological processes, and the connections between genotype and phenotype. Other topics include bacterial genetics and regulation of gene expression in prokaryotes and eukaryotes.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

# **GENETICS 2102**

## **Genetics IIA (Molecular Biology)**

- 3 units semester 1
- 3 lectures, 1 tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: BIOLOGY 1101 Biology I: Molecules, Genes and Cells A or BIOLOGY 1102 Biology I: Molecules, Genes and Cells B
- Restriction: GENETICS 2100 Genetics IIA: Foundation of Genetics
- Assessment: exam, tutorial assessment

This course aims to provide a broad understanding of some of the foundation concepts of genetics. We begin with examining different patterns of inheritance and the nature of linkage and genetic recombination, move onto discussing the nature of mutations, their use in analysis of biological processes, and the connections between genotype and phenotype. Other topics include bacterial genetics and regulation of gene expression in prokaryotes and eukaryotes. This course is equivalent to the lecture and tutorial component GENETICS 2100 Genetics IIA: Foundation of Genetics.

## **GENETICS 2106**

#### **Genetics IIA (Biomedical Science)**

- 4 units semester 1
- 3 lectures, 1 tutorial, 1 practical per week
- Eligibility: BSc (Biomed Sc) students only
- Prerequisite: one of BIOLOGY 1101 Biology I: Molecules, Genes and Cells A or BIOLOGY 1102 Biology I: Molecules, Genes and Cells B
- Restriction: GENETICS 2100 Genetics IIA: Foundation of Genetics
- Assessment: exam, tutorial & practical component

This course aims to provide a broad understanding of some of the foundation concepts of genetics, with a specialised emphasis on human genetics. We begin with examining different patterns of inheritance and the nature of linkage and genetic recombination, move onto discussing the nature of mutations, their use in analysis of biological processes, and the connections between genotype and phenotype. Other topics include bacterial genetics and regulation of gene expression in prokaryotes and eukaryotes.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

## **GENETICS 2200**

#### Genetics IIB: Function and Diversity of Genomes

- 4 units semester 2
- 3 lectures, 1 tutorial, 1 practical per week
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101 Biology I: Molecules, Genes and Cells A or BIOLOGY 1102 Biology I: Molecules, Genes and Cells B
- Assumed Knowledge: GENETICS 2100 Genetics
   IIA: Foundation of Genetics

- Restriction: GENETICS 2202 Genetics IIB (Mol. Biol.), GENETICS 2206 Genetics IIB (Biomed.Sc.)
- Assessment: exam, tutorial & practical component

This course aims to provide an appreciation of the power of genetic analysis, building on the concepts developed in GENETICS 2100. Topics include structure and function of nuclear and organellar genomes, genetic dissection of the cell cycle, cancer as a genetic disease, human genetics and genetic control of embryo development. The course concludes with an overview of molecular evolution and the genetics of populations.

The practical component for this course draws from the MBS Prac A, Prac B and Prac C series. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for information on enrolling in these practicals.

# GENETICS 2202

#### **Genetics IIB (Molecular Biology)**

- 3 units semester 2
- 3 lectures, 1 tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: BIOLOGY 1101 Biology I: Molecules, Genes and Cells A or BIOLOGY 1102 Biology I: Molecules, Genes and Cells B
- Assumed Knowledge: GENETICS 2102 Genetics IIA (Mol.Bio.)
- Restriction: GENETICS 2200 Genetics IIB: Function and Diversity of Genomes
- · Assessment: exam, tutorial assessment

This course aims to provide an appreciation of the power of genetic analysis, building on the concepts developed in GENETICS 2102. Topics include structure and function of nuclear and organellar genomes, genetic dissection of the cell cycle, cancer as a genetic disease, human genetics and genetic control of embryo development. The course concludes with an overview of molecular evolution and the genetics of populations. This course is equivalent to the lecture and tutorial component GENETICS 2200 Genetics IIB: Function and Diversity of Genomes.

## **GENETICS 2206**

## **Genetics IIB (Biomedical Science)**

- 4 units semester 2
- 3 lectures, 1 tutorial, 1 practical per week
- Eligibility: BSc (Biomedical Sc.) students only
- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells A/B
- Assumed Knowledge: GENETICS 2106 Genetics IIA (Biomed.)
- Restriction: GENETICS 2200 Genetics IIB: Function and Diversity of Genomes
- Assessment: exam, tutorial & practical component

This course aims to provide an appreciation of the power of genetic analysis, building on the concepts developed in GENETICS 2100/2106. Topics include structure and function of nuclear and organellar genomes, genetic dissection of the cell cycle, cancer as a genetic disease, human genetics and genetic control of embryo development. The course concludes with an overview of molecular evolution and the genetics of populations. The practical component of this course aims to develop advanced literature research skills, teamwork experience, and written and oral presentation skills.

# Level III

## **GENETICS 3110**

## **Advanced Molecular Biology IIIA (Genetics)**

- 6 units semester 1
- 3 x 1 hour lectures, 5 hour practical, 1 hour tutorial per week
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: BIOCHEM 2102 & 2202 Adv. Molecular Biology A&B; GENETICS 2100 or 2102 & GENETICS 2200 or 2201 Genetics IIA&B
- Restriction: BIOCHEM 3125 Adv. Mol. Biol. IIIA (Biochem); GENETICS 3111 Genes, Genomes and Molecular Evolution; BIOCHEM 3002, 3000
- Assessment: written exam on lecture material, written & oral reports on practicals & tutorials

This course combines lectures from GENETICS 3111 Genes, Genomes and Molecular Evolution with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting-edge molecular biology principles and techniques are applied to major research questions. The PBL segment of course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

## **GENETICS 3111**

#### Genes, Genomes and Molecular Evolution

- 6 units semester 1
- 6 lectures, 1 tutorial, 3 x 4 hour practicals per fortnight
- Available for Non-Award Study
- Prerequisite: GENETICS 2100 Genetics IIA & GENETICS 2200 Genetics IIB,or GENETICS 2102 Genetics IIA (MB) & GENETICS 2202 Genetics IIB (MB),or GENETICS 2106 Genetics IIA (Biomed) & 2206 Genetics IIB (Biomed),or GENETICS 2100 Genetics IIA- for BSc(Biotech) students only
- Restriction: GENETICS 3110 Advanced Molecular Biology IIIA (Genetics), GENETICS 3000, 3002
- Assessment: exam, practical component, written reports

The DNA molecules that comprise the informational basis of inheritance in living organisms are collectively referred to as the genome. In this course the organisation, origin and mechanisms of change of prokaryotic and eukaryotic genomes are explored using cytogenetic and molecular genetic analyses. Topics include - structure and function of genomes and chromosomes; chromosomes in disease; genomics; genome evolution; interactions between nuclear, mitochondrial and chloroplast genomes; mechanisms for the generation and maintenance of diversity in eukaryotes; the roles of natural selection and chance as drivers of molecular evolution; molecular phylogeny.

## **GENETICS 3210**

## Advanced Molecular Biology IIIB (Genetics)

- 6 units semester 2
- 3 x 1 hour lectures, 5 hour practical, 1 hour tutorial per week
- Eligibility: BSc (Molecular Biology) students only

- Prerequisite: BIOCHEM 2102 & 2202 Adv. Molecular Biology A & B, GENETICS 2100 or 2102 & GENETICS 2200 or 2201; Genetics IIA/B
- Assumed Knowledge: GENETICS 3110
   Advanced Molecular Biology IIIA (Genetics)
- Restriction: BIOCHEM 3225 Adv. Mol. Biol. IIIB (Biochem); GENETICS 3006 Human Dev & Evol. Gen.
- Assessment: written exam on lecture material, written & oral reports on practicals & tutorials

This course combines lectures from GENETICS 3211 Gene Expression and Human & Development Genetics with practical exercises and/or laboratory placements in professional research laboratories. It includes a special set of tutorial/Problem Based Learning (PBL) exercises, not offered in any other course, which are designed to provide students with a perspective of how cutting edge molecular biology principles and techniques are applied to major research questions. The PBL segment of course will include aspects of biochemistry, genetics, microbiology/immunology and chemistry. This course will illustrate that cross-disciplinary approaches are essential in modern research.

## **GENETICS 3211**

# Gene Expression and Human and Developmental Genetics

- 6 units semester 2
- 6 lectures, 1 tutorial, 3 x 4 hour practicals per fortnight
- Available for Non-Award Study
- Prerequisite: GENETICS 2100/2200 Genetics IIA & IIB, or GENETICS 2102 Genetics IIA(MB) & GENETICS 2202 Genetics IIB(MB),or GENETICS 2106 Genetics IIA(Biomed) & GENETICS 2206 Genetics IIB(Biomed), GENETICS 2100 Genetics IIA - BSc (Biotech) students only
- Assumed Knowledge: GENETICS 3111 Genes, Genomes and Molecular Evolution
- Restriction: GENETICS 3210 Advanced Molecular Biology IIIB (Genetics), GENETICS 3005, 3006
- Assessment: exam, practical component, written reports

This advanced genetics course examines the diverse molecular mechanisms that control the expression of genes in prokaryotes and eukaryotes. It continues with a description of the human genome and a description of how genes are regulated during development. Topics include the regulation of gene expression; epigenetic events; the genetic and epigenetic basis of human disease (including cancer); neurogenetics; gene therapy; genetic control of development.

## **GENETICS 3212**

## Gene Expression and Human and Developmental Genetics (Biomed)

- 6 units semester 2
- 6 lectures, 1 tutorial, 3 x 4 hour practicals per fortnight
- Eligibility: BSc.(Biomed.) students only
- Prerequisite: GENETICS 2100 Genetics IIA & GENETICS 2200 Genetics IIB, or GENETICS 2106 Genetics IIA (Biomed) & GENETICS 2206 Genetics IIB (Biomed)
- Restriction: GENETICS 3211 Gene Exp and Human & Dev Genetics, GENETICS 3005, 3006
- Assessment: exam, reports of practical component

This advanced genetics course examines the diverse molecular mechanisms that control the expression of genes in prokaryotes and eukaryotes. It continues with a description of the human genome and a description of how genes are regulated during development. Topics include - the regulation of gene expression; epigenetic events; the genetic and epigenetic basis of human disease (including cancer); neurogenetics; gene therapy; genetic control of development.

Subject to availability, the practical component of this course is a placement within a genetic research laboratory which will be arranged by the course convenor.

## Honours

## **GENETICS 4000**

## **Honours Genetics**

- 24 units full year
- Prerequisite: satisfactory performance in appropriate Level III courses offered by School of Molecular & Biomedical Sc. -students from other departments or institutions who have passed suitable Level III courses may be considered
- Assessment: details available from School

Candidates are required to give their full attendance for one academic year to a program of study. Each candidate will carry out a research investigation under the supervision of a member of staff. The program will include participation in seminars and discussions on advanced topics, essay writing and a research proposal. Candidates will be required to present the results of their research work in written form.

Intending Honours candidates should consult the Head of Genetics during the final year of the B.Sc.

# GEOGRAPHICAL AND ENVIRONMENTAL STUDIES

## Level I

## **GEST 1001**

## **Globalisation, Justice and a Crowded Planet**

- 3 units semester 2
- 3 contact hours per week, fieldwork
- Restriction: GEOG 1004 Population, Globalisation and Social Justice
- Assessment: tutorial participation, attendance & exercises 20%, workshop participation & attendance 20%, essay 20%, exam 40% - total approx 4500 words

This course is concerned with three of the most important global forces operating on human populations at local, national and international scales: (i) population growth and migration, (ii) processes of globalisation and (iii) environmental scarcity and degradation. In doing so, the course seeks to introduce students to the important demographic, social and environmental issues affecting Australia and the world. By linking demographic and migratory shifts to the social, economic and political manifestations of alobalisation, the course enables students to understand the problems of environmental degradation in a global context. Moreover, this analysis helps students to understand the major processes that operate to create, maintain and even deepen inequality, poverty and environmental and social justice around the world. Inequalities between and among individuals, groups, regions and nations represent some of the most critical and pervasive global problems.

The course considers these matters through local and developing country case studies. Attention is

also paid to possible policy responses to the problems of managing a 'crowded planet' and responding to social injustice.

## **GEST 1002**

#### **Sustaining a Fragile Planet**

- 3 units semester 1
- 3 contact hours per week
- Restriction: GEOG 1002 Footprints on a Fragile Planet, ENVT 1110 Sustaining Australia: The Environmental Challenge
- Assessment: essay 40%, tutorial & workshop exercises 20%, exam 40% - total approx 4500 words

This course introduces students to the contemporary sustainability crisis that confronts Australia and the world and seeks to involve students in a search for possible solutions to the contemporary environmental or ecological degradation problems from social sciences perspectives. The course first examines global environmental issues including climate change, land desertification, deforestation, biodiversity loss and water pollution. The course next investigates anthropocentric and ecocentric views of sustainable development. The course next considers a range of government policy responses (e.g. waste recycling, community-based natural resource management strategies, ecotourism) to the environmental problems. The course finally pays attention to the issues with respect to intergovernmental cooperation in pollution control and wildlife conservation.

# Level II

## **GEST 2002**

#### **Environmental Management**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: tutorial participation 10%, essays 40%, exam 50% total approx 6000 words

The course will provide a critical survey of the contemporary field of environmental management in the Australian context. The course is centrally concerned with understanding deliberate efforts to translate (environmental) knowledge into action in order to achieve particular outcomes in the way the Australian landscape is used and managed. It will also consider how the objectives for land and resource use are shaped, fashioned and contested in democratic settings. The course will begin by introducing students to the long-dominant "command and control" approach (or rational planning model). It will then shift focus to address a set of intellectual and socio-political changes new theories of ecology, the interrelationship between values and knowledge, the restructuring of the public sphere and the emergence of new actors - to set the scene for contemporary approaches to environmental planning. A feature of the course's examination of contemporary approach will be in-depth analysis of nationally prominent cases of environmental management: the Regional Forest Agreement process, the Natural Heritage Trust and the Resource Assessment Commission's inquiry into land use at Coronation Hill. The course will critically examine contemporary thinking about environmental planning including: decentralised environmental management, the role of NGOs, community-based approaches and regional planning.

## **GEST 2005**

#### Living on the Edge: Humans and Landscape

- 4 units semester 1
- 3 contact hours per week, optional fieldtrip
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences/Engineering
- Restriction: Landscape Patterns and Processes
- Assessment: exam 40%, essay 30%, 2 tutorial papers 30% - total approx 6000 words

This course deals with the interactions between humans and landscape. Using examples drawn from every continent, we show how prehistoric human societies adapted to the changing environments of the past few million years and how they had a progressively greater impact upon the landscapes in which they lived. We also consider spatial variations in landscape, noting the peculiar risks to human endeavour associated with volcanic, glacial, desert and humid landscapes. We continue with a discussion of early plant and animal domestication and with the emergence of urban civilisations in various parts of the world, often but not always along major river valleys such as the Nile, Indus and Yellow River. We conclude with a detailed evaluation of the role of humans and climatic changes in creating deserts and salt accumulation in agricultural areas.

#### **GEST 2009**

## Introduction to Environmental Impact Assessment

- 4 units semester 1
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: seminar participation and presentations 25%, essays/reports 75% - total approx 6000 words

This course introduces the methodology of environmental impact assessment (EIA) and examines the development and practice of EIA overseas. The course then focuses on EIA in Australia and, in particular, draws on case studies of EIA from around Australia with a focus on South Australia. Different levels of EIA are examined alongside key stages in the EIA process such as screening, scoping, EIA document preparation, public involvement, review and assessment, monitoring and auditing, appeal rights and decision-making. A number of major projects with environmental impact statements (EISs) are critically examined together with the EIA process in South Australia. This includes discussion of recent changes to legislation.

## **GEST 2010**

#### **Tourism Development and Sustainability**

- 4 units semester 1
- 4 contact hours per week, 2 days fieldwork
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: workshop exercises 40%, field exercises 40%, essay 20% - total approx 6000 words

This course is focused on ecotourism in the Asia-Pacific region, with particular emphasis on Australia and South Australia. The term `ecotourism' refers to sustainable forms of nature/culture-based tourism. This course provides an understanding of the principles of ecotourism (as sustainable nature/culture-based tourism) and practical experience in applying these principles to the management of ecotourism projects. To achieve these objectives the course will: examine current and forecasted trends in the tourism industry, particularly in the context of South Australia, but also with reference to Australia and the wider Asia-Pacific region; provide an understanding of the economics of the tourism industry and its social and ecological impacts, both positive and negative; outline the key elements of ecotourism, where ecotourism involves a sustainable approach to the management of nature/culture-based tourism projects; examine ecotourism codes and guidelines for tourists, tourism operators and destinations; review the methodology of tourism impact assessment, tourism visitor management, community participation in tourism projects, ecotourism accreditation and ecotourism site and activity design; demonstrate the development of ecotourism strategies for regions and destinations.

## **GEST 2015**

#### Wetlands and Water Resources

- 4 units semester 1
- · 4 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: essay, exam total approx 6000
   words

This course provides an introduction to climate patterns, water catchments, the nature of wetlands and the variability of water resources over space and time. Accordingly, the themes addressed include local and global climates; variation in precipitation patterns, the operation of the water cycle, land-runoff interactions, groundwater processes, monitoring water quality and the ecology of aquatic ecosystems including lakes, rivers and estuaries. These fundamental principles will be employed to examine contemporary issues in water resources such as environmental flows, wetland reserves and 'the Cap' drawing on evidence from the Daly, Murray and Snowy River catchments.

## **GEST 2016**

#### **Population and Health**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: tutorial participation 10%, tutorial paper 20%, essay 30%, exam 40% - total approx 6000 words

This course is aimed at introducing students to geographical and demographic perspectives in the

study of health. It is concerned with providing students with the empirical knowledge, theoretical background and analytical studies to examine the distribution and determinants of health related states and mortality in populations. Such analyses involve both examination of variations between different types of groups: socio economic, ethnic, etc., and between different spatial areas. There will be a particular focus on migration and health. There will be an emphasis on developing applied skills in students so that they are familiar with the data sources required to study health and mortality in populations as well as with the major techniques involved. In particular, students will learn how new technologies in geographical information systems can be used to analyse the spatial patterns of disease and health, the geographical spread of diseases and in planning the allocation of health resources and location of health services. While there is a focus on the Australian situation in the course students will also be introduced to some of the major population and health issues in Asia and Africa. There will not only be an emphasis on examination of health and disease patterns in populations but also on planning the interventions needed to address health problems.

#### **GEST 2018**

#### **Environmental Change**

- 4 units semester 2
- 4 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: essay, exam total approx 6000
   words

The aim of this course is to introduce students to the global environmental fluctuations over the last two million years as context to recent anthropogenic change. Our focus is on the interactions between the geological, biological and hydrological processes that have given rise to the landscapes and ecosystems we see today. We then explore the affects of accelerating human impact on the environment and consider how far the long-term record may be useful in understanding recent change and predicting future environmental change. Topics include natural cycles of Quaternary climate change, glacials and interglacials, sea-level fluctuations, hydrological changes and the waxing and waning of vegetation communities. The past and future impacts of

greenhouse warming, regulation and abstraction, deforestation, pollution, desertification and other recent perturbations are then examined in relation to natural rates and magnitudes of change.

## **GEST 2020**

#### **Urban Futures: Environmental and Social Issues**

- 4 units semester 1
- 3 contact hours per week, fieldwork
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: exam 40%, essay 30%, tutorial exercises and participation 30% - total approx 6000 words

This course focuses on the city. By the end of this decade, more than half of the world's population will live in cities, making humanity a predominantly urban species for the first time in its history. With reference to cities in both Australian and global contexts, this course explores the environmental consequences of urbanisation, the city as a dynamic cultural space, the socio-economic 'drivers' of urbanisation and urban governance. The course will also explore what has been described as a 'global urban crisis' caused by urban sprawl, which in turn causes problems of water and energy supply, pollution, increasing inequalities and socio-economic stratification, and is responsible for the rise of the 'mega-urban region'.

## **GEST 2021**

#### **Resource Scarcity and Allocation**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: essays 50%, exam 40%, tutorial participation 10% - total approx 6000 words

The course aims to generate an understanding of the complex issues arising when decisions have to be made about the management, conservation and use of scarce natural resources, and of the interface between economics, ecology, sociology, law and other disciplines, with respect to these decisions. The primary concern of the course is over the sustainable exploitation of non-renewable and renewable natural resources, including minerals, water resources, fisheries and forests, in an Australian context. The course therefore investigates intertemporal and interpersonal allocative efficiency and distributive equity issues, by way of various case studies. The course considers non-marketed benefits of natural resources, multiple-use conflicts and economic tradeoffs between alternative resource uses.

## **GEST 2022**

#### **Introductory Geographic Information Systems**

- 4 units semester 2
- 4 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assumed Knowledge: intermediate computer skills
- Assessment: practical exercises/reports 50%, tutorial 10%, exam 40% total approx 6000 words

'Geography Matters' (Environmental Systems Research Institute). Put the space and place into your understanding of urban, social and environmental issues. Learn about the importance of location in the interplay between human and environmental systems. This course provides an introduction to the theory and practice of geographic information systems (GIS). What is geographic data? What is GIS? How is GIS applied in the study of real world issues? This course will introduce some of the basic concepts of GIS, input of data, storage and management of data, modelling geographic data and output from GIS. Concepts such as how to model the complex real world in a computer and the difference between data and geographic data are covered. Lectures cover the basics of GIS, vector and raster data models, geographic data analysis, visualisation techniques and geographic data overlay. Importantly, the focus of this course is in the application of GIS to solving real world problems using examples from social, urban and environmental issues. Practical sessions build basic skills in GIS such as adding data, visualising data, analysing and modelling data and outputting data using data and examples from the above subject areas.

## **GEST 2023**

## **Global International Migration**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: tutorial/workshop participation 10%, workshop exercise 10%, major research project 40%, exam 40% - total approx 6000 words

At no stage in human history has there been higher mobility between nations and this has important implications for economic, social, demographic, environmental, political and cultural change. This course is designed to introduce students to the scale, composition, characteristics, causes, effects and implications of evolving patterns of population movement between nations. It focuses especially on the relationship between migration on the one hand and economic development, environmental issues and social change on the other, arguing that the relationship is complex and multi-directional. It introduces the concept of diaspora and investigates its increasing significance. While the focus is on global patterns and issues there is a concentration on Australia and the Asia Pacific region to illustrate the main emerging patterns. A number of theories which have been put forward to explain migration are investigated and assessed. There is a particular concentration on the role of policy with respect to both the migration process and the reception of migrants in destination countries. Migration is a strongly gendered process and the migration of women, its distinct causes and implications are examined. Student migration is another topic of interest that will be examined in the course.

## **GEST 2024**

## **Global Change and Coasts**

- 4 units semester 2
- 3 contact hours per week, fieldwork
- Prerequisite: 6 units Level I Humanities & Social Sciences/Sciences
- Assessment: essays 30%, seminar 40%, field reports 30% total approx 6000 words

This course provides an introduction to the impacts of global change on coastal environments. It is important because global change is increasingly affecting our lives and most of the world's population live near the coast and

depend heavily on coastal resources. The course outlines patterns and cycles of coastal change in a geological context as a background to more recent changes incorporating human influences. The course discusses the concept of global change and the difficulties in separating human impact from natural change. It also examines the human use of coastal resources and the impact of globalisation in economic terms where coastal impacts in one country may be related to resource demand in another. The course outlines the science behind global changes affecting the coast such as sea-level rise, elevated sea-surface temperatures, changes in river flow and coastal sediment supply and discusses these in terms of the potential impacts, adaptation and vulnerability of coastal settlements and population. The course draws heavily on international scientific work from the intergovernmental panel on climate change (IPCC), the international geosphere-biosphere program (IGBP) and the earth system science partnership (ESSP) but also discusses alternative perspectives.

# Level III

## **GEST 3002**

#### **Environmental Management**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: tutorial participation 10%, essays 40%, exam 50% total approx 9000 words

The course will provide a critical survey of the contemporary field of environmental management in the Australian context. The course is centrally concerned with understanding deliberate efforts to translate (environmental) knowledge into action in order to achieve particular outcomes in the way the Australian landscape is used and managed. It will also consider how the objectives for land and resource use are shaped, fashioned and contested in democratic settings. The course will begin by introducing students to the long-dominant "command and control" approach (or rational planning model). It will then shift focus to address a set of intellectual and socio-political changes new theories of ecology, the interrelationship between values and knowledge, the restructuring of the public sphere and the emergence of new actors - to set the scene for contemporary

approaches to environmental planning. A feature of the course's examination of contemporary approach will be in-depth analysis of nationally prominent cases of environmental management: the Regional Forest Agreement process, the Natural Heritage Trust and the Resource Assessment Commission's inquiry into land use at Coronation Hill. The course will critically examine contemporary thinking about environmental planning including: decentralised environmental management, the role of NGOs, community-based approaches and regional planning.

## **GEST 3005**

#### Living on the Edge: Humans and Landscape

- 6 units semester 1
- 3 contact hours per week, optional fieldtrip
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences/Engineering
- Restriction: Landscape Patterns and Processes
- Assessment: exam 40%, essay 30%, 2 tutorial papers 30% - total approx 9000 words

This course deals with the interactions between humans and landscape. Using examples drawn from every continent, we show how prehistoric human societies adapted to the changing environments of the past few million years and how they had a progressively greater impact upon the landscapes in which they lived. We also consider spatial variations in landscape, noting the peculiar risks to human endeavour associated with volcanic, glacial, desert and humid landscapes. We continue with a discussion of early plant and animal domestication and with the emergence of urban civilisations in various parts of the world, often but not always along major river valleys such as the Nile, Indus and Yellow River. We conclude with a detailed evaluation of the role of humans and climatic changes in creating deserts and salt accumulation in agricultural areas.

## **GEST 3009**

## Introduction to Environmental Impact Assessment

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences

 Assessment: seminar participation and presentations 25%, essays/reports 75% - total approx 9000 words

This course introduces the methodology of environmental impact assessment (EIA) and examines the development and practice of EIA overseas. The course then focuses on EIA in Australia and, in particular, draws on case studies of EIA from around Australia with a focus on South Australia. Different levels of EIA are examined alongside key stages in the EIA process such as screening, scoping, EIA document preparation, public involvement, review and assessment, monitoring and auditing, appeal rights and decision-making. A number of major projects with environmental impact statements (EISs) are critically examined together with the EIA process in South Australia. This includes discussion of recent changes to the legislation.

# **GEST 3010**

## **Tourism Development and Sustainability**

- 6 units semester 1
- 4 contact hours per week, five days fieldwork
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: workshop exercises 40%, field exercises 40%, essay 20% - total approx 9000 words

This course is focused on ecotourism in the Asia-Pacific region, with particular emphasis on Australia and South Australia. The term ecotourism' refers to sustainable forms of nature/culture-based tourism. This course provides an understanding of the principles of ecotourism (as sustainable nature/culture-based tourism) and practical experience in applying these principles to the management of ecotourism projects. To achieve these objectives the course will: examine current and forecasted trends in the tourism industry, particularly in the context of South Australia, but also with reference to Australia and the wider Asia-Pacific region; provide an understanding of the economics of the tourism industry and its social and ecological impacts, both positive and negative; outline the key elements of ecotourism, where ecotourism involves a sustainable approach to the management of nature/culture-based tourism projects; examine ecotourism codes and guidelines for tourists, tourism operators and destinations; review the methodology of tourism

impact assessment, tourism visitor management, community participation in tourism projects, ecotourism accreditation and ecotourism site and activity design; demonstrate the development of ecotourism strategies for regions and destinations.

## **GEST 3015**

#### Wetlands and Water Resources

- 6 units semester 1
- 4 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: essay, report, exam total approx 9000 words

This course provides an introduction to climate patterns, water catchments, the nature of wetlands and the variability of water resources over space and time. Accordingly, the themes addressed include local and global climates; variation in precipitation patterns, the operation of the water cycle, land-runoff interactions, groundwater processes, monitoring water quality and the ecology of aquatic ecosystems including lakes, rivers and estuaries. These fundamental principles will be employed to examine contemporary issues in water resources such as environmental flows, wetland reserves and 'the Cap' drawing on evidence from the Daly, Murray and Snowy River catchments.

## **GEST 3016**

## **Population and Health**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: tutorial participation 10%, tutorial paper 20%, essay 30%, exam 40% - total approx 9000 words

This course is aimed at introducing students to geographical and demographic perspectives in the study of health. It is concerned with providing students with the empirical knowledge, theoretical background and analytical studies to examine the distribution and determinants of health related states and mortality in populations. Such analyses involve both examination of variations between different types of groups; socio economic, ethnic, etc., and between different spatial areas. There will be a particular focus on migration and health. There will be an emphasis on developing applied skills in students so that they are familiar with the data sources required to study health and mortality in populations as well as with the major techniques involved. In particular, students will learn how new technologies in geographical information systems can be used to analyse the spatial patterns of disease and health, the geographical spread of diseases and in planning the allocation of health resources and location of health services. While there is a focus on the Australian situation in the course students will also be introduced to some of the major population and health issues in Asia and Africa. There will not only be an emphasis on examination of health and disease patterns in populations but also on planning the interventions needed to address health problems.

## GEST 3018

#### **Environmental Change**

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: essay, report, exam total approx 9000 words

The aim of this course is to introduce students to the global environmental fluctuations over the last two million years as context to recent anthropogenic change. Our focus is on the interactions between the geological, biological and hydrological processes that have given rise to the landscapes and ecosystems we see today. We then explore the affects of accelerating human impact on the environment and consider how far the long-term record may be useful in understanding recent change and predicting future environmental change. Topics include natural cycles of Quaternary climate change, glacials and interglacials, sea-level fluctuations, hydrological changes and the waxing and waning of vegetation communities. The past and future impacts of greenhouse warming, regulation and abstraction, deforestation, pollution, desertification and other recent perturbations are then examined in relation to natural rates and magnitudes of change.

## **GEST 3020**

#### **Urban Futures: Environmental and Social Issues**

- 6 units semester 1
- 3 contact hours per week, fieldwork
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: exam 40%, essay 30%, tutorial exercises and participation 30% - total approx 9000 words

This course focuses on the city. By the end of this decade, more than half of the world's population will live in cities, making humanity a predominantly urban species for the first time in its history. With reference to cities in both Australian and global contexts, this course explores the environmental consequences of urbanisation, the city as a dynamic cultural space, the socio-economic 'drivers' of urbanisation and urban governance. The course will also explore what has been described as a 'global urban crisis' caused by urban sprawl, which in turn causes problems of water and energy supply, pollution, increasing inequalities and socio-economic stratification, and is responsible for the rise of the 'mega-urban region'.

# GEST 3021

## **Resource Scarcity and Allocation**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: essays 50%, exam 40%, tutorial participation 10% - total approx 9000 words

The course aims to generate an understanding of the complex issues arising when decisions have to be made about the management, conservation and use of scarce natural resources, and of the interface between economics, ecology, sociology, law and other disciplines, with respect to these decisions. The primary concern of the course is over the sustainable exploitation of non-renewable and renewable natural resources, including minerals, water resources, fisheries and forests, in an Australian context. The course therefore investigates intertemporal and interpersonal allocative efficiency and distributive equity issues, by way of various case studies. The course considers non-marketed benefits of natural resources, multiple-use conflicts and economic tradeoffs between alternative resource uses.

## **GEST 3022**

#### **Introductory Geographic Information Systems**

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assumed Knowledge: intermediate computer skills
- Assessment: practical exercises/reports 50%, tutorial 10%, exam 40% - total approx 9000 words

'Geography Matters' (Environmental Systems Research Institute). Put the space and place into your understanding of urban, social and environmental issues. Learn about the importance of location in the interplay between human and environmental systems. This course provides an introduction to the theory and practice of geographic information systems (GIS). What is geographic data? What is GIS? How is GIS applied in the study of real world issues? This course will introduce some of the basic concepts of GIS, input of data, storage and management of data, modelling geographic data and output from GIS. Concepts such as how to model the complex real world in a computer and the difference between data and geographic data are covered. Lectures cover the basics of GIS, vector and raster data models, geographic data analysis, visualisation techniques and geographic data overlay. Importantly, the focus of this course is in the application of GIS to solving real world problems using examples from social, urban and environmental issues. The practical sessions build basic skills in GIS such as adding data, visualising data, analysing and modelling data and outputting data using data and examples from the above subject areas.

## **GEST 3023**

## **Global International Migration**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: tutorial/workshop participation 10%, workshop exercise 10%, major research project 40%, exam 40% - total approx 9000 words

At no stage in human history has there been higher mobility between nations and this has important implications for economic, social, demographic, environmental, political and cultural change. This course is designed to introduce students to the scale, composition, characteristics, causes, effects and implications of evolving patterns of population movement between nations. It focuses especially on the relationship between migration on the one hand and economic development, environmental issues and social change on the other, arguing that the relationship is complex and multi-directional. It introduces the concept of diaspora and investigates its increasing significance. While the focus is on global patterns and issues there is a concentration on Australia and the Asia Pacific region to illustrate the main emerging patterns. A number of theories which have been put forward to explain migration are investigated and assessed. There is a particular concentration on the role of policy with respect to both the migration process and the reception of migrants in destination countries. Migration is a strongly gendered process and the migration of women, its distinct causes and implications are examined. Student migration is another topic of interest that will be examined in the course.

## **GEST 3024**

#### **Global Change and Coasts**

- 6 units semester 2
- 3 contact hours per week, plus fieldwork
- Prerequisite: 8 units Level II Humanities & Social Sciences/Sciences
- Assessment: essays 30%, seminar 40%, field reports 30% total approx 9000 words

This course provides an introduction to the impacts of global change on coastal environments. It is important because global change is increasingly affecting our lives and most of the world's population live near the coast and depend heavily on coastal resources. The course outlines patterns and cycles of coastal change in a geological context as a background to more recent changes incorporating human influences. The course discusses the concept of global change and the difficulties in separating human impact from natural change. It also examines the human use of coastal resources and the impact of globalisation in economic terms where coastal impacts in one country may be related to resource demand in another. The course outlines the

science behind global changes affecting the coast such as sea-level rise, elevated sea-surface temperatures, changes in river flow and coastal sediment supply and discusses these in terms of the potential impacts, adaptation and vulnerability of coastal settlements and population. The course draws heavily on international scientific work from the intergovernmental panel on climate change (IPCC), the international geosphere-biosphere program (IGBP) and the earth system science partnership (ESSP) but also discusses alternative perspectives.

## **GEST 3100**

#### **Environmental Studies Internship**

- 6 units semester 2
- 3 contact hours per week (except during main work experience)
- Eligibility: B.Environmental Studies students only
- Quota will apply
- Prerequisite: average credit level pass in Environmental Ethics & Action/History, Philosophy of Environmentalism, and at least 2 other Level II Environmental Studies courses
- Restriction: ENVT 3015 Environmental Studies: Working in the Field

Assessment: seminar participation and presentation 20%, 6000 word project report 80%

This course allows students to spend up to two days per week during the semester working as an intern with a community, business/industry or government agency engaged in environmental policy, planning and management activities, or with an individual or group engaged in environmental research. During their internships students will be assigned specific projects by their 'sponsors' and will prepare reports on the methodology and results of their projects. The course coordinator will assist students to identify suitable sponsors and projects and will monitor student progress in weekly seminars. Students are expected to choose their sponsors and projects in consultation with the course coordinator before the beginning of the semester, as admission to the course will depend on approval of the sponsor and project by the course coordinator.

## Honours

## **GEST 4401**

#### **Honours Geographical & Environmental Studies**

- 24 units full year
- Prerequisite: UG degree with Cr. average in courses contributing to major in Geography, Environmental Studies or equiv. approved by Head of Discipline
- Assessment: 15000-20000 word dissertation; essays/project work for each elective total7000-9000 words per topic

Students wishing to take Honours Geographical & Environmental Studies should consult the Honours Coordinator prior to commencing Level II.

The course consists of two parts: a coursework component and a research component, each worth 50%. In the coursework component, students complete a compulsory workshop on research methods and theory and one elective course. The available electives reflect more specialist areas of study in Geographical and Environmental Studies. Students can choose from a range of electives which might include: Biodiversity and Environmental Change; Integrated Coastal Management; Advanced Quantitative Research Techniques; Urban Habitats; The Ecologies of Cities; and Environmental Governance. In the research component, students conduct a research project under the supervision of a staff member culminating in a research dissertation.

# GEOLOGY

## Level I

## **GEOLOGY 1100**

## Earth's Interior I

- 3 units semester 2
- 3 lectures, 3 hours practical work per week, field work
- Assessment: written exams, assignments, practical work

This course provides a global perspective of Planet Earth and the dynamic processes that have modified it over its 4 billion-year history. We explore Earth's place in space and time and examine the operation of its internal chemical and physical processes. Fundamental concepts are developed: the formations and structure of the Earth; the driving forces of plate tectonics and continental drift; earthquakes and volcanoes, the formation and identification of geological materials, mountain building and rock deformation; the development of the geologic timescale. Emphasis is given to the geological evolution of Australia.

## GEOLOGY 1103

#### **Earth Systems**

- 3 units semester 1
- 3 lectures, 3 hour practical per week
- Restriction: GEOLOGY 1200 Earth's Environment
- Assessment: written exams, assignments, practical work

This course draws from all fields of geoscience to explore the evolution of Planet Earth. Topics include the evolution of the solar system and the solid earth, the concept of deep time; the Plate Tectonic theory, in which the Earth's plates are colliding, generating earthquakes, volcanoes and mountain belts; the evolution of Earth's atmosphere and oceans; the Earth's climate, including the Earth in space, hydrologic cycle, the carbon cycle and the 'greenhouse effect'; the development and future of our unique Australian landscape and resources.

## GEOLOGY 1200

## Earth's Environment I

- 3 units semester 2
- 3 lectures, 3 hour practical work per week, field work
- Eligibility: B.Sc.(Ag.Sc), B.Sc.(NRM), B.Sc (Viti.) students + any program outside Sciences Faculty
- Assessment: written exams, assignments, practical work

This course looks at the dynamic global processes that affect the Earth and its environment today. Important problems are stressed: our use of finite natural resources, human impact on the planetary environment, landslides and subsidence, and extremes in the ocean-atmosphere system. We examine the development of the Earth's hydrosphere and atmosphere through time; the formation of ancient oceanic environments and the reconstruction of ice age climates; and the critical importance of soils to the environment. The course treats the Earth as a global system and gives perspective to common modern concerns such as 'greenhouse' and 'icehouse'.

# Level II

## **GEOLOGY 2005**

## **Geology for Engineers**

- 2 units semester 2
- 50 hours lectures & practical work
- Assessment: theory exam 50%, practical exams, laboratory work, field excursions (attendance & report) (compulsory & nonredeemable) 50% - minimum 40% necessary in both theory & practical to pass

An introduction to the basic geological background needed for civil and environmental engineers, covering the theory of plate tectonics and the evolution of our planet; igneous, metamorphic and sedimentary rock genesis; geophysics and the structure of the Earth's interior; economic geology; structural geology; mineralogy; exploration geophysics. Environmental geology issues will also be dealt with. There will be laboratory-based practicals introducing identification of minerals and rocks, geophysical site investigations, and field-based practicals including visits to civil engineering constructions, with an emphasis on the geological aspects.

## **GEOLOGY 2006**

## Igneous and Metamorphic Geology II

- 4 units semester 2
- 3 hours lectures, 6 hours practical classes per week/12 weeks, single day field excursion
- Prerequisite: GEOLOGY 1100 Earth's Interior I or GEOLOGY 1200 Earth Environment I
- Assumed Knowledge: some secondary school chemistry
- Restriction: GEOLOGY 2000 Mineralogy and Petrology II

This is a systematic course in the understanding of the materials of the geosciences. Students will be introduced to the study of igneous, metamorphic and ore rocks and their minerals. The course will develop skills and understanding in the area of methods of analysis, identification, determination and genesis of minerals and the igneous, metamorphic and ore rocks that these form. The course will introduce the students to mineralogical methods that include an understanding of optical, X-ray and chemical analysis.

# GEOLOGY 2007

## Sedimentary & Structural Geology II

- 4 units semester 1
- 8 hours lectures & practicals per week/11 weeks, excursion
- Assumed Knowledge: 3 units of Level I Geology

The course begins with an introduction to the composition, textures, structures and depositional settings of both siliciclastic and chemical sediments and their significance as indicators of modern and ancient environments. The second module deals with the deformation of sedimentary strata once they have become lithified. The key elements of structural geology are outlined: fractures (faults, joints, veins), folds and fold geometry, rock fabrics (foliations, lineations) and the forces that produced them (rock mechanics). The geological structures observed at the Earth's surface are represented on two-dimensional maps. This module (and the mapping camp) equips the student to visualise sedimentary rock sequences in the third dimension by way of constructing subsurface cross-sections. Fieldwork, in the form of local and regional excursions, is an integral component of this course. The eight-day excursion to the Southern Flinders Ranges is a seminal learning experience wherein the main elements of stratigraphic and structural mapping, field interpretation, and field safety are taught.

The final module, palaeontology introduces the fourth dimension of geology (time) by way of a survey of the major fossil ecosystems and how they changed over geological time. This modern approach to palaeontology is taught using key South Australian examples.

## GEOLOGY 2008

## Landscape Processes and Environments II

- 4 units semester 2
- 3 hours lectures, 5 hours practical per week/12 weeks, 7 days in field soil & regolith surveys
- Assumed Knowledge: GEOLOGY 1200 Earth's Environment I or GEOLOGY 1103 Earth Systems I
- Restriction: GEOLOGY 2008 Surficial Geology II

This course will develop skills and knowledge in 'reading' and understanding landscapes and the Earth materials encountered specifically at and near the Earth's surface. The approaches covered are fundamental to environmental geoscience and the management of the Earth's resources. This includes the morphological, geochemical and physical description of pedological and regolith materials such as soils, weathering profiles, surficial sediments, indurated regolith as well as how they interact with other components of the lithosphere, biosphere and hydrosphere. An emphasis will be given to describing these materials in the field and to collecting field data and its later presentation and interpretation. A field trip to arid zone landscapes in the Broken Hill region (during midyear break) provides experience in field mapping and description as well as survey design and sample collection for later laboratory study and data presentation and interpretation for both environmental and mineral exploration applications.

# Level III

## GEOLOGY 3008

#### **Theoretical Geophysics III**

- 3 units semester 2
- 3 lectures, 3 hours practical, 1 tutorial per week
- Prerequisite: MATHS 1007A/B Mathematics IA/IB or equivalent
- Assumed Knowledge: 6 units of Level I Geology
- Restriction: GEOLOGY 3008 Theoretical Geophysics IIIS
- Assessment: practical assignments 40%, 3 hour exam 60%

Geophysicists are employed in a wide range of industries, including petroleum and mineral exploration, groundwater, contaminants and salinity evaluation, state and government geological surveys, defence science and academic research. This course provides the mathematical and physical background for a career in solidearth, exploration and environmental geophysics. It is split into four parts (i) potential field theory (gravity and magnetics), (ii) seismic methods (iii) electromagnetic methods and (iv) numerical modelling and inversion. In each section, we start with the underlying theory and examine applications at global, exploration and environmental scales. The course is aimed at students from a range of numerate scientific backgrounds including geoscience, physics, engineering, mathematics and computer sciences

# GEOLOGY 3010 Remote Sensing III (S)

- 3 units semester 2
- 2 lectures, 3 hours practical work, 1 tutorial per week
- Prerequisite: 16 units Level II Sc.courses or equiv
- Restriction: GEOG 3008 Remote Sensing III(A), Remote Sensing IIIA, SOIL&WAT 3008 Remote Sensing for Environmental and Agricultural Sciences
- Assessment: exam 50%, practical exercises 50%

Remote sensing interprets image-based information gathered by space and airborne platforms using various scanning systems. This course examines the principles and applications of remote sensing to a range of disciplines. Principles include the interaction of electromagnetic radiation with the Earth's atmosphere and surface, spectral characteristics of earth surface materials, and the nature of imagery collected by a variety of earth-observation sensors. We will discuss the use of spectral data to identify and characterise objects (rocks, soils, vegetation, water), produce thematic maps and monitor changes over time. The nature and application of specialised forms of remote sensing including radiometric data, hyperspectral, radar and thermal imagery are also considered. These data are relevant to a wide range of applications including geology, environmental and agricultural science. Information is extracted using digital image processing: correction, enhancement and classification of the digital data and its integration with geographic information systems. Practicals are used to give 'hands-on' experience with the basics of digital image interpretation and processing and application to specific projects.

## GEOLOGY 3013

#### **Tectonics III**

- 3 units semester 1
- 7 hours lectures/tutorials, practicals per week/12 weeks
- Assumed Knowledge: GEOLOGY 2006 Igneous and Metamorphic Geology II, GEOLOGY 2007 Sedimentary and Structural Geology II
- Restriction: GEOLOGY 3002 Structural and Field Geology III

This course will develop knowledge of the Earth as a four-dimensional dynamic system. The

megascopic structure of the earth -oceanic and continental crust and lithosphere, and the asthenosphere, will be introduced and compared. The basic dynamic potentials acting on the Earth (heat, gravity) will be examined, and their diverse first order effects explored (isostasy, convection, exhumation, pluming). The concepts of rifting and ocean formation will be examined, as will those of subduction and mantle plumes. Processes of orogenesis will be examined in depth. Recent and Mesozoic evidence (structural, geochemical, geophysical, sedimentological) for the operation of these processes will be examined. We will examine evidence and constraints on interpretation of these processes operating in past geological eras: the Palaeozoic, Proterozoic and Archaean. Emphasis will be placed upon understanding examples from the tectonic evolution of the Australian Plate. A four-day field excursion to Kangaroo Island to examine an ancient orogen is an integral part of this course.

## GEOLOGY 3014

#### **Environmental Geoscience Applications III**

- 3 units semester 2
- 2 lectures, 5 hours practical work, 8 days field work
- Assumed Knowledge: GEOLOGY 2008 Surficial Geology II; GEOLOGY 2008 Landscape Processes and Environments II
- Restriction: GEOLOGY 3014 Surficial Geology III, GEOLOGY 3009 Environmental Geology III, GEOLOGY 3011 Environmental Geology IIN

This course covers advanced aspects of geological processes in near-surface geological environments and the methods used to quantify these processes in time and space. Current applied environmental issues, such as soil salinity, erosion, coastal degradation and their management will be looked at from the geological perspective. The relevance of the geochemistry of soil and regolith are treated in their application in mineral exploration, contamination control and waste management. Natural geohazards like earthquakes and floods are related to tectonic activities and climatic variation on local, regional and global scales.

Man-made and natural environmental impacts will be critically reviewed and possible solutions will be discussed. These include deep aquifer water storage, CO2 sequestration, and nuclear waste deposition. Thus the course will draw on the basic principles of sedimentation, erosion and weathering on the earth's surface as well as tectonic, magmatic and geochemical processes. Geo-microbiological principles are introduced as an integrative part of the soil/regolith evolution process. The course will further include up to eight one-day field visits to sites of integrated field work and site inspection in the vicinity of Adelaide.

#### GEOLOGY 3015

#### **Environmental Geoscience Processes III**

- 3 units semester 2
- 2 lectures, 5 hours practical work, 7 days field work
- Assumed Knowledge: GEOLOGY 2008 Surficial Geology II; GEOLOGY 2008 Landscape Processes and Environments II
- Restriction: GEOLOGY 3015 Surficial Geology III
   Field Program
- Assessment: Practical and theory exams, practical reports, field reports and assignments

The aim of this course is to provide an understanding of the fundamental principles of geoscience and an appreciation of their application to practical problems. The course is composed of three interlinked strands: environmental geochemistry, landscape processes and landscape evolution. The recognition, description, origin and development of regolith materials and their relation to land form, climate, and lithology will be introduced in the laboratory and reinforced during actual field survey. The aim of this course is to provide an understanding of the fundamental physical, chemical and mineralogical properties of sediments, soils and indurated regolith.

#### GEOLOGY 3016

#### Igneous and Metamorphic Geology III

- 3 units semester 1
- 7 hours lectures/tutorials, practicals per week/12 weeks
- Prerequisite: GEOLOGY 2006 Igneous & Metamorphic Geology II or GEOLOGY 2000 Mineralogy and Petrology II
- Assumed Knowledge: Some secondary school chemistry
- Restriction: GEOLOGY 3004 Igneous and Metamorphic Petrology III, Earth's Internal Processes III

This course is concerned with aspects of the longterm thermal and material history of the earth's lithosphere and mantle. The course has as its foundation the basic skills learnt at level II in Igneous and Metamorphic Geology II. Included amongst the skills learnt in this course are understanding of the governing theory describing high temperature element partitioning between fluids and melts, the thermodynamic theory that governs and predicts sub-solidus mineral growth and reaction and the principles of natural radioactive decay and the application of isotopes to geochronology. Metamorphic Geology: This examines the nature and change of sub-solidus mineral assemblages and textures in rocks. This information provides a sound basis with which to examine orogenic processes. Igneous Geology: This section examines the physical controls on the generation and differentiation of silicate melts within the earth and the contribution these processes have made to the composition of the crust and mantle through time. Part of this section of the course is devoted to case studies of magma generation in key tectonic settings on the current earth and the extrapolation of this knowledge back through time.

## GEOLOGY 3017

#### Petroleum Exploration III

- 3 units semester 1
- 7 hours lectures, practicals per week/12 weeks
- Assumed Knowledge: GEOLOGY 2007 Sedimentary & Structural Geology II

This course introduces the unifying concept of a petroleum system and shows how it may be used in the exploration of sedimentary basins for their oil and gas resources. The course has three interrelated themes: sequence stratigraphy, seismic methods and applied organic geochemistry. The basic principles of sequence stratigraphy are outlined including how cyclical stratigraphic patterns reflect changes in sediment supply and accommodation. The building blocks of sedimentary sequences (facies successions, key surfaces and stacking patterns) are highlighted, and how these are displayed on seismic sections and well logs. The history of the development of modern seismic and sequence stratigraphy is discussed. Current sequence stratigraphic models for siliciclastic and carbonate depositional settings in different types of basins are introduced, but the emphasis is on the flexible and pragmatic application of stratigraphic concepts and principles.

The second module covers the seismic techniques (refraction and reflection) that play a crucial role in delineating the sub-surface architecture of basins, in particular hydrocarbon kitchens, migration pathways, reservoirs and traps. The final module examines the use of geochemistry as a tool in petroleum exploration. Specific topics include source rock evaluation; the generation and migration of hydrocarbons; and the geological controls on crude oil consumption.

#### GEOLOGY 3018

#### Mineral Exploration III

- 3 units semester 1
- 2 lectures, 3 hours practical, 1 tutorial a week, 4 days fieldwork
- Assumed Knowledge: 6 units of Level I Geology, and GEOLOGY 2006 Igneous and Metamorphic Geology II
- Restriction: GEOLOGY 3003 Economic Mineral Deposits; GEOLOGY 3006 Mineral and Environmental Geophysics

This course covers genetic processes and geological setting of economic mineral deposits, and the exploration strategies employed by industry. Mineralising processes are seen in the framework of the tectonic, petrogenetic and geochemical evolution of the Earth's crust on local, regional and global geological scales. Thus, we will draw upon igneous and metamorphic petrology, geochemistry, sedimentary facies analysis, and the science of soils, weathering and diagenesis in the setting of evolving landscapes.

Mineral exploration will be examined in terms of the physical and chemical characteristics of mineral deposits, and their geophysical and geochemical detection, with an emphasis on exploration strategies in regolith-covered environments. We will also discuss the tightly interrelated issues of economics of natural resources, environmental conservation and rehabilitation, and social impacts of the mining industry. Practical work includes ore microscopy, quantitative analytical methods, thermodynamic calculations, geophysical field methods, as well as an introduction to exploration software packages. The course will include at least three days of integrated geochemical and geophysical fieldwork, with industry visits to South Australian mineral deposits, PIRSA and mineral exploration companies in Adelaide.

## GEOLOGY 3019

## Field Geoscience Program III

- 3 units semester 2
- 15 days fieldwork
- Corequisite: Tectonics III, Igneous and Metamorphic Geology III
- Assumed Knowledge: GEOLOGY 2006 Igneous and Metamorphic Geology II, GEOLOGY 2007 Sedimentary and Structural Geology II

This course provides a comprehensive introduction to independent geological mapping and the construction of geological maps. You will develop the skills required to interpret and solve geological relationships at a variety of scales, and synthesise them into four-dimensional models that describe the geological evolution of terrains. These skills include hand specimen and outcrop geology, mapping and stratigraphic analysis at a range of scales, aerial photo interpretation, remote sensing and the integration of geophysical datasets into geological mapping and interpretation. Thus, the course will draw upon the principals of structural geology and combine them with an understanding of sedimentary, igneous and metamorphic rock systems. Fieldwork will focus on the Precambrian terrains of southern and central Australia, however the acquired skills will be transferable into any aged geological system.

# Honours

## **GEOLOGY 4000**

## **Honours Geology**

- 24 units full year
- Prerequisite: major in geology, environmental geoscience, or cognate area, and Credit standard in Level III geoscience or related courses - applicants with less than a Credit standard may be accepted with the approval of Head of Discipline
- Assumed Knowledge: Other Level III courses offered by Geology & Geophysics
- Assessment: Coursework related 30%, research project related 70%

Candidates may be required to attend course programs in specialised earth science topics. Candidates will undertake supervised individual research projects. Specific research programs will be generated for each individual candidate, usually involving field and laboratory work and literature review. This will require their full time. Candidates will be required to present a series of seminars, to prepare a poster and a manuscript on their research. An interstate study tour is normally held early in the year.

Intending Honours students must apply, before the end of the year preceding Honours enrolment, to the Head of Geology and Geophysics or nominee for approval of candidature. See the Discipline web site for more detailed information: www.ees.adelaide.edu.au/prospective/honours/ programs/geology.html/

# GEOLOGY 4001 Honours Geophysics

- 24 units full year
- Prerequisite: major in geophysics, or cognate area with the approval of Head of Discipline, and Credit standard in Level III geoscience or related courses. - applicants with less than a Credit standard or students with a different background to that stipulated may be accepted at discretion of Head of Discipline or nominee

Candidates will be required to attend a core program of geophysics courses. These include some combination of signal analysis, airborne geophysics, electrical and EM techniques, seismic processing, seismic interpretation, and geophysical field work. Honours students may, after consultation with the Head or nominee, also be required to take some level III courses in Geology and Geophysics, Applied Mathematics or Physics and Mathematical Physics which they did not take in third year. In addition, candidates will undertake supervised individual projects; possible topics should be discussed with the Head or nominee before the end of the preceding year. Special programs of reading and laboratory studies will be laid down and each candidate will be required to give all the time not required for lectures or in the field to work in the laboratory. Candidates will be required to contribute to a series of seminars.

Intending Honours students must apply, before the end of the year preceding that in which they wish to enrol, to the Head of Discipline of Geology and Geophysics or nominee for approval of their proposed programs of study.

## GEOLOGY 4002

## **Honours Geology and Botany**

- 24 units full year
- Prerequisite: Credit in at least 6 Level III units in Botany, credit in at least 6 Level III units in Geology
- · Assessment: thesis, exams, seminar

The course allows students who have completed at least 6 units of both Geology and Botany at a credit standard or better to undertake an honours project unique to their skills. Students undertake a major research project in Geology and Geophysics and undertake minor components (eg coursework, minor projects, essays) in Botany. The course may be particularly relevant to students interested in palaeobotany, plant/mineral interactions or minesite reclamation/ rehabilitation.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of study in the degree and be prepared to begin studies in early February or August.

## **GEOLOGY 4003**

## Honours B.Env.Sc (Geology

- 12 units full year
- Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: Research proposal, literature review, seminars, thesis 60%, average of 4 specified Level III courses 40%
- Requirement: modest research project of student's choosing (topic acceptable to Discipline) normally taken at same time as coursework (4 Level III courses/12 units relevant to student's Honours project and approved by Head of Discipline)

Intending candidates should consult the Head of Discipline and potential supervisors during third year and be prepared to begin studies at the beginning of February or July (mid year intake).

## GEOLOGY 4007

## Level IV Geological Study Tour

- 3 units semester 1 or semester 2
- 3 hours per day/5 days, excursion, 8 hours per day/7 days
- Eligibility: B.Env.Sc. students only

- Prerequisite: GEOLOGY 1000A/B Planet Earth I, GEOLOGY 1001 Environmental Geoscience or GEOLOGY 2005 Geology for Engineers
- Corequisite: GEOLOGY 4003A/B Honours Environmental Science (Geology)
- Assessment: assignments, presentations, field performance, oral exam

The course is introduced with one week of workshop style lectures, tutorials and practicals, during which students are introduced to the geological and environmental themes and issues that will be illustrated during the field study tour. Students are given background reading and are individually assigned to research and report on a geological issue relevant to the excursion.

## GEOPHYS 4001

#### **Honours Geophysics**

- 24 units full year
- Prerequisite: passes satisfactory to Head of Discipline in Earth's Structure, Geophysics & Geostatistics III, Geophysics IIIS, at least one other Level III courses offered by Discipline, or Applied Maths or Physics & Math.Physics students with different prerequisite background to that stipulated may be accepted at discretion of Head of Discipline.

Candidates will be required to attend a core program of geophysics courses. These will include signal analysis, geostatistics, aeromagnetics, electrical and EM techniques, seismic processing, seismic interpretation, and geophysical field work. Honours students may, after consultation with the Head or nominee, also be required to take some level III courses in the Disciplines of Geology and Geophysics, Applied Mathematics or Physics which they did not take in third year. In addition, candidates will undertake supervised individual projects; possible topics should be discussed with the Head or nominee before the end of the preceding year. Special programs of reading and laboratory studies will be laid down and each candidate will be required to give all the time not required for lectures or in the field to work in the laboratory. Candidates will be required to contribute to a series of seminars.

Intending Honours students must apply, before the end of the year preceding that in which they wish to enrol, to the Head of Geology and Geophysics or nominee for approval of their proposed program of study.

### PETROL 4000

#### **Honours Petroleum Geology and Geophysics**

- 24 units full year
- Prerequisite: B.Sc. majoring in Geology and/or Geophysics, or equiv.
- Assumed Knowledge: background in some/all of: sedimentology, stratigraphy, structural geology & exploration geophysics; combinations of third year geoscience courses with other appropriate science or maths courses may be acceptable
- Assessment: formal written & oral assessments, marked practical exercises, assignments & seminars - coursework 50%, project thesis 50%

The program comprises three components: (a) five months of coursework, commencing in late January. This provides a thorough grounding in petroleum geoscience. All students take a set of core topics, with additional specialist geology or geophysics units. Details can be found at www.asp.adelaide.edu.

(b) six-week internship in the petroleum industry, normally commencing in late June. (c) supervised individual research project, which is written up as a thesis, and submitted in early November. Work done during the internship usually forms the basis of the thesis.

Depending on the nature of their previous studies and experience, coursework exemptions, substitutions or additions may be granted or required for some students. Intending students must apply before the end of the year preceding that in which they wish to enrol.

## **GERMAN STUDIES**

#### Level I

### **GERM 1002**

#### German IA: Beginners' German

- 3 units semester 1
- 4 contact hours per week
- Available for Non-Award Study
- Restriction: except with permission, SACE Stage 2 German or equiv.
- Assessment: class tests, end of semester test, oral exam

With no previous knowledge of German assumed, special emphasis will be placed on speaking and comprehension, then on reading, writing and grammar. It is expected that each student will spend at least six hours of private study reviewing work done in class and preparing for lessons. Aspects of German culture will be a component of language instruction throughout the semester.

### **GERM 1003**

#### German IB: Beginners' German

- 3 units semester 2
- 4 contact hours per week
- Available for Non-Award Study
- Prerequisite: GERM 1002 German IA: Beginners' German or equiv.
- Restriction: except with permission, SACE Stage 2 German or equiv.
- Assessment: class tests, end of semester test, oral exam

This second semester course is a sequel to German IA: Beginners' German. It is expected that each student will spend at least six hours of private study reviewing work done in class and preparing for lessons. Aspects of German culture will be a component of language instruction throughout the semester.

## GERM 1011

#### **German Studies ISA**

- 3 units semester 1
- 4 contact hours per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 German or equiv.
- Assessment: language class tests, end of semester tests, tutorial participation; other essays, end of semester tests or working papers, balance of achievement in all areas required to pass course

The aim of this course is to introduce students to the life and language of German-speaking countries, to make them more skilled at speaking and writing the language and more informed about contemporary German culture. Three out of four hours are devoted to practical language instruction in formal language classes and small tutorial groups, and one hour per week to cultural and historical studies. Students with outstanding qualifications in language may, with the permission of the Discipline Convenor, take the language components of the course at a more advanced level. Further information on course content can be obtained from the discipline of German Studies.

### **GERM 1012**

### **German Studies ISB**

- 3 units semester 2
- 4 contact hours per week
- Available for Non-Award Study
- Prerequisite: GERM 1011 German Studies ISA /German Studies I Pt 1 or equiv.
- Assessment: language weekly exercises, end of semester tests, tutorial participation; other essays, end of semester tests or working papers; balance of achievement in all areas required to pass course

The aim of this course is to introduce students to the life and language of German-speaking countries, to make them more skilled at speaking and writing the language and more informed about contemporary German culture. Three out of four hours per week are devoted to practical language instruction in formal language classes and small tutorial groups, and one hour per week to cultural and historical studies. Students with outstanding qualifications in language may, with the permission of the Course Coordinator, take the language components of the course at a more advanced level. Further information on course content can be obtained from the discipline of German Studies.

### Level II

#### **GERM 2002**

#### German Studies IIA: Language and Culture

- 4 units semester 1
- 4 contact hours per week
- Prerequisite: GERM 1003 German Studies IB: Beginners' German (Pass Div 1) or equiv.
- Assessment: language class tests, semester tests, tutorial participation; other - essays, end of semester tests or working papers; balance of achievement in all areas required to pass course

This course offers a balance between practical language instruction and teaching a critical appreciation of literature, culture and society in German-speaking countries. German Studies IIA students will do the culture lectures with German Studies IS, but will attend their own language classes and tutorials.

#### **GERM 2003**

#### **German Studies IIB: Language and Culture**

- 4 units semester 2
- 4 contact hours per week
- Prerequisite: GERM 2002 German Studies IIA: Language and Culture/German Studies IIA: Language & Culture Pt 1 or equiv.
- Assessment: language class tests, semester tests, tutorial participation; other - essays, end of semester tests or working papers; balance of achievement in all areas required to pass course

This course offers a balance between practical language instruction and teaching a critical appreciation of literature, culture and society in German-speaking countries. German Studies IIA students will do the culture lectures with German Studies IS, but will attend their own language classes and tutorials.

#### **GERM 2005**

#### German in Germany

- 4 units summer semester
- Jan Feb 2007 at Stuttgart Winter University
- Prerequisite: 24 units at Level I or equiv.
- Assessment: as specified for specific language & culture courses taken as part of Stuttgart
   Winter University program

This course consists of six weeks of full time study at Stuttgart Winter University. The course is divided into two components running concurrently: (a) an intensive language course students undertake 16 hours of instruction per week in a totally German-speaking language environment; (b) a cultural/historical program which will entail 8 hours per week of the chosen elective. There will also be visits to museums and art galleries as well as to other significant cultural centres. For details, contact the German Studies discipline or the International Office.

Students should keep all work in a folder to show to staff in German Studies when they return. If they intend to count this course towards a major in German, the Discipline reserves the right to require completion of an essay in addition to work completed in Germany.

### **GERM 2008**

#### **German Special Topic II**

- 4 units semester 1 or 2
- Culture: 3 contact hours per week; Language: 4 contact hours per week
- Prerequisite: Culture: German Studies ISB; Language: sem 1 - 6 units Level 1 Humanities/ Social Sc; sem 2 - Language Topic (semester 1)
- Restriction: Culture: consult the Discipline; Language: not available to students who have completed Level I German
- Assessment: Culture: as specified by Discipline; Language: as for German Studies I/IS 60%, 1500 word essay in English on German culture to be negotiated with Course Coordinator 40%

There are two topic choices in this course:

With the Culture option, students will attend lectures in a European Studies course as advised by the Discipline of German Studies or in an option offered by the Discipline. Assignments and tutorials will be in German. Students can do either semester 1 or 2 or both semesters.

The Language option offers the opportunity for students in second year to be introduced to German language and culture at a more intensive level than at first year. It is particularly appropriate for prospective postgraduates needing reading skills in German and/or students wishing to do an Honours degree who are not majoring in a European language but need to develop a reading ability of the German language for research purposes. The research essay component of the course enables students to choose a topic in line with their own research interests. Students will be required to read selected German texts, although they will write their essay in English. Students intending to do Semester 2 of the language topic must complete Semester 1.

### **GERM 2011**

#### **German Studies IISA: Language and Culture**

- 4 units semester 1
- 4 contact hours per week
- Prerequisite: GERM 1012 German Studies ISB/German Studies I Pt 2 (Pass Div 1) or equiv.
- Assessment: language weekly exercises, end of semester tests, tutorial participation; other essays, end of semester tests; balance of achievement in all areas required to pass course

Like all courses in German at second and third vear level, this course offers a balance between practical language instruction and studying the social, literary and political culture of Germanspeaking countries in the past and present, with particular emphasis on the last 250 years, from the eighteenth century Enlightenment to the present. Language instruction consists of one formal hour per week and one weekly tutorial in small groups. In addition, all students will normally take the Core Course: Studies in German Literature and Cultural Background. Details are available in the Discipline handbook. Students with outstanding qualifications in language may, with the permission of the Course Coordinator, take the language components of the course at a more advanced level

### **GERM 2012**

#### German Studies IISB: Language and Culture

- 4 units semester 2
- 4 contact hours per week
- Prerequisite: GERM 2011 German Studies IISA: Language & Culture/German Studies II: Language & Culture) or equiv
- Assessment: language weekly exercises, end of semester tests, tutorial participation; other essays, end of semester tests; balance of achievement in all areas required to pass course

Like all courses in German at second and third year level, this course offers a balance between practical language instruction and studying the social, literary and political culture of Germanspeaking countries in the past and present, with particular emphasis on the last 250 years, from the eighteenth century Enlightenment to the present. Language instruction consists of one formal hour per week and one weekly tutorial in small groups. In addition, all students will choose one of various options offered. Details are available in the Discipline handbook.

Students with outstanding qualifications in language may, with the permission of the Course Coordinator, take the language components of the course at a more advanced level.

### Level III

### **GERM 3002**

### German Studies IIIA: Language and Culture

- 6 units semester 1
- 4 contact hours per week
- Prerequisite: GERM 2003 German Studies IIB: Language and Culture/German IIA: Language & Culture Pt 2) or equiv.
- Assessment: language written exercises, end of semester tests, tutorial participation; other essays, end of semester tests, working paper; balance of achievement in all aspects required to pass course

This course is a continuation of German Studies IIB. Students will do the language section of the course with German Studies II and the core course and options with German Studies III. Language instruction consists of one formal hour per week and one weekly tutorial. In addition, students will normally take the core course: Studies in German Literature and Cultural Background. Details are available in the Discipline handbook.

### **GERM 3003**

### German Studies IIIB: Language and Culture

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: GERM 3002 German IIIA: Language and Culture or equiv
- Assessment: language written exercises, end of semester tests, tutorial participation; other essays, end of semester tests, working paper; balance of achievement in all aspects required to pass course

This course is a continuation of German Studies IIIA . Students will do the language section of the course with German Studies II and the core course and options with German Studies III. Language instruction consists of one formal hour per week and one weekly tutorial. In addition, all students will choose one of the various options offered. Details are available in the Discipline handbook.

### GERM 3005 German in Germany

- 6 units summer semester
- January Feb 2007 at Stuttgart Winter University
- Prerequisite: Pass 1 GERM 2003 or GERM 2012 or equiv.
- Assessment: as specified for specific language & culture courses taken as part of Stuttgart Winter University

This course consists of six weeks full time study at Stuttgart Winter University. The course is divided into two components running concurrently: (a) an intensive language course. Students undertake 16 hours of instruction per week in a totally German-speaking language environment; (b) a cultural/historical program which will entail 8 hours per week of the chosen elective. Students who have completed GERM 2012 German Studies IISB will normally be expected to take the culture elective offered in German. There will also be visits to museums and art galleries as well as to other significant cultural centres. For details, contact German Studies or the International Office.

Students should keep all work in a folder to show to staff in German Studies when they return. If they intend to count this course towards a major in German, the Discipline reserves the right to require completion of an essay in addition to work completed in Germany.

### **GERM 3008**

#### **German Special Topic III**

- 6 units semester 1 or 2
- Culture: 3 contact hours per week, Language: 4 contact hours per week
- Prerequisite: Culture: German Studies IISB or German Studies IIISB or equiv; Language: sem 1 - 8 units Level II Humanities/Social Sciences; sem 2 - Language Topic (semester 1)
- Restriction: Culture: consult German Studies for information; Language: not available to students who have completed German language at any level
- Assessment: Culture: as specified by Discipline; Language: as for German Studies IA or German Studies I 60%, 3000 word essay in English on German culture to be negotiated with the Course Coordinator 40%

There are two topic choices in this course:

With the Culture option, students will attend lectures in a European Studies course as advised by the Discipline of German Studies or in an option offered by the Discipline. Students can do either semester 1 or 2 or both semesters. Assignments and tutorials will be in German.

The Language option offers the opportunity for students in second year to be introduced to German language and culture at a more intensive level than at first year. It is particularly appropriate for prospective postgraduates needing reading skills in German and/or students wishing to do an Honours degree who are not majoring in a European language but need to develop a reading ability of the German language for research purposes. The research essay component of the course enables students to choose a topic in line with their own research interests. Students will be required to read selected German texts, although they will write their essay in English. Students intending to do semester 2 of the language topic, must complete semester 1.

### **GERM 3011**

### German Studies IIISA: Language and Culture

- 6 units semester 1
- 4 contact hours per week
- Prerequisite: GERM 2012 German Studies IISB: Language & Culture/German Studies II Pt 2) or equiv.
- Assessment: language weekly exercises, end of semester tests, tutorial participation; other essays, end of semester tests or working papers

Where students take course components also available to second year students, a higher level of achievement is required and additional work must be completed.

Like all courses in German Studies at second and third year level, German Studies III offers a balance between practical language instruction and studying the social, literary and political culture of German-speaking countries in the past and present, with particular emphasis on the last 250 years, from the eighteenth century Enlightenment to the present. Language instruction consists of one formal hour per week and one weekly tutorial in small groups. In addition, all students will normally take the core course: Studies in German Literature and Cultural Background. Details are available in the German Studies handbook.

### GERM 3012

#### German Studies IIISB: Language and Culture

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: GERM 3011 German Studies IIISA: Language and Culture /German Studies III: Language & Culture Pt 1) or equiv
- Assessment: language weekly exercises, end of semester tests, tutorial participation; other essays, end of semester tests or working papers

Where students take course components also available to second year students, a higher level of achievement is required and additional work must be completed.

Like all courses in German Studies at second and third year level, German Studies III offers a balance between practical language instruction and studying the social, literary and political culture of German-speaking countries in the past and present, with particular emphasis on the last 250 years, from the eighteenth century Enlightenment to the present. Language instruction consists of one formal hour per week and one weekly tutorial in small groups. In addition, all students will choose one of the various options offered. Details are available in the German Studies handbook.

### Honours

### GERM 4401 Honours German Studies

- 24 units full year
- Prerequisite: Undergraduate degree, Cr. average in courses contributing to a major in German Studies or equiv. approved by German Studies
- Assessment: 12000 word dissertation in German, Advanced course in language, Option

Requirements: students will write a dissertation on some aspect of German Studies. Choice of topic should be made not later than the middle of the second semester in the preceding year. Students must also attend advanced courses in language, together with one option. Both thesis topics and options should be chosen in consultation with the Honours Coordinator.

Students may obtain Faculty permission to combine German Studies with another discipline for the Honours degree. They should consult the Honours Coordinator in German Studies as soon as possible, so that a suitably modified program of study can be arranged. The 15,000 word thesis will then be written in English. In some circumstances Honours in German Studies can be studied part-time over two years. Please see the German Studies handbook for further details.

## HISTORY

### Level I

### **HIST 1105**

### Europe, Empire and the World 1492 - 1914

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 2 essays, exam, tutorial participation, attendance

This course will consider Europe from the Renaissance to the eve of the Great War. In this period, Europe explored and conquered new worlds: new worlds of religion, art, science, politics, production, and consumption, as well as the 'New World' of the Americas, and large parts of Africa and Asia. We will examine the wrenching effect these explorations had on Europe and on the world, paying particular attention to the Renaissance, Reformation and Counter-Reformation, European expansion, Enlightenment, the crisis of the Old Regime, ideas and ideologies of industrialisation, and the 'new imperialism' of the late nineteenth century. Alongside the momentous we will consider the mundane: changes in daily lives of ordinary people. We will study the interaction between 'high culture' and 'low culture', and examine ways in which ordinary men and women shaped and responded to the emerging modern world.

### **HIST 1106**

#### The Twentieth Century: A World in Turmoil

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 2500 word essay 40%, 1200 word seminar paper 25%, quizzes 10%,tutorial performance 25%

This course sets out to provide a clear thematic account of the 20th century from the perspective

of the twenty-first century. It will introduce students to key events and issues in the global history, politics and culture of the twentieth century. It assumes no prior knowledge. The course serves as a foundation course for a number of interdisciplinary majors within the faculty and also fulfils the needs of students across the University who seek an informed introduction to the key events of the recent past. The course will cover the following themes: the New Imperialism: Total War, New Ideologies (and Revolution): Asia between the Wars: the Inter-War Years in Europe: World War II: the Cold War, the End of Empire: the Post Colonial World: and the Collapse of Communism in Europe. Students will be encouraged and assisted through a mixture of lectures and tutorial workshops as they strive to acquire an overview of the twentieth century and to investigate why it was a 'World in Turmoil'.

### Level II

### **HIST 2002**

#### Uniting the Kingdoms: Britain 1534-1707

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: Britain, 1534-1707
- Assessment: essay, tutorial performance, exam

This course examines England in the sixteenth and seventeenth centuries and its development from a European backwater to the beginning of its emergence as a global power. Particular attention is paid to the British context: the impact of English imperialism on its Anglo-Celtic neighbours, the absorption of Wales, the conquest and colonisation of Ireland, and the conflicts with Scotland which led to the union of 1707.

### HIST 2014

#### **Fascism and National Socialism**

- 4 units semester 1
- 2 lectures, 1 seminar per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essays 70%, seminar attendance & participation 30%

Extreme right wing ideologies of the twentieth century and European movements or parties that claimed to be based on them provide the focus of this course. Broadly, it covers the period 1900-1945. Major themes discussed in lectures and seminars include the intellectual and cultural origins of fascism; political and social dislocation following World War I; Italian fascism, its appeal and its leaders; the distinguishing features of National Socialism in Germany (notably anti-Semitism and policies of exclusion and repression); social and cultural life in Fascist Italy and Nazi Germany; and degrees of cooperation, collaboration and resistance in occupied Europe. We will also discuss the changing perceptions of Fascism over time and current debates on its nature.

#### **HIST 2025**

### **Russia in Crisis and Revolution 1890-2004**

- 4 units semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 3000 word research essay 40%, seminars 20%, final exam 40%

This course will be of topical rather than chronological character. It is framed around an analytic structure that will focus students' attention on the socio-economic and political processes that contributed to the collapse of the Soviet Union in 1991. The elements of the course are: Liberalism vs Marxism; the Revolutionary and the Counter-revolutionary Traditions; the culture of Russian Industrialism: the Russian form of Capitalism, NEP, the system of the 'plan'; the true dissenters: Russian culture under Soviet rule; Revolution as evil: Leninism and Stalinism: War and Peace: the impact of war and the threat of war on Soviet politics; the Soviet Union in its golden age, 1955-1968; political corruption, economic stagnation and society's silent revolt, 1969-1985; Gorbachev and the collapse of the USSR, 1985-1991; Russia's struggle to reinvent itself, 1991-2004.

### HIST 2029

#### **Reel History: World War II in Film**

- 4 units semester 2
- · 3 hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: written work 80%, tutorial participation and attendance 20%

The aim of this course is to explore the relationship between the past and its

representation on film with particular emphasis on World War II. It takes various aspects of the history of the war to examine how film has represented, reconstructed and interpreted the mid-twentieth century crisis. The course compares films with more traditional historical texts and sources in order to chart how filmmakers have constructed the war. Why did some individuals and events draw more attention than others? How did different people address the same subjects? Who has been responsible for shaping our understanding of the war and why was so much invested in its recreation on the screen? Students will address such questions and should complete the course with an understanding of the influence of film on popular perceptions of the past; an appreciation of the economic, social and political contexts that influence filmmaking: and an awareness of the dynamic process of remembering and forgetting history that is inherent in the production of historical films.

#### **HIST 2030**

#### America, Asia and the Cold War 1945-1990

- 4 units semester 1
- 2 lectures per week, 2-hour tutorial per fortnight
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essay, take-home exam, tutorial participation

The course will provide an introduction to the Cold War, one of the seminal events of the twentieth century, in its American-Asian context. It will provide a crucial historical framework for an informed understanding of current events. Although the Cold War has often been conceived primarily in terms of Europe (Berlin, the Soviet 'threat', etc), its ramifications in America and Asia were at least as far reaching. This course will discuss key aspects of the Cold War and Anti-Communism in the United States; the (new) triangular relationship that evolved between the United States, China and Japan after 1945, the Korean War, the long Cold War stand-off over Taiwan: Cold War in the hot climate of Indonesia and the destruction of the Communist Party there the mid-1960s; and America's involvement in and withdrawal from the Vietnam War.

### HIST 2032

#### **Colonial Identity and the Legacies of Empire**

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: tutorials, essays

This course will explore the role of British and French colonialism in the shaping of ethnic and national identities. What are the bonds that hold communities together, and what are the forces that tear them apart? We will examine not only the ways in which these Imperial powers sought to impose their culture upon subject populations, but also the impact of colonialism on the Imperial powers themselves. To trace the complex forces that have shaped 'colonialism's culture' from the Age of Enlightenment to the era of de-colonisation, we will not just consider political developments, but will study changes in art, literature, and film.

### HIST 2033

#### Heresy and Witchcraft in Medieval Europe

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essay plan 10%, bibliography totalling 1000 words 10%, 3000 word essay 50%, tutorial participation 10%, in-class test 20%

This course explores belief and deviancy in medieval Europe. After identifying religious and cultural orthodoxy, it embarks upon an analysis of dissent. Divergence from sanctioned ideology and ritual ranged from the spiritual and social challenge of medieval heresies, through popular beliefs in the magical powers of people and objects, to the witchcraze of the sixteenth and seventeenth centuries. Using a wide variety of original documents and historical interpretations, the course aims to understand and explain conflicting belief systems and the rise of intolerance in the pre-modern world.

#### **HIST 2042**

### Medieval Europe: The Crusades to the Black Death

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essays, exam

A study of the civilisation of Western Christendom c.1100-1350. The conversion of Europe: Feudal and manorial systems. The urban and commercial revolutions of the 12th Century. Models of Christendom: the Papacy and the Holy Roman Empire. The medieval church: popular religious culture. The medieval reformation: monastic revival; the apostolic life, orthodox and heretical. Vernacular culture: epics and romances; Provengal culture; courtly love and the Arthurian legends. The Crusades: pilgrimages; rise and fall of the crusading ideal. The Mediterranean dimension: impact of Arabic and Byzantine worlds on Latin culture. A Twelfth-century Renaissance? Recovery of law and philosophy, rise of scholasticism, monastic v university learning, Gothic art and architecture. Decline: demographic crisis, the Black Death, bastard feudalism, nominalism and mysticism

#### **HIST 2044**

#### **Slavery and Emancipation in the Atlantic World**

- 4 units semester 2
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: tutorial participation 10%, 2 papers 25% each, final exam 40%

This course will introduce students to slavery and emancipation around the Atlantic basin. The course will cover the period of European colonial expansion through the beginnings of decolonisation, from the fifteenth century through the nineteenth century. The international focus will allow us to consider how the institution of slavery shaped life in Europe, Africa, and the Americas. Much of the course will involve comparing New World slave societies and tracing their development over time. To accomplish this task we will analyse a variety of topics related to the slave community: the middle passage, the formation of African and African American culture, the experience of labour, gender and family life, and resistance. The causes, and various results, of emancipation will occupy our attention in the latter stages of the course beginning with the San Domingue Revolution and extending through emancipation in the United States, Cuba, and Brazil. By the end of the course students will have a strong background in one of the essential topics in modern history.

### **HIST 2045**

#### Migrants and the Making of Modern Australia

- 4 units semester 1
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: tutorial paper, research essay, 2 hour exam with pre-circulated questions

The Tampa crisis, widespread fears of 'people smuggling', and the revelations about the condition of asylum seekers in detention centres have reignited the debate about Australia's immigration policy and the way that we treat refugees. There is a perception that Australia has already 'done its bit' in generously accepting waves of displaced persons and refugees since World War II, and that further large-scale intakes will destabilise the Australian economy and threaten our 'way of life'. Yet, others argue that Australia's post-war Displaced Persons Scheme was self-serving and oriented towards sourcing cheap labour for dangerous public works projects, and that while Australia opened its border to Asians and East-Europeans for the first time, our preference was always for British migrants who continued to constitute the overwhelming majority of new arrivals. From this perspective, the Australian government's current attitude towards asylum seekers and its stringent migrant intake quota, simply reflect the continuation of a longstanding and generally hard-hearted immigration policy. Students of this course will examine these points of view, alongside the testimony of migrants and refugees who left behind everything and everyone they knew to make a new life in Australia. An understanding of the challenges that they faced in the workplace, at school, as women and children, and as 'wogs' 'chings' and 'reffos', might provide insight into the kinds of relationships that we have with our own neighbours and family members.

### Level III

#### HIST 3002

#### Uniting the Kingdoms: Britain 1534-1707

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Britain, 1534-1707
- Assessment: essay, tutorial performance, exam

This course examines England in the sixteenth and seventeenth centuries and its development from a European backwater to the beginning of its emergence as a global power. Particular attention is paid to the British context; the impact of English imperialism on its Anglo-Celtic neighbours: the absorption of Wales, the conquest and colonisation of Ireland, and the conflicts with Scotland which led to the union of 1707.

#### **HIST 3014**

### **Fascism and National Socialism**

- 6 units semester 1
- 2 lectures, 1 seminar per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: research essays 70%, seminar attendance & participation 30%

Extreme right wing ideologies of the twentieth century and European movements or parties that claimed to be based on them provide the focus of this course. Broadly, it covers the period 1900-1945. Major themes discussed in lectures and seminars include the intellectual and cultural origins of fascism; political and social dislocation following World War I; Italian fascism, its appeal and its leaders; the distinguishing features of National Socialism in Germany (notably anti-Semitism and policies of exclusion and repression); social and cultural life in Fascist Italy and Nazi Germany; and degrees of cooperation, collaboration and resistance in occupied Europe. We will also discuss the changing perceptions of Fascism over time and current debates on its nature.

### HIST 3025

### **Russia in Crisis and Revolution 1890-2004**

- 6 units semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 3500 word research essay 40%, seminars 20%, 1500 word essay dealing specifically with historiography of major issue in Russian history 20%, final exam 20%

This course will be of topical rather than chronological character. It is framed around an analytic structure that will focus students' attention on the socio-economic and political processes that contributed to the collapse of the Soviet Union in 1991. The elements of the course are: Liberalism vs Marxism; the Revolutionary and the Counter-revolutionary Traditions; the culture of Russian Industrialism: the Russian form of Capitalism, NEP, the system of the 'plan'; the true dissenters: Russian culture under Soviet rule; Revolution as evil; Leninism and Stalinism; War and Peace: the impact of war and the threat of war on Soviet politics; The Soviet Union in its golden age, 1955-1968; Political corruption, economic stagnation and society's silent revolt, 1969-1985; Gorbachev and the collapse of the USSR, 1985-1991; Russia's struggle to reinvent itself, 1991-2004.

### HIST 3029

#### **Reel History: World War II in Film**

- 6 units semester 2
- 3 hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: written work 80%, tutorial participation and attendance 20%

The aim of this course is to explore the relationship between the past and its representation on film with particular emphasis on World War II. It takes various aspects of the history of the war to examine how film has represented, reconstructed and interpreted the mid-twentieth century crisis. The course compares films with more traditional historical texts and sources in order to chart how filmmakers have constructed the war. Why did some individuals and events draw more attention than others? How did different people address the same subjects? Who has been responsible for shaping our understanding of the war and why was so much invested in its recreation on the screen? Students will address such questions and should complete the course with an understanding of the influence of film on popular perceptions of the past; an appreciation of the economic, social and political contexts that influence filmmaking; and an awareness of the dynamic process of remembering and forgetting history that is inherent in the production of historical films.

### **HIST 3030**

#### America, Asia and the Cold War 1945-1990

- 6 units semester 1
- 2 lectures per week, 2- hour tutorial per fortnight
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: essay, take-home exam, tutorial participation

The course will provide an introduction to the Cold War, one of the seminal events of the twentieth century, in its American-Asian context. It will provide a crucial historical framework for an informed understanding of current events. Although the Cold War has often been conceived primarily in terms of Europe (Berlin, the Soviet 'threat', etc), its ramifications in America and Asia were at least as far reaching. This course will discuss key aspects of the Cold War and Anti-Communism in the United States; the (new) triangular relationship that evolved between the United States, China and Japan after 1945, the Korean War, the long Cold War stand-off over Taiwan: Cold War in the hot climate of Indonesia and the destruction of the Communist Party there the mid-1960s; and America's involvement in and withdrawal from the Vietnam War.

### **HIST 3032**

#### **Colonial Identity and the Legacies of Empire**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorials, essays

This course will explore the role of British and French colonialism in the shaping of ethnic and national identities. What are the bonds that hold communities together, and what are the forces that tear them apart? We will examine not only the ways in which these Imperial powers sought to impose their culture upon subject populations, but also the impact of colonialism on the Imperial powers themselves. To trace the complex forces that have shaped 'colonialism's culture' from the Age of Enlightenment to the era of decolonisation, we will not just consider political developments, but will study changes in art, literature, and film.

### HIST 3033

#### Heresy and Witchcraft in Medieval Europe

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: essay plan 10%, annotated bibliography totalling 2000 words 20%, 3500 word essay 40%, tutorial participation 10%, in class test 20%

This course explores belief and deviancy in medieval Europe. After identifying religious and cultural orthodoxy, it embarks upon an analysis of dissent. Divergence from sanctioned ideology and ritual ranged from the spiritual and social challenge of medieval heresies, through popular beliefs in the magical powers of people and objects, to the witchcraze of the sixteenth and seventeenth centuries. Using a wide variety of original documents and historical interpretations, the course aims to understand and explain conflicting belief systems and the rise of intolerance in the pre-modern world.

#### **HIST 3042**

### Medieval Europe: The Crusades to the Black Death

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: essays, exam

A study of the civilisation of Western Christendom c.1100-1350. The conversion of Europe: Feudal and manorial systems. The urban and commercial revolutions of the 12th Century. Models of Christendom: the Papacy and the Holy Roman Empire. The medieval church: popular religious culture. The medieval reformation: monastic revival; the apostolic life, orthodox and heretical. Vernacular culture: epics and romances; Provengal culture; courtly love and the Arthurian legends. The Crusades: pilgrimages; rise and fall of the crusading ideal. The Mediterranean dimension: impact of Arabic and Byzantine worlds on Latin culture. A Twelfth-century Renaissance? Recovery of law and philosophy, rise of scholasticism, monastic v university learning, Gothic art and architecture. Decline: demographic crisis, the Black Death, bastard feudalism, nominalism and mysticism.

### HIST 3044

#### Slavery and Emancipation in the Atlantic World

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial participation 10%, 2 papers 15% each, final research paper 30%, final exam 30%

This course will introduce students to slavery and emancipation around the Atlantic basin. The course will cover the period of European colonial expansion through the beginnings of decolonisation, from the fifteenth century through the nineteenth century. The international focus will allow us to consider how the institution of slavery shaped life in Europe, Africa, and the Americas. Much of the course will involve comparing New World slave societies and tracing their development over time. To accomplish this task we will analyse a variety of topics related to the slave community: the middle passage, the formation of African and African American culture, the experience of labour, gender and family life, and resistance. The causes, and various results, of emancipation will occupy our attention in the latter stages of the course beginning with the San Domingue Revolution and extending through emancipation in the United States, Cuba, and Brazil. By the end of the course students will have a strong background in one of the essential topics in modern history.

#### **HIST 3045**

#### Migrants and the Making of Modern Australia

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial paper, research essay, 2hour exam with pre-circulated questions

The Tampa crisis, widespread fears of 'people smuggling', and the revelations about the condition of asylum seekers in detention centres have reignited the debate about Australia's immigration policy and the way that we treat refugees. There is a perception that Australia has already 'done its bit' in generously accepting waves of displaced persons and refugees since World War II, and that further large-scale intakes will destabilise the Australian economy and threaten our 'way of life'. Yet, others argue that Australia's post-war Displaced Persons Scheme was self-serving and oriented towards sourcing cheap labour for dangerous public works projects. and that while Australia opened its border to Asians and East-Europeans for the first time, our preference was always for British migrants who continued to constitute the overwhelming majority of new arrivals. From this perspective, the Australian government's current attitude towards asylum seekers and its stringent migrant intake guota, simply reflect the continuation of a longstanding and generally hard-hearted immigration policy. Students of this course will examine these points of view, alongside the testimony of migrants and refugees who left behind everything and everyone they knew to make a new life in Australia. An understanding of the challenges that they faced in the workplace, at school, as women and children, and as 'woas' 'chings' and 'reffos'. might provide insight into the kinds of relationships that we have with our own neighbours and family members.

### Honours

#### **HIST 4401**

#### **Honours History**

- 24 units full year
- Prerequisite: UG degree, credit average in courses contributing to major in History or equiv. approved by Head of Discipline
- Assessment: coursework (2 topics) usually in sem. 1, 15000 word thesis written in sem. 2 (lists of special courses & thesis supervisors are in Honours handbook)

Students wishing to take Honours in History should consult the Honours Coordinator prior to commencing Level II to ensure appropriate course choices are made in preparation for Honours.

Application forms for admission to Honours and a detailed brochure on the course are available from the school office; students with questions about the course or their eligibility should consult the Honours Coordinator.

In some circumstances Honours in History can be studied part-time or can be combined with Honours in another discipline.

## HORTICULTURE

### Level III

### **HORTICUL 3000WT**

### **Production Horticulture**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: ENV BIOL 2006 Botany II or equivalent
- Assessment: exam, assignments

The course examines production of commercial fruit, vegetable and nut crops including limits to production and characteristics for cultivars, management and irrigation, harvesting and marketing. Crops considered include citrus, apple and pears, grape vines, soft vines (berries), stone fruits, almond, walnut, macadamia, pecan, pistachio, and the tropical fruit, pineapple, banana, mango, lychee and avocado. Vegetables include tomato, potato, brassicas, cucurbits, lettuce and the onion group.

#### **HORTICUL 3001WT**

#### **Horticulture Systems**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: ENV BIOL 2006 Botany II
   or equivalent
- Assessment: mid-semester exam, final exam, assignments

The importance of horticulture to the community, sustainability and economic value, horticultural production areas and environmental factors involved. Fruit crop growth and its control using cultural and chemical methods. Horticultural propagation methods. The basis of production systems which include horticulture, and systems which combine different types of horticulture. Plant improvement and breeding. The significance of pollination to horticulture.

# HORTICUL 3004WT

### **Olive Production and Marketing**

- 3 units semester 2
- Mid year break
- Assessment: exams, practical, tour reports, major assignment

This course examines production aspects of olive oil and pickling fruit. Characteristic requirements regarding cultivar selection, climate, soils and location; growing practices plus management of irrigation, pest and diseases; development budget financial planning; harvesting and oil quality assessment; marketing of olives including market evaluation, market plan development in product, pricing, distribution and marketplace decisions. Students are required to participate in field visits to growing/marketing enterprises as arranged.

### Honours

### **HORTICUL 4000WT**

### Honours Wine and Horticulture (BAgSc)

- 12 units full year
- Prerequisite: credits in 2 Level III courses offered by the Discipline
- Corequisite: 2 additional specified Level III courses offered by the Discipline
- Assessment: procedures discussed at commencement of study

Intending candidates should consult the Head of Discipline and potential supervisors before October of Year III, and should be prepared to commence studies in the Discipline on or about 1 February or July. After consultation, each candidate will be assigned a research project which will be carried out under supervision. The results will be presented in a dissertation at the end of the course. A candidate may also be required to prepare an essay and give a seminar.

### **HORTICUL 4003WT**

### **Honours Wine and Horticulture**

- 24 units full year
- Prerequisite: credit or higher pass in appropriate Level III courses offered by a Science Discipline
- Corequisite: 2 Level III courses offered by Discipline of Wine & Horticulture -at discretion of Head of Discipline, one may be a relevant course taught by another discipline

- Assessment: to be advised
- This course is available under the provisions of Academic Program Rule 5.7.2

Intending candidates must consult the Honours Coordinator and potential supervisors during October of the final year of studies for the degree of Bachelor of Science, and should be prepared to commence studies on or about 1 February. After consultation, each candidate must obtain a letter of acceptance from the Head of the Discipline of Wine and Horticulture. A research project will then be assigned which will be carried out under supervision. The results will be presented in a seminar and research report at the end of the course. A candidate may also be required to prepare an essay, attend lectures and pass an exam.

### **HORTICUL 4005WT**

### Honours Horticultural Science (BAgSc)

- 12 units full year
- Prerequisite: credits in 2 level III courses offered by the Discipline
- Corequisite: 2 additional specified Level III courses offered by the Discipline
- Assessment: coursework, essays or other assignments not part of research project, research project - research proposal, seminar, thesis and viva voce

Intending candidates should consult the Head of Discipline and potential supervisors before October of Year III, and should be prepared to commence studies in the Discipline on or about 1 February or July. After consultation, each candidate will be assigned a research project, which will be carried out under supervision. The results will be presented in a dissertation at the end of the course. A candidate may also be required to prepare an essay and give a seminar.

### **HORTICUL 4006WT**

### Honours Wine and Horticulture (BAg)

- 24 units full year
- Prerequisite: credits in 2 level III courses offered by the Discipline
- Assessment: coursework, essays or other assignments not part of research project, research project - research proposal, seminar, thesis and viva voce

Intending candidates should consult the Head of Discipline and potential supervisors before October of Year III, and should be prepared to commence studies in the Discipline on or about 1 February or July. After consultation, each candidate will be assigned a research project, which will be carried out under supervision. The results will be presented in a dissertation at the end of the course. A candidate may also be required to prepare an essay and give a seminar.

## **INDONESIAN**

### Level I

### INDO 1001

#### Indonesian Introductory A

- 3 units semester 1
- 5 contact hours per week
- Assessment: written & oral tests, assignments, tutorial papers

The topic introduces beginner and near-beginner students to contemporary Indonesian language, society and culture. Functional fluency will be developed through speaking, listening, reading and writing. Students will acquire basic vocabulary and an understanding of sentence patterns required for simple communication in everyday language, and to proceed to higher levels of study. Weekly culture and society lectures are an integral part of the topic. No previous knowledge of the language is assumed. Students with some background knowledge of the language (either native or non-native speaker) must consult the Director of Studies if they wish to enrol in an Indonesian language topic.

### INDO 1002

#### Indonesian Introductory B

- 3 units semester 2
- 5 contact hours per week
- Prerequisite: INDO 1001 Indonesian Introductory A (formerly known as Part 1) or permission of Convenor
- Assessment: written & oral tests, assignments, tutorial papers

This topic advances the skills acquired in INDO 1001 Indonesian Introductory A, to provide a deeper level of language use and understanding at the introductory level. An emphasis on communicative competence will help students to increase proficiency in basic reading, writing, speaking and listening. Culture and society lectures will expand knowledge of modern Indonesia.

### INDO 1011

#### **Indonesian Introductory SA**

- 3 units semester 1
- 5 contact hours per week
- Prerequisite: SACE Stage 2 Indonesian (15 or better) or permission of Convenor
- Assessment: graded written & oral tests, assignments

The weekly Indonesian culture and society lectures are an integral part of the topic. The language practicals aim to extend students' knowledge of basic spoken Indonesian to written standard Indonesian. Special focus will be on developing extensive reading skills and on further exploring morphological and syntactic patterns in that context. Active student participation is required as this topic also aims to enhance speaking skills through role-plays, small group discussions, practical task-based activities, and other fun language activities.

### INDO 1012

#### Indonesian Introductory SB

- 3 units semester 2
- 5 contact hours per week
- Prerequisite: INDO 1011 Indonesian Introductory SA (formerly Indonesian Introductory A Part 1) or permission of Convenor
- Assessment: graded written & oral tests, assignments

The topic's objective is to further develop students' knowledge of standard written Indonesian language. Special attention is directed to developing extensive vocabulary and writing skills, and reinforcing essential grammar points and sentence structures in Indonesian texts. Development of speaking skills in practical language activities and thematic discussions will be important components of this topic.

### INDO 2001

### Indonesian Intermediate A

- 4 units semester 1
- 5 contact hours per week
- Prerequisite: INDO 1002 Indonesian Introductory Part 2 or permission of Convenor
- Assessment: graded written & oral tests, assignments

The language practicals aim to extend students' knowledge of basic spoken Indonesian to written standard Indonesian. Special focus will be on developing extensive reading skills and on further exploring morphological and syntactic patterns in that context.

Active student participation is required as this topic also aims to enhance speaking skills through role-plays, small group discussions, practical taskbased activities and other fun language activities.

### INDO 2002

### Indonesian Intermediate B

- 4 units semester 2
- 5 contact hours per week
- Prerequisite: INDO 2001 Indonesian Intermediate A (formerly Indonesian Intermediate Part 1) or permission of Convenor
- Assessment: graded written & oral tests, assignments

The topic's objective is to further develop knowledge of standard written Indonesian language. Special attention is directed to developing extensive vocabulary and writing skills, and reinforcing essential grammar points and sentence structures in Indonesian texts. Development of speaking skill in practical language activities and thematic discussions will be important components of this topic.

### INDO 2011

### Indonesian Intermediate SA

- 4 units semester 1
- 4 contact hours per week
- Prerequisite: INDO 1012 Indonesian Introductory A Part 2 or permission of Convenor
- Assessment: written, oral tests

This topic focuses on developing and extending oral and written skills in Indonesian through a variety of distinct, but interrelated, activities. Emphasis is on reading, discussion, translation, and writing in Indonesian based on Indonesian source materials relating to the social sciences. This unit involves intensive Indonesian comprehension of various aspects of Indonesian history, culture and current affairs. Part of this course may be delivered online.

### INDO 2012

### Indonesian Intermediate SB

- 4 units semester 2
- 4 contact hours per week
- Prerequisite: INDO 2011 Indonesian Intermediate SA/Indonesian Intermediate A Pt 1 or permission of Convenor
- Assessment: written, oral tests

This course focuses on developing and extending oral and written skills in Indonesian through a variety of distinct but interrelated activities and approaches; reading, translation, discussion and writing in Indonesian based on Indonesian source materials relating to the social sciences. Intensive Indonesian comprehension and oral presentation of a variety of historical and current affairs sources in both audio and video format will be undertaken. Part of this course will be delivered online.

### Level III

## INDO 3001 Indonesian Advanced A

- 6 units semester 1
- 4 contact hours per week
- Prerequisite: Indonesian language at Level II or permission of Convenor
- · Assessment: written, oral tests

This topic focuses on developing and extending oral and written skills in Indonesian through a variety of distinct, but interrelated, activities. Emphasis is on reading, discussion, translation, and writing in Indonesian based on Indonesian source materials relating to the social sciences. This unit involves intensive Indonesian comprehension of various aspects of Indonesian history, culture and current affairs. Part of this course may be delivered online.

### INDO 3002

### Indonesian Advanced B

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: INDO 3001 Indonesian Advanced A/Indonesian Advanced Pt 1or permission of Convenor
- Assessment: written, oral tests

This course focuses on developing and extending oral and written skills in Indonesian through a variety of distinct but interrelated activities and approaches; reading, translation, discussion and writing in Indonesian based on Indonesian source materials relating to the social sciences. Intensive Indonesian comprehension and oral presentation of a variety of historical, cultural and current affairs sources in both audio and visual format will be undertaken. Part of this course will be delivered online.

### INDO 3004

### **Indonesian In-Country**

- 12 units semester 1 or 2
- Quota applies

For students who wish to study at an Indonesian University. Indonesian language and other courses can be studied. For further information contact the Centre for Asian Studies.

### INDO 3011

### **Indonesian Advanced SA**

- 6 units semester 1
- Prerequisite: INDO 2012 Indonesian
   Intermediate A Part 2 or permission of Convenor
- Assessment: written, oral tests

This topic will consolidate advanced language skills through integrating general Indonesian studies with language study. Materials are taken from a range of authentic sources including audiovisual, on-line and newspapers to extend comprehension and expression abilities. In addition to the weekly seminar, students are expected to carry out independent study, which will be submitted for assessment. Assessment will consist primarily of short tests, written assignments and oral presentations.

### INDO 3012 Indonesian Advanced SB

- 6 units semester 2
- Prerequisite: INDO 3011 Indonesian Advanced SA/Indonesian Advanced A Pt 1) or permission of Convenor
- Assessment: written, oral tests

This topic aims to develop analytical skills and to prepare students for language use in a variety of fields and professions. Materials used will be relevant to current issues and debates in and about Indonesia with particular focus on the politics, social movements and popular culture. Students will have the opportunity to research a topic of personal interest related to one of the themes of the topic. In addition to the weekly seminar, students are expected to carry out independent study to be submitted for assessment.

## **INFORMATION SYSTEMS**

### Level I

### ECOMMRCE 1000

### **Information Systems I**

- 3 units summer semester or semester 1
- 2 lectures, 1 tutorial, 6 hours per week selfdirected study per week
- Available for Non-Award Study
- Quota may apply
- Assumed Knowledge: basic accounting concepts-students without this are advised to enrol concurrently in ACCTING 1002 Accounting for Decision Makers I
- Restriction: not to be counted with either COMP SCI 1004 Computer Literacy I or COMP SCI 1001 Computer Applications I or PURE MTH 1002 Quantitative Methods Using Computers I
- Assessment: exam, assignments as determined at first lecture

Introduction to information systems and their role in organisations; computer hardware (PC and multi-user), system and application software, data and people; end-user application software (spreadsheets and graphics, database management, accounting packages); networking and data communication; information systems for business operations, decision support and strategic advantage; introduction to E-Business and E-Commerce; principles of information system development; trends, issues and concerns.

### Level II

### ECOMMRCE 2004

### Internet Commerce II

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Assumed Knowledge: fundamentals of World Wide Web, information system development & relational database management systems (eg Microsoft Access) as in Information Systems I
- Assessment: exam, assignments as determined at first lecture

An examination of how businesses use the World Wide Web to interact with consumers. Topics include alternative business models, current Australian practices, commercial benefits and costs, design, construction and management of a web site, integration with a database, HTML and Java Script languages, project management, payment systems, security, international considerations, evaluation and maintenance of a web site as part of a marketing plan.

### Level III

### ECOMMRCE 3016

#### **Electronic Commerce III**

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Assumed Knowledge: fundamentals of World Wide Web, information system development, relational database design θ computerised accounting as taught in Information Systems I
- Assessment: exam, assignments as determined at first lecture

An examination of how businesses use computer communications to interact with other organisations including suppliers, customers, financial institutions and government agencies. Topics include communications technologies, private and public networks, electronic data interchange, supply-chain management, current Australian practices, strategic planning for information technology, relationships with other businesses and departments, integration with internal systems, enterprise resource planning software, implementation issues, firewalls and security

## INTERNATIONAL STUDIES

### Level II

### **INST 2001**

### International Studies (core topic)

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1500-2000 word essay 30%, 2500-3000 word essay 50%, tutorial participation 10%, multiple choice test on lecture content 10%

This course focuses on the problems and issues associated with thinking about the concept of 'Globalization' as a way of understanding the contemporary international system. For example, do we live in an increasingly interconnected globalized world or in a world marked by increased levels of cultural, economic and political fragmentation? The first part of the course looks broadly at the concept of globalization - its various understandings as economic, political and cultural processes and the relationship between globalization and militarization. The second part of the course looks at how global processes 'touch down' in national spaces - drawing upon examples from Asia, Africa, Latin America and Europe. Guest lecturers will provide case studies from countries around the world - exploring the contemporary challenges and issues that they face . In the final part of the course, we focus on issues such as the rise of global cities, democratisation and 'good governance', new forms of war and conflict and factory production. These examples illustrate the complex interplay between local societies and states and processes associated with globalization in contemporary international studies.

### Honours

#### **INST 4401**

#### **Honours International Studies**

- 24 units full year
- Prerequisite: undergraduate degree, credit average in courses contributing to major in International Studies
- Assessment: 2 x 5000 word seminars 25% each, 15 000 word thesis 50%

Students wishing to take Honours in International Studies should consult the Honours Coordinator prior to commencing Level II to ensure that appropriate course choices are made in preparation for Honours.

There is a preliminary Honours meeting in November of each year where the Honours Handbook and applications will be available. Any questions regarding Honours are answered at this meeting. Please check the School of History and Politics noticeboard, level 4, Napier Building, for the date of this meeting, which will also be announced in lectures.

In some circumstances, Honours International Studies can be studied part-time over two years or can be combined with Honours in another discipline.

## ITALIAN

### Level I

### ITAL 1001

#### Italian IA

- 3 units semester 1
- 4 hours per week
- Assessment: periodic written & oral tests, class participation, written assignments

The course consists of classes divided according to linguistic competence at the point of entry. Emphasis is placed on developing the skills of comprehension and active use of spoken and written Italian, in the context of language goals that are realistic and rewarding for each student. The program, which presupposes regular attendance at all scheduled hours, includes both lecture-type instruction and tutorials where students are expected to participate interactively in the language-learning process. Advanced students study a selection of Italian texts related to Italian culture and society.

### ITAL 1002

### Italian IB

- 3 units semester 2
- 4 hours per week
- Prerequisite: ITAL 1001 Italian IA/Italian I Part 1

Assessment: periodic written  $\theta$  oral tests, class participation, written assignments, final written exam in language component

The course develops further the basic language skills acquired in first semester and extends the students' proficiency in both spoken and written Italian. The topic consists of classes divided according to levels of linguistic competence, where emphasis is placed on the continuing development of the skills of comprehension and active use of spoken and written Italian in the context of realistic and rewarding language goals. The program presupposes regular attendance at all scheduled classes, including both lecture-type instruction and interactive language tutorials. Advanced students study aspects of modern Italy.

### Level II

### ITAL 2001 Italian IIA

- 4 units semester 1
- 4-5 hours per week
- Prerequisite: ITAL 1002 Italian IB/Italian I Part 2
- Assessment: periodic written & oral tests, class participation, written assignments

The course is designed to strengthen and extend the students' linguistic proficiency in the four basic skills (listening, speaking, reading and writing) acquired at level I, and to provide further study in the area of Italian society and culture. The language component consists of classes divided according to levels of linguistic competence, where particular emphasis is placed on oral-aural comprehension and on the use of spoken and written Italian in the context of language goals that for each student are realistic and rewarding. In the culture component (2 hours per week) students consider issues relating to Italian culture and society as illustrated in a selection of Italian texts.

### ITAL 2002 Italian IIB

- 4 units semester 2
- 4-5 hours per week
- Prerequisite: ITAL 2001 Italian IIA/ Italian II Pt 1
- Assessment: periodic written & oral tests, class participation, written assignments, final written exam in language component

The course continues the development of communication skills, both spoken and written, through the progressive study of more advanced grammatical structures in the context of conversation practice, composition, and other language activities. Between 1 and 2 hours are devoted to the culture component, and a further 3 to 4 hours are devoted to language in separate streams divided according to linguistic competence. These classes are programmed for interaction within the group. The culture component consists of the study of issues relating to Italian culture and society as illustrated in a selection of Italian texts.

### Level III

### ITAL 3001

#### Italian IIIA

- 6 units semester 1
- 4-5 hours per week
- Prerequisite: ITAL 2002 Italian IIB/Italian II Pt 2
- Assessment: periodic written & oral tests, class participation, written assignments

The course is designed to strengthen and extend the students' proficiency in the four macro skills (written/oral comprehension and communication) acquired at level II, and to provide the opportunity for the study of specific aspects of Italian society and culture. The language classes are divided according to the students' linguistic competence and cover advanced Italian grammar, particularly syntax, commensurate with this level. The culture component consists of a monographic study in the area of Italian society, language or literature (details available at the time of enrolment). In lieu of this monographic study available at the University of Adelaide, students may take the culture segment offered in first semester at the Flinders University campus.

### ITAL 3002 Italian IIIB

- 6 units semester 2
- 4-5 hours per week
- Prerequisite: ITAL 3001 Italian IIIA /Italian III Pt 1
- Assessment: periodic written & oral tests, class participation, written assignments, final written exam in language component

The course is designed to extend further the students' proficiency in the four macro skills (written/oral comprehension and communication) acquired in the first semester of level III, and to provide the opportunity for the close study of an aspect of Italian society and culture. The language classes are divided according to the students' linguistic competence and develop further advanced aspects of Italian grammar, particularly syntax, commensurate with this level. The culture component consists of a monographic study in an area of Italian society, language or literature (details available at the end of first semester). In lieu of this monographic study available at the University of Adelaide, students may take the culture segment offered in second semester at the Flinders University campus.

## JAPANESE

### Level I

## JAPN 1001 Japanese IA

- 3 units semester 1
- 6 contact hours per week
- · Available for Non-Award Study
- Assessment: continuous small tests, assignments, exam

No previous knowledge of Japanese required

This introductory course is designed to teach the basic grammar and vocabulary of modern spoken Japanese, together with the writing system, Hiragana and Katakana and the introduction of basic Kanji. Emphasis will be placed on promoting students' communication skills in both spoken and written Japanese through practical tutorials.

### **JAPN 1002**

#### Japanese IB

- 3 units semester 2
- 6 contact hours per week
- · Available for Non-Award Study
- Prerequisite: JAPN 1001 Japanese IA or equiv
- Assessment: continuous small tests, assignments, exam

This course enables students to broaden the skills in basic Japanese language acquired in JAPN 1001 Japanese IA, in order to provide a solid foundation at the introductory level in both spoken and written Japanese.

### **JAPN 1011**

### Japanese ISA

- 3 units semester 1
- 6 contact hours per week
- Available for Non-Award Study
- Prerequisite: Continuers Japanese (at 15 or better) or equiv
- · Assessment: continuous small tests and assignments, exam

This course consolidates a foundation in the basic grammar and vocabulary of modern Japanese. Throughout the course, communication skills will be reinforced and at the same time increased emphasis will be placed on developing reading and writing skills using a substantial number of characters and their combinations.

### **JAPN 1012**

#### **Japanese ISB**

- 3 units semester 2
- 6 contact hours per week
- Available for Non-Award Study
- Prerequisite: JAPN 1011 Japanese ISA or equiv
- · Assessment: continuous small tests and assignments, exam

This course enables students to broaden the skills in basic Japanese language acquired in JAPN 1011 Japanese ISA, in order to provide a solid foundation at the elementary level in both spoken and written Japanese. Throughout the course, communication skills will be reinforced and at the same time increased emphasis will be placed on

developing reading and writing skills using a substantial number of characters and their combinations.

### Level II

### **JAPN 2001**

### **Japanese IIA**

- 4 units semester 1
- 6 contact hours per week
- Prerequisite: JAPN 1002 Japanese IB (Pass Div 1) or equiv.
- Assessment: continuous small tests, assignments, exam

This course consolidates a foundation in the basic grammar and vocabulary of modern Japanese. Throughout the course, communication skills will be reinforced and at the same time increased emphasis will be placed on developing reading and writing skills using a substantial number of characters and their combinations.

### **JAPN 2002**

#### **Japanese IIB**

- 4 units semester 2
- · 6 contact hours per week
- Prerequisite: JAPN 2001 Japanese IIA or equiv.
- Assessment: continuous small tests, assignments, exam

This course enables students to broaden the skills acquired in basic Japanese language acquired in JAPN 2001 Japanese IIA, in order to provide a solid foundation at the elementary level in both spoken and written Japanese. Throughout the course, communication competence will be reinforced and at the same time increased emphasis will be placed on developing reading and writing skills using a substantial number of characters and their combinations.

### **JAPN 2011**

#### **Japanese IISA**

- 4 units semester 1
- 5 contact hours per week
- Prerequisite: JAPN 1012 Japanese ISB (Pass Div 1) or equiv.
- · Assessment: continuous small tests and assignments, exam

This course consolidates the language skills at an upper elementary level. Emphasis is placed on building vocabulary and widening the understanding of grammatical structures to develop communication skills.

### **JAPN 2012**

### **Japanese IISB**

- 4 units semester 2
- 5 contact hours per week
- Prerequisite: JAPN 2011 Japanese IISA or equiv.
- Assessment: continuous small tests and assignments, exam

This course enables students to develop Japanese language skills at a lower intermediate level. Emphasis is placed on building communication skills while reviewing the elementary grammar.

### Level III

### **JAPN 3001**

#### **Japanese IIIA**

- 6 units semester 1
- 5 contact hours per week
- Prerequisite: JAPN 2002 Japanese IIB (Pass Div 1) or equiv.
- Assessment: continuous small tests and assignments, exam

This course consolidates the language skills at an upper elementary level. Emphasis is placed on building vocabulary and widening the understanding of grammatical structures to develop communication skills.

### **JAPN 3002**

#### **Japanese IIIB**

- 6 units semester 2
- 5 contact hours per week
- Prerequisite: JAPN 3001 Japanese IIIA or equiv.
- Assessment: continuous small tests and assignments, exam

This course enables students to develop Japanese language skills at a lower intermediate level. Emphasis is placed on building communication skills while reviewing the elementary grammar.

### JAPN 3011 Japanese IIISA

- 6 units semester 1
- 4 contact hours week
- Prerequisite: JAPN 2012 Japanese IISB (Pass Div 1) or equiv.
- Assessment: combination of tests/exams/essays

The course aims to review and integrate students' linguistic knowledge and language skills acquired in Japanese IIIB/IISB. The course places a strong focus on developing advanced communication skills as well as introducing basic research skills to present and write research essays in Japanese, using authentic Japanese language source materials.

### JAPN 3012

### **Japanese IIISB**

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: JAPN 3011 Japanese IIISA or equiv.
- Assessment: combination of tests/exams/ essays

This course is a continuation and extension of the materials introduced in JAPN 3011 Japanese IIISA.

### Honours

### **JAPN 4401**

#### **Honours Japanese Studies**

- 24 units full year
- Prerequisite: UG degree with Credit average or better in courses contributing to major in Japanese or equiv. approved by Head of Discipline
- Assessment: coursework 50%, thesis 50%

Students wishing to take Honours Japanese Studies should consult the Honours Coordinator prior to commencing.

Entry to Honours is subject to the approval of the Head of Discipline on advice from the Honours Committee of the Centre. For further details please consult the Honours Handbook.

## LANDSCAPE ARCHITECTURE

### Level IV

### **LARCH 4018**

### Landscape Architecture Elective Studio A

- 6 units semester 1
- Up to 9 hours lectures/tutorials/workshops including average 6 hours studio, contact hours vary from week to week
- Eligibility: B.L.Arch., B.Arch., B.Arch./B.L.Arch. students only
- Restriction: LARCH 4010 Landscape Architecture Studio IA
- · Assessment: assignments, projects

This course explores the theory and practice of ecological design in relation to water and wetlands. It examines examples of projects that successfully demonstrate the management of water and wetland ecologies, the survey and documentation of existing environments, and strategies for design and construction. The course will also examine related issues of plant design in wetlands.

### LARCH 4019

#### Landscape Architecture Studio

- 6 units semester 1
- Up to 9 hours lectures/tutorials/workshops including average 6 hours studio, contact hours vary from week to week
- Eligibility: B.L.Arch, B.Arch./B.L.Arch. students
- Restriction: LARCH 4012 Landscape Architecture Studio IB or LARCH 5030 Architecture/Landscape Architecture Studio IIE
- · Assessment: assignments, projects

This course focuses on the design and construction of a medium scale urban landscape project. Students will develop a brief from a client's instructions, develop design options that respond to the brief, the site and urban ecology environmental objectives, predict and analyse the potential performance of the chosen design, and develop sample construction specifications and drawings. The analysis and documentation will be carried out using digital media.

### LARCH 4020

#### Landscape Architecture Elective Studio B

- 6 units semester 2
- intensive studio in approx Weeks 8-13, up to 18 hours lectures/tutorials/workshops including average 6 hours studio, contact hours vary from week to week
- Eligibility: B.L.Arch, B.Arch, B.Arch./B.L.Arch. students only
- Restriction: LARCH 4017 Landscape Architecture Studio IC or ARCH 4027 Architecture/Landscape Architecture Studio IF
- · Assessment: assignments and projects

This course will explore connections between landscape architecture design and avant-garde trends, culture, aesthetics and/or aspects of landscape architecture theory. The course is intended to be an opportunity to expand creative design boundaries. It may include crossdisciplinary connections with architecture, art and urban design.

### Level V

### **LARCH 5028**

### Advanced Studies in Landscape Architecture II

- 3 units semester 1
- 2 hour tutorial/seminar per week
- Eligibility: approved Honours B.L.Arch. students
- Prerequisite: admission is selective based on prior results - guidelines available from School of Architecture, Landscape Architecture & Urban Design
- Assessment: 3000 5000 word final report

Students wishing to take this course on a parttime basis should consult the School Executive Officer

Students will be required to undertake supervised research and/or design exploration into a particular topic, leading to the presentation of a seminar paper and/or exhibition, and submission of a final essay or report of between 3000 to 5000 words.

Topics offered for this course will depend upon staff availability. Examples of topics which can be expected from time to time include: Appropriate Technology and Energy Topics, Computer-Aided Design, Criticism and Landscape Architecture, Cultural Design Topics, Dryland Management, Ecological Restoration, Environmental Planning, Environmental Psychology, Ethno-Ecological Design Topics, Heritage Conservation, Landscape Design History, Landscape Architectural Theory, Landscape Planning, Rural Land Design Topics, Sustainable Design Applications, Urban Design, Urban Ecology, Urban Stormwater Management.

### LARCH 5030

### Architecture /Landscape Architecture Studio IIE

- 4 units semester 1
- Up to 9 hours lectures/tutorials/workshops/field trip, contact hours vary week to week
- Eligibility: B.Arch/B.L.Arch. double degree students only
- Restriction: LARCH 4012 Landscape Architecture Studio IB
- Assessment: assignments, projects

This course focuses on the design and construction of a medium scale urban landscape project. Students will develop a brief from a client's instructions, develop design options that respond to the brief, the site and urban ecology environmental objectives, predict and analyse the potential performance of the chosen design, and develop sample construction specifications and drawings. The analysis and documentation will be carried out using digital media.

### **LARCH 5031**

#### Landscape Architecture Processes

- 6 units semester 1
- Up to 18 hours lectures/tutorials/workshops including average 6 hours studio, contact hours vary from week to week
- Eligibility: B.L.Arch., B.Arch./B.L.Arch. students
- Prerequisite: 18 units of Level I B.L.Arch. or B.Arch./B.L.Arch. courses, including at least 12 units of Level I core courses
- Corequisite: ARCH 5028 Professional Practice and ARCH 5030 Design Seminar
- Restriction: LARCH 5029 Landscape Architecture Studio II
- Assessment: assignments and projects

This course will mirror in an educational setting the processes by which medium to large scale landscape architecture projects are managed, initiated, developed and documented. Students will develop integrated proposals for a semiarid/arid landscape project or projects raising significant environmental design issues, linking stages from project conception and landscape planning to construction and documentation. It will address the stakeholders, environment, and means of achieving design objectives.

### **LARCH 5032**

#### Landscape Architecture Project

- 10 units semester 2
- Up to 20 hours a week studio work with specialist lectures irregularly spaced
- Eligibility: B.L.Arch, B.Arch./B.L.Arch. students
- Prerequisite: LARCH 5031 Landscape Architecture Processes or LARCH 5029 Landscape Architecture Studio II
- Corequisite: LARCH 5033 Landscape Architecture Seminar
- Restriction: LARCH 5021 Landscape Architecture Project II
- Assessment: final project

This course focuses on the definition, development and description of a major culminating landscape architectural design project that both challenges and demonstrates students' skills and knowledge of landscape architecture. The project, which will be of moderate complexity and of a student's own choice, is negotiated with academic staff and may potentially be drawn from any aspect of landscape architecture. Responses should demonstrate competency in most phases of landscape architecture thought and practice, including a final presentation that should show a thorough integration of all major aspects of the academic program. The course links with the concurrent course Landscape Architecture Seminar.

### **LARCH 5033**

#### Landscape Architecture Seminar

- 2 units semester 2
- 2-3 hours lectures/tutorials/workshops, contact hours vary week to week
- Eligibility: B.L.Arch, B.Arch./B.L.Arch. students
- Prerequisite: LARCH 5031 Landscape Architecture Processes or LARCH 5029 Landscape Architecture Studio II
- Corequisite: LARCH 5032 Landscape Architecture Project
- Assessment: assignments, seminar papers

This course examines contemporary issues, theories and philosophies in landscape architectural design. It will engage in the critical review of influential and cutting edge practice and practitioners. It supports the concurrent course Landscape Architecture Project in which the critical thinking developed in this course is expressed as creative work.

## LATIN

### Level I

### LATN 1002

### Latin I

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: AGRE 1102 Introduction to Latin and Ancient Greek I (or equivalent)
- Restriction: not available to students who reached a satisfactory level of achievement in SACE Stage 2 Latin (or equiv)
- Assessment: 4 progressive tests 40%, end-ofsemester exam 60%

The course is a continuation of AGRE 1102 Introduction to Latin and Ancient Greek. It introduces students to some of the more complex grammatical constructions of the Latin language and expands their Latin vocabulary with a view to enabling them to read and comprehend (modified) texts in the original language. Students are required to complete a variety of language tasks including translation both into and from Latin and answering comprehension questions on passages in Latin. This course develops students' ability to identify and analyse sophisticated grammatical constructions and improves their comprehension skills.

### Level II

### LATN 2002

### Latin IIA

- 4 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: LATN 1002 Latin I Part 2 or satisfactory achievement in SACE Stage 2 Latin (or equiv)
- Assessment: semester tests on grammar & syntax 40%, 3-hour exam on translation & grammar 60%

This course aims to consolidate students' understanding of the more complex and sophisticated grammatical constructions of the Latin language while introducing them to the reading of (modified) texts written in the original language. Two hours per week will be devoted to the study of grammar and syntax in which students will be required to complete a variety of language tasks including translation both into and from Latin. One hour per week may be devoted to the reading of (modified) passages from Latin texts, including unseen comprehension.

## LATN 2003

### Latin IIB

- 4 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: LATN 2002 Latin II Part 1 (or equiv)
- Assessment: 2 end-of-semester exams preparation text and discussion text 50%, ability in unseen translation 40%, 2 grammar tests during semester 10%

The course aims to: i) consolidate and improve reading skills and understanding of grammatical constructions; ii) enhance ability to comprehend and interpret Latin literature; iii) give students an understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention to literary analysis as well as translation.

### LATN 2010 Latin IIS

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: acceptance for Honours & AGRE 2102 Introduction to Latin and Ancient Greek IIS (or equiv)
- Restriction: not available to students who have reached a satisfactory level of achievement in SACE Stage 2 Latin or equiv.
- Assessment: 4 progressive tests during semester 40%, end of semester exam 60%

The course is a continuation of AGRE 2102 Introduction to Latin and Ancient Greek IIS. It introduces students to some of the more complex grammatical constructions of the Latin language and expands their Latin vocabulary with a view to enabling them to read and comprehend (modified) texts in the original language. Students are required to complete a variety of language tasks including translation both into and from Latin and answering comprehension questions on passages in Latin. This course develops students' ability to identify and analyse sophisticated grammatical constructions and improves their comprehension skills.

### Level III

# LATN 3002

### Latin IIIA

- 6 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: LATN 2003 Latin II Part 2 (or equiv)
- Assessment: sentences/proses during semester 15%, 3 exams - preparation text & discussion text 30%, unseen translation & translation from English 40%, private reading text 15%

The course aims to: i) enable students to gain complete mastery over the language structure; ii) improve their reading skills over a variety of genres and writing styles; iii) enhance their understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension and translation from English: in this class, students will be expected to hand up work for assessment. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation. In addition, a text is to be read privately during the semester, for examination at the end.

### LATN 3003

### Latin IIIB

- 6 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: LATN 3002 Latin III Part 1 (or equiv)
- Assessment: sentences/proses during semester 15%, 3 exams - preparation text & discussion text 30%, unseen translation & translation from English 40%, private reading text 15%

The course aims to: i) enable students to gain complete mastery over the language structure; ii) improve their reading skills over a variety of genres and writing styles; iii) enhance their understanding and appreciation of the literature and culture of the society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension and translation from English: in this class, students will be expected to hand up work for assessment. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation. In addition, a text is to be read privately during the semester, for examination at the end.

### LATN 3011 Latin IIISA

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: acceptance for Honours, LATN 2101 Latin IIS (or equiv)
- Assessment: semester tests 40%, 3-hour exam on translation, grammar & comprehension 60%

This course aims to consolidate students' understanding of the more complex and sophisticated grammatical constructions of the Latin language while introducing them to the reading of (modified) texts written in the original language. Two hours per week will be devoted to the study of grammar and syntax in which students will be required to complete a variety of language tasks including translation both into and from Latin. One hour per week may be devoted to the reading of (modified) passages from Latin texts, including unseen comprehension.

### LATN 3012

### Latin IIISB

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: acceptance for Honours, LATN 3011 Latin IIIS Part 1 (or equiv)
- Assessment: 2 grammar tests during semester 10%, 2 end of semester exams - preparation text & discussion text 50%, ability in unseen translation 40%

The course aims to: i) consolidate and improve reading skills and understanding of grammatical constructions; ii) enhance ability to comprehend and interpret Latin literature; iii) give students an understanding and appreciation of the literature and culture of society. One hour per week will be devoted to the study of grammar and syntax, including unseen comprehension. One hour will be spent on a preparation text, prepared beforehand and translated in class with attention given to grammatical understanding and analysis. One hour per week will be devoted to a discussion text with attention given to literary analysis as well as translation.

### Honours

### LATN 4401

#### **Honours Latin**

- 24 units full year
- Prerequisite: UG degree, credit average in courses contributing to a major in Latin (or equiv.approved by Head of Discipline)
- Assessment: 4 short, 2 long or 1 long & 2 short texts assessed by exam and/or 6000 word essay 33%, common course - 3000 word seminar paper 12%, proses & end-of-semester exam on unseen & prose translation 13%, 12500-15000 word dissertation in sem. 2, 42%

Students wishing to take Honours Latin should consult the Honours Coordinator prior to

commencing level II to ensure appropriate course choices are made in preparation for Honours.

The exact arrangement of the course may be varied by the Head of the Discipline in accordance with the interests of the students and the availability of specialised teaching. In some circumstances Honours Latin can be studied parttime over two years or can be combined with Honours in Ancient Greek or another discipline.

## LAW

### Level I

### LAW 1001

### Introduction to Australian Law

- 4 units semester 1 or 2
- 48 hours
- Eligibility: Law degree students only
- Assessment: class participation, written assignment/s, exam

This course provides an introduction to development and operation of the Australian legal system, including the historical background and the development of the Australian legal system and its components; Legal System taxonomy, including the Australian Federal system. public and private law; other families of legal systems, including the International legal system and comparative law; an introduction to human rights law; and an introduction to legal theory, addressing the nature of law and critical legal thinking. The course will also provide an introduction to legal research and problem solving.

### LAW 1002

#### Law of Torts

- 4 units semester 1
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assessment: examination 100% or 75%, small group assignment 25%

The tort of negligence including defences, with some consideration of damages, concurrent liability and alternative methods of providing compensation for accidental injury. A representative range of other torts and their defences which may include intentional torts to the person, and torts to the person, trespass to land and defamation.

### LAW 1003

### Law of Contract

- 4 units semester 1
- 50 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assessment: exam 100%, or exam 75% and 1000 word assignment 25%

Acquaints students with the content and application of the common law, equitable and statutory rules relating to enforceable agreements and puts those rules in their practical and social perspective. Although the course is not concerned with the various statutory modifications made with respect to specific classes of contract (eg employment, land, consumer finance, etc), which are dealt with in other courses, an understanding of the basic conception of a contract is vital not just as a starting point for those statutory models but also for an understanding of everyday commercial agreements. The following topics will be covered: Creation and content of a contract (formation, privity, agency, terms); Statutory remedies for misleading and deceptive conduct in trade and commerce, misrepresentation; unconscionable dealing, improper pressure; discharge of obligations (breach, frustration, variation and discharge by agreement); Remedies (enforcement, compensation, restitution).

### LAW 1004

### Law of Crime

- 4 units semester 1
- 50 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: class participation 10%, essay/ exercise (to be determined if optional or compulsory) 10% or 20%, exam 70%, 80% or 90%

The course opens with an examination of the nature and purposes of law of crime and the general principles of criminal responsibility before proceeding to a detailed examination of selected substantive offences. The offences to be considered will include fatal and non-fatal offences against the person, and selected offences of dishonesty. Attempted offences and preparatory crimes are covered, with particular reference to the law relating to trafficking and related offences involving illicit drugs. The course will examine the major defences to crime, including self-defence, necessity and mental impairment. It will also provide students with a basic understanding of criminal procedure.

### LAW 1005

### **Property Law**

- 4 units semester 2
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1003 Law of Contract
- Assumed Knowledge: LAW 1002 Law of Torts
- Assessment: exam 100% or 75%, small group written presentation 25%

This course will discuss the important features of the Australian common law and statutory provisions relating to real and personal property, with emphasis being given to the former. The principal aim is to acquaint students with the fundamental proprietary interests and to teach students how to apply the relevant laws and concepts to practical situations where such interests are in dispute. The following topics will be considered: ownership and possession of real and personal property; adverse possession and limitation of actions legislation; limits to land (including fixtures, the ownership of airspace and subsoil, land boundaries and encroachments); estates and tenure; legal rights recognised in land (including bare and contractual licences; mortgages; co- ownership); future interests and equitable intervention; creation and enforceability of equitable interests; the Torrens system of land title registration; leases; easements; and restrictive covenants.

### LAW 1006

### Introduction to Public International Law

- 4 units not offered 2007
- 36 hours
- Prerequisite: LAW 1001 Intro. to Australian Law, LAW 2001 Legal Research and Writing
- Assumed Knowledge: basic knowledge of legal reasoning
- Restriction: not to be presented with 5600
   Public International Law
- Assessment: to be advised

The main aim of the course is for students to learn the place of international law in the Australian legal system. Students will study the international legal system, its sources, its system of adjudication and enforcement, to what extent its norms are part of Australian municipal law and how this came about.

### LAW 1007

### Law of Torts 2

- 4 units semester 2
- 1 hour lecture, 2 hour seminar per week
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

This course will build on the foundations of the introduction to Torts in first semester. The aim of the course is to focus on specific areas of the law including the economic torts, intentional torts and the emerging tort of privacy. The course will include a critical analysis of the role of policy in the development of the law and closely analyse the interaction of common law and legislation. Students will have the opportunity to focus on specific areas of the law through individual and/or group research projects enabling an understanding of the fundamental role of the modern law of torts. The course will be taught through a combination of lectures, seminars and group activities.

### LAW 1008

### Legal Research and Writing

- 4 units not offered 2007
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assessment: Interview demonstrated preparation, demonstrated skills (eg active listening) and reflective evaluation - 25%Written exercises - 25%Major research project - 50%

This course develops the following legal skills: problem based legal research and analysis, legal interviewing; letter writing and drafting of nonlitigious legal documents such as contracts, trust deeds and wills. The skills are not considered in isolation. The initial teaching program revolves around fact situations including interviews leading to research, drafting and letter writing. In the latter part of the course students will extend their skills development with higher level legal research and writing activities which may include case note analysis (involving investigation of litigious history, critical analysis and evaluation of impact); a law reform exercise (including investigation of legal policy in comparative jurisdictions); or statutory policy and drafting. Students may also be required to investigate international legal material.

### Level II

### LAW 2001

### Legal Research and Writing

- 2 units semester 2
- 25 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

This course is concerned with the following legal skills: problem based legal research and analysis; legal interviewing; letter writing and drafting of non-litigious legal documents. The skills are not considered in isolation. Much of the teaching program revolves around fact situations including interviews leading to research, drafting and letter writing.

### LAW 2002

#### **Administrative Laws**

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract, LAW 2002 Australian Constitutional Law
- Assessment: to be advised

The 3 main aims of the course are to teach the basic principles which govern review of administrative action by courts and tribunals, to train students to apply those principles in complex fact situations and to provide a critical analysis of that system. A particular focus is placed upon judicial review, including its fundamental concepts or jurisdiction, ultra vires, and procedural fairness. The course will also cover review 'on the merits' by administrative tribunals. The practical significance of the course in substantive areas such as taxation, immigration, welfare and regulation is emphasised.

Topics include: the organisation of the executive arm of government; State and Commonwealth avenues of review; the conceptual and constitutional basis of administrative law; error of law, error of fact and the legality/merits distinction; the 'new' administrative law of review by tribunals; justiciability and standing; procedural fairness; ultra vires and abuse of discretion; jurisdictional error, judicial review remedies and privative clauses.

### LAW 2003

### Australian Constitutional Law

- 4 units semester 1
- 36 hours
- Check with School for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

The Australian constitutional system. Selected topics including: introduction to Federal and State Constitutions, both written and common law; historical background and theories of constitutionalism; the doctrine of separation of powers, the nature of legislative, executive and

iudicial power at both Commonwealth and State levels: the legislative power of the Commonwealth, including the process of characterisation and an examination of heads of power specified in s51 and s52: relations between the Commonwealth and the States and the resolution of inconsistencies between laws: representative and responsible government. including the relation of citizens and their parliaments, the relation of executive government to the parliaments, and the implications in the constitutions drawn from representative and responsible government; the Commonwealth and the States as a social and an economic union. including the constitutional place of indigenous peoples and the law relating to sections 117 and to sections 90 and 92.

### LAW 2004

#### **Corporate Law**

- 4 units semester 2
- 50 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: multiple choice exam 50%, participation in problem solving exercise 25%, reflective essay 25%

Examination of the legal regulation of corporate activity including formation; comparison with noncorporate entities, attributes of corporate personality (property, contract, tort, member liability); the corporate contract; corporate governance (directors' duties, shareholder primary norm, members rights and remedies); public regulation of corporate activity (ASC and ASX regulations); corporate finance (debt and equity); corporations in financial trouble (administration, receivership, winding up); and rights attendant upon dissolution.

### LAW 2005

### Equity

- 4 units semester 1
- 50 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, LAW 1005 Property Law

• Assessment: exam 100% or 60%, 4 x 800-1000 word papers 40%

Historical basis of equity; equitable interests in property - the nature of beneficial interest, equitable assignments. The course will examine in details major equitable doctrines or principles: 1) unconscionable conduct; 2) fiduciary relationships; 3) trust: express, resulting and constructive. Particular emphasis will be places throughout the course upon remedies, both specific and monetary. Other equitable doctrines such as breach of confidence will be considered

### LAW 2006

### **Australian Legal History**

- 4 units semester 2
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: 3000 word essay 60%, essay outline 15%, Legal History Project 15%, class participation 10%

This course will draw from the historical influences on the evolution of the Australian legal system to federation, with special reference to the continuing effects on the present day ordering of legal activities. Students will be expected to participate in class discussions. The course will draw from the following topics: The legal and philosophical foundations of the British empire, the juridical status of Australian settlement, the status of the Aboriginal people under European law, the English background to the Australian system, frontier law and other original Australian developments, the move to independent legal institutions and the juridical nature of constitution making in Australia. The course will also introduce students to the sources of legal history generally and Australian legal history in particular, as well as basic historical methodology.

## LAW 2007 Workers Compensation Law

- 2 units not offered 2007
- 24 hours
- Available for Non-Award Study

The field of workers' compensation requires trained professionals to handle injuries or illnesses that result from workplace hazards and accidents. Employers and employees need advisers who understand the complexities of the workers' compensation process. This course examines how to establish and defend a workers compensation claim, rehabilitation of injuries, as well as dispute resolution and review. Following the course, students will also achieve a greater understanding of medico-legal issues arising in the workplace, as well as, other legal topics, particularly tortious, industrial, insurance and administrative law.

### LAW 2009

### **Guilt and Punishment: Principles of Sentencing**

- 4 units semester 2
- 36 hours
- Quota may apply
- Prerequisite: 1004 Law of Crime
- Assessment: class participation 20% and essay or examination 80%

The course opens with a survey of current legislative practice in the formulation of criminal offences when distinctions are made between factors that determine guilt and factors that determine the form and duration of punishment. The middle section of the course will deal with common law sentencing principles; legislation establishing sentencing guidelines, detention of dangerous and habitual offenders, mandatory penalties; the role of the victim in the criminal process and alternative correctional measures as. for example, diversion and rehabilitation, community corrections and restorative justice. The concluding section of the course deal with selected topics which may include: quasi criminal sanctions, forfeitures and disqualifications; corporate liability and sanctions; prison law and the administration of correctional sanctions.

### LAW 2010

### **Research Project B**

- 4 units not offered 2007
- 5 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, core course student chooses for research
- Assessment: research essay

Students will opt for a core course that they have completed or are currently undertaking. Students will be assigned in groups of 30 to a teacher in those courses and each student will choose (subject to approval) a research essay topic. The seminars will meet five times to discuss general research techniques and particular problems as they arise. Students will submit a draft of their essay which will be returned with comments prior to final submission.

### LAW 2011

### Tax and the Revenue Concept

- 2 units semester 1
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Restriction: Law 2018 Revenue Law and COMMLAW 3010 Income Tax Law III
- Assessment: exam

This course will cover the constitutional aspects of taxation and the distinction between capital and income receipts and deductions.

### LAW 2013

#### Restitution

- 2 units not offered 2007
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

As many as possible of these topics will be covered. Historical origins of restitution. Nature and extent of restitutionary principle. Action for recovering money. Quantum meruit. Grounds for restitutionary recovery: mistake; compulsion and duress; total failure of consideration; incontrovertible benefit. Restitution and contract: i - void and ineffective contracts; ii - contracts terminated by breach or frustration. Restitution and wrongs specially breach of contract; torts. Defences to restitution.

### LAW 2014

### Selected Issues in International Law

- 4 units summer semester
- 36 hours
- Quota may apply
- Prerequisite: LAW 1001 Introduction to Australian Law and LAW 3066 Public International Law
- Assumed Knowledge: LAW 2001 Legal Research and Writing
- · Assessment: to be advised

The course involves the examination of current international legal issues at an advanced level. Topics covered will depend on teacher availability and will be drawn from amongst others: use of force, armed conflict and international humanitarian law, law of the sea; theories of international law, international institutions, international dispute resolution, self determination and statehood, international trade law, international criminal law.

## LAW 2015

### **Family Law**

- 4 units semester 1
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: exam

The law of marriage and divorce within the constitutional context and the Family Law act. Child welfare including custody, access, support and adoption. Matrimonial property and spousal maintenance.

### LAW 2016

#### **Transnational Crime**

- 4 units not offered 2007
- Available for Non-Award Study
- Quota may apply
- Prerequisite: LAW 1004 Law of Crime
- Assessment: participation 20%, project presentation 40%, assignment 40%

Contemporary crime and criminal justice is increasingly characterised by the globalisation of criminal activities and international efforts to combat transnational crime. The focus of this course is with the growing body of international criminal law, increasing numbers of international conventions to combat transnational crime and domestic efforts in Australia to accede to and implement this body of law. This course is concerned with the criminalisation of transnational criminal activities, and national, regional and international efforts to investigate such crime and prosecute offenders. The course examines the opportunities and limitations of international conventions on the prevention of crime, Australia's experiences with transnational criminal activities and its efforts to fight these activities.

### LAW 2017

#### Human Rights Internship Program

- 4 units summer semester or semester 1 or 2
- 40 hours internship
- Quota may apply
- Prerequisite: LAW 2085 Human Rights Law
- Assessment: 5000-7000 word portfolio details at start of course

The course places students in 'internships' with human rights organisations located internationally and nationally for a period of three months. The internships enable students to build on their understanding of the theory of human rights law by gaining an appreciation of its practical operation. The course aims to give depth and context to students' existing knowledge of human rights law.

During the internship, the students will be required to complete an agreed research task under the supervision of a senior person at the chosen human rights organisation. This research task might involve research into a specific area of law or policy for the purpose of a 'test-case' being run in the courts, for the drafting of a report, or the preparation of educational material. The research task will be negotiated by the student and the organisation, with the approval of the course coordinator. It is expected that students will also be involved in the day-to-day activities of the organisation and gain an understanding of how such organisations operate.

Prior to commencement, students will be given orientation to introduce them to the strategies and procedures generally employed by human rights organisations. The seminars will be conducted by the course convener in conjunction with practitioners in the field.

### LAW 2018

#### **Revenue Law**

- 4 units not offered 2007
- · Available for Non-Award Study
- · Quota may apply
- Restriction: not to be counted with 3021 Capital Gains Tax and the Taxation of Entities, 2011 Tax and the Revenue Concept, Income Tax Law III

This course will cover the constitutional aspects of taxation and the distinction between capital and income receipts and deductions, the provisions of part 3.1 and 3.2 of the Income Tax Assessment Act 1997, which relates to Capital Gains Tax. In addition, this course will deal with tax accounting, income assignments and the taxation of entities (in particular partnerships, companies and trusts) and tax avoidance.

### LAW 2019

#### **Remedies Under the Trade Practices Act**

- 4 units not offered 2007
- Available for Non-Award Study
- · Quota may apply
- Assumed Knowledge: Introduction to Australian Law and Law of Contract
- Assessment: 3000 word research essay

In litigation, remedies are what clients want. The courses focuses on the remedies available under the Trade Practices Act (and the substantially similar Fair Trading Act 1987 (SA)). It has been recognised that the Trade Practices Act will have an increasing impact upon the traditional areas of legal obligations, contracts, torts and equity. What this means is the course would of importance to all litigation lawyers. And there are important differences in between TPA remedies and remedies available under traditional legal obligation. This course will attempt to clarify these differences in the process of providing a straight forward analysis of the remedies available under the TPA and their operation.

### LAW 2020

#### **Commercial Law and the Market**

- 4 units semester 1
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- · Assessment: 4000 word essay

This course will begin with an investigation of the history of commercial law. Particular attention will be paid to the competing views over the origin and content of the law merchant and what lessons this debate provides for a student today. The course then considers a basic issue of legal study - how much attention is paid to the law, in this case commercial law. Empirical and theoretical works covering a wide range of industries will be examined to help answer this question. The course will also examine responses to the use of law in the market in light of the purposes of commercial law and the capacities of judges and the legal system to meet these purposes. The course will end with an investigation into the role of law in expanding the range of the market into new areas such as biotechnology and the Web.

### LAW 2021

#### **Medical Law and Ethics**

- 4 units semester 1 or winter semester
- 40 hours
- Quota may apply
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 2003 Law of Torts
- Assumed Knowledge: LAW 1003 Law of Contract
- Assessment: 3000 word essay 80%, class presentation, participation 20%

The course provides an introduction to ethics generally and then to medical ethics, examining in particular the principle of autonomy, which informs much of medical law. Medical practitioners are meant to act in a way which preserves patient autonomy, which allows the patient to make informed decisions about their treatment. The course then considers the general part of medical law governing the legal relationship between medical practitioners and their patients. It considers the legal implications of the provision of medical advice, diagnosis and treatment, drawing mainly on the tort of negligence but also parts of the Law of Crime, in particular the offences against the person. Selected medico-legal issues over a human life are then examined. They may include reproductive technologies, abortion, foetal rights, research on human subjects, organ donation, the rights of the dving and the legal definition of death.

### LAW 2022

#### **Consumer Protection & Unfair Trading**

- 4 units semester 1
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: Class participation 20%, essay 40%, exam 40%

A study of: the regulation of trading practices under national and state laws (particularly advertising); remedies for infringement of the standards for fair trading; impact of privatisation; small claims procedures; class actions; assistance for consumers.

#### LAW 2023

### Roman Law

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract, LAW 1005 Property Law
- Assessment: 5000-7000 word paper on negotiated topic 70%, class participation 15%, class presentation 15%

The aim of this subject is both comparative and analytical. It aims to compare the substantive content of Roman, canon and common law, as well as the contemporary and cross-cultural operation of those legal systems. Analytically, the entire subject is directed toward answering one question: Why has the Roman influence on canon law and common law been overlooked? Closely related to this is the general oversight in the contemporary Australian legal academy of the operation of religious law. Both of these concerns will be explored using the Roman law as a starting point.

### LAW 2024

### Moot Court 2

- 2 units semester 1 or 2
- 20-30 hours
- Eligibility: Law students selected by course coordinator/ team coach
- Maximum 5 students
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: research & skills in oral & written presentation

Students are eligible for the subject by application and selection only. Participants in the Moot Court subject will be selected as members of a team(s) of 3-5 students. The team(s) will prepare material for presentation in moot court competitions to be held within the Law School or in state, national or international competition. A team(s) will also be selected for the Sir Harry Gibbs Constitutional Moot Competition and may be selected for participation in other moot competitions. Participation in Moot Court will require students to acquire skills in the drafting of written submissions and in the oral presentation or legal argument.

### LAW 2026

#### Aboriginal People and the Law

- 4 units not offered in 2007
- 40 hours
- Available for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1005 Property Law
- Assessment: assignments, seminar presentation, participation

A critical analysis of the legal and historical relationships between Aboriginal and non-Aboriginal peoples, including laws and governmental policies towards Aboriginal people: in particular focus will be given to the relationship for Aboriginal law to the Australian legal system, Aboriginal title, the Mabo decision and native title law, cultural heritage protection, the stolen generations, Aboriginal peoples and the criminal justice system, and the role of international law in the process of reconciliation and social justice.

### LAW 2027

#### Adelaide Law Review A

- 2 units semester 1
- 24 hours
- Eligibility: by selection only
- 12 students
- Prerequisite: Introduction to Australian Law, Law of Torts and Law of Contract
- Assessment: 2,000 word case note 40%, 1000 word critical analysis of submitted articles to ALR 40%, class presentation 20%

The Adelaide Law Review has been since 1962 the flagship publication of the Law School. The journal is peer reviewed and is committed to the publication of legal scholarship of the highest quality. The Course will introduce students to legal publishing and editing. Further students will consider the legal journal as a means of legal education. This course will involve students in the production of the annual editions of the journal. Students will consider the role of legal publications, critically analyse submitted material and comment upon a diverse range of legal scholarship. In addition students will develop skills in advanced legal writing, copy-editing and journal production.

### LAW 2028

#### Adelaide Law Review B

- 2 units semester 2
- 24 hours
- Eligibility: By Selection Only
- · Quota of 12 students only
- Prerequisite: Adelaide Law Review A
- Assessment: 2,000 word reveiw essay 40%, editing of submitted material to ALR 40%, class presentation 20%

This course will build upon Adelaide Law Review A. The course will introduce students to higher level issues related to legal publishing. These will include evaluation of legal submissions and legal research and writing for publication. Students may develop themed issues of the Adelaide Law Review. This will include the determination of contemporary and emerging legal issues, sourcing articles and critical assessment of submissions.

### LAW 2031

#### **Financial Transactions**

- 4 units semester 1
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, LAW 1005 Property Law
- Assumed Knowledge: completion/concurrent study of Corporate Law is advisable
- Assessment: exam 100% or 60%, research paper 40%

Commercial lending and security; finance bills; consumer credit; guarantees; lease financing; financing against receivables; financing overseas transactions; project financing; letter of credit and performance bonds; privacy obligations of the financier; the consequences of debtor insolvency for the financier.

### LAW 2032

#### **Australian Federal Criminal Law**

- 4 units semester 1
- 36 hours
- · Quota may apply
- Prerequisite: 1001 Introduction to Australian Law
- Assumed Knowledge: Law 1004 Law of Crime
- Assessment: 5,000 word research essay 80%, class participation 20%

Most of the more serious federal criminal offences are codified in the Commonwealth Criminal Code. It now consists of eight chapters, ranging in subject matter from offences of dishonesty, through terrorism, sexual slavery, drug trafficking, crimes against humanity and cybercrime. The content of the Code is still growing rapidly. The Code is divided between a general part - Chapter 2 General Principles of Criminal Responsibility which provides a comprehensive codification of the general principles - and Chapters 4 - 10, the special part of the Code, which contain the substantive offences. Federal criminal law occupies an increasingly large proportion of criminal litigation and federal legislative policy increasingly determines the scope and content of state and territorial laws dealing with fraud, illicit drugs, internet and computer crime. The course will present an overview of federal criminal law. The importance of the general principles of criminal liability will be emphasised and their application will be discussed in a range of substantive areas of criminal law drawn from the following: Corporate Crime and Cultures of Non Compliance; Federal jurisdiction; Foreign and Domestic Bribery: Crimes of Dishonesty- Identity Theft; Crimes against Infrastructure: cybercrime, money laundering and telecommunications offences; Drug Trafficking Law; Sex Slavery And Child Pornography: Civil/Criminal Divide: forfeiture and pecuniary penalties; Aspects of Federal Sentencing Law.

#### LAW 2036

#### Land Transactions

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1005 Property Law
- · Assessment: to be advised

An examination of various aspects of the law relating to the creation and transfer of interests in land. The course will consider land dealings of all types, with particular reference to informal dealings.

#### LAW 2053

### **Feminist Legal Theory**

- 2 units not offered 2007
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

This course explores how the law affects, treats and constructs women. It examines the relationship between feminism, law and politics and, in particular, feminist struggles for social change, nationally and internationally. It offers an introduction to the various theoretical frameworks and the current challenges facing the feminist project. It analyses contemporary feminist engagements with the law on both a practical and theoretical level, covering areas such as sexuality, pornography, sexual harassment, abortion, work conditions, trafficking, and globalisation. In particular, it will assess feminist strategies that can be used to address these (and other) issues.

### LAW 2059

### Intellectual Property Law

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 1005 Property Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Corequisite: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: take home exam

This course aims, through a treatment of laws relating to patents, trademarks, confidential information, copyright and other regimes, to examine the protection provided by the law in regard to ideas, inventions, information and other forms of creative effort. The course also aims, in terms of general legal education of students, to explore how the law deals with a particular problem, and how in solving that problem the law must balance interests and protect investment while taking into account the public welfare and technological developments. The course will explore the interrelationship of the different regimes of protection, and will also consider practical issues arising in the commercialisation or exploitation of intellectual property. Students completing this course should have a basic grounding in the law of the area, its limitations, policies, and objectives, including the basic features of the various systems of protection.

### LAW 2060

### Selected Issues in Law of Crime

- 4 units not offered 2007
- 40 hours
- Available for Non-Award Study
- Quota may apply
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, LAW 1004 Law of Crime

 Assessment: exam or research essay 75-80%, class participation or compulsory 1 hour exam 20-25%

The course deals with specific issues in the law of crime and procedure, with emphasis on issues which are the subject of current debate or reform in Commonwealth and State criminal law. New topics are introduced each year. In recent years, the course has explored issues in the codification of the criminal law, at federal and state levels. The approach is comparative, drawing on developments in other Australian and overseas jurisdictions (See Law Handbook for more detail).

### LAW 2061

### Public and Private Provision of Income Maintenance

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

The course will offer a theoretical framework for analysing the relationship between public, private, industrial and family based welfare and individual income maintenance schemes from each sector. Topics for the application of this framework will be chosen from the fields of provision for age, disability and incapacity or provision for broken families.

### LAW 2062

#### Succession

- 2 units semester 2
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: exam 60%, 1000 word assignment 30%, Tutorial participation 10%

Acquaints students with the basic principles of the devolution and distribution of property upon death of the owner. Death is a major occasion for the transfer of property and the principles relating to it form an important part of any legal practice. Whilst the course concentrates upon the rules and practice relating to devolution of property on death, various aspects of social policy are considered. The following topics will be covered: wills; distribution upon intestacy; family provision; probate and administration.

## LAW 2064

#### Jurisprudence

- 4 units semester 1
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: 3000 word essay 60%, 1500 word critical review 25%, class participation 15%

This course introduces some of the philosophical questions raised by the practical workings of law. We will examine the nature of law and legal reasoning and how law is related to other social institutions, practices or discourses (primarily morality, politics and ideology). Such issues have been long debated, though our discussions will focus on readings drawn from a variety of influential and critical contemporary perspectives. The course also raises substantive issues of justice and morality. The primary aim is not to ask what the law should say in particular areas, but to examine some broader issues concerning the relationship between law, legal institutions and justice. Issues addressed will vary from year to year (depending, in part, on student interests) but may include: the role and value of the 'rule of law'; the communitarian critics of 'liberal' rights discourse; the economic analysis of law; the philosophical foundations of constitutionalism and the problem of constitutional interpretation; the extent of any moral obligation to obey the law; and how (if at all) law and legal institutions can help achieve justice in multicultural and/or postcolonial societies.

No background in philosophy is assumed, though students should have a basic understanding of common law reasoning and the Australian constitutional system.

# LAW 2070

#### **Environmental Law**

- 2 units semester 1
- 24 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract, Law 2003 Australian Constitutional Law
- Assessment: 3000 word essay 80%, class participation 20%

An introduction to the concepts and principles which underpin environmental law from the international to the local level. The course will address Constitutional responsibilities and roles relating to the environment; sustainable development and the law; environmental planning through environmental impact assessment and land-use law; environmental protection principles, climate change and renewable energy; water resources law; and the protection of biological diversity.

# LAW 2074

## **Property Theory**

- 4 units not offered 2007
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1005 Property Law
- Assessment: to be advised

This course considers current theories of property and their applicability to the social context, especially public spaces. The current theories of property upon which we might rely include the work of John Christman, Brendan Edgeworth, JW Harris, David Lametti, CB Macpherson, Stephen Munzer, James Penner, Margaret Jane Radin, Carol Rose, JL Schroeder, and Jeremy Waldron, Using one or more of these theories of property, we will examine the role which property--as law and as theory--plays in defining the use of public spaces by various groups, which might include, but are not limited to, residents, recreational users, the poor, the homeless, and gangs. We will develop this part of the course using a variety of crosscultural audio-visual and literary perspectives. Having critiqued one or more of these theories, we will develop a theory of property applicable to public spaces that draws upon property and urban

planning theory. Students interested in the theory of property from a legal and philosophical perspective will find this course stimulating.

# LAW 2081

#### **Research Project A**

- 2 units not offered in 2007
- 9 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: 5000 word essay

Students will work in teams of five on a research project in law reform. They will produce a report and a draft of a statutory amendment. Attached to each team will be five first year students who will act as research assistants.

# LAW 2085

## Human Rights:Int & National Perspectives

- 4 units semester 2
- 40 hours
- Assumed Knowledge: LAW 3066 Public International Law or LAW 1006 Introduction to Public International Law
- Assessment: 5000 word essay 80%, class participation 20%

The aim of this course is to have students consider the legal, philosophical and sociological underpinnings of human rights; students will be encouraged to think critically about the views they hold and the values reflected in the Australian and international legal systems. The course will focus on the United Nations and its role in formulating, interpreting and monitoring human rights. A further component of the course will be the protection of human rights in Australia.

# LAW 2092

#### **Advanced Property Law**

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1005 Property Law
- Assessment: 8000-8200 word research paper or take home exam

This course will build on the knowledge obtained by students in the compulsory Property Law course and will provide those students who have acquired an interest in property law with an opportunity to develop and deepen that interest. The course will comprise a detailed treatment of title to goods and title to land. Special topics will include: sale of lands (the conveyancing process), native title, particular titles.

# LAW 2096

#### **Minerals and Energy Laws**

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 1005 Property Law
- Assumed Knowledge: Law 2003 Australian Constitutional Law
- Assessment: 5000 word essay 80 %, class attendance, participation 20%

The course examines the law and practice relating to the ownership and development of on-shore and off-shore mineral and petroleum resources in Australia. It covers the development of legislation with reference to exploration, extraction and the enforcement of mining and petroleum interests. Community and social issues will be discussed, including the relationship between mining and indigenous people, environmental controls over mining production, health and safety in mining, and the corporate social responsibility of companies operating overseas, including the links between resource exploitation, the environment and human rights. We will look at international boundary disputes, including the dispute over the Timor Sea.

The course will also deal with international and national laws and regulatory mechanisms to address climate change, including national and state legislation to encourage renewable energy resources, and the regulation of specific alternative energy resources such as wind, solar and geothermal energy. The regulation of the electricity industry and the regulation of uranium mining and nuclear energy will also be covered.

# LAW 2097

## **Securities and Investment Law**

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 2004 Corporate Law
- Corequisite: LAW 2004 Corporate Law
- Assumed Knowledge: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: exam 100% or exam 60%, 3000 word essay 40%, or exam 40%, 5000 word research paper 60%

This course deals with the following aspects of the law relating to financial products and markets: Defining financial products and financial markets; Misleading and deceptive conduct in financial product transactions; Financial market manipulation; Insider trading in financial products; Short-selling of financial products; The regulation of corporate takeovers.

# LAW 2099

#### Law of the Person

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts and LAW 1003 Law of Contract
- · Assessment: to be advised

Law interprets our social, political and physical beings in ways which determine our most basic rights and obligations as legal courses. This course aims to develop in students an informed, coherent and critical understanding of the legal fiction of the person and the role of that fiction in Western law. It will trace the legal person through a number of core and elective courses of the curriculum in order to show a) how law variously attributes characteristics to its subject and b) how those attributed qualities of the person serve to justify and rationalise the very priorities and forms of law. The course will also have strong comparative and historical dimensions: it will foster an appreciation of changes in the idea of the legal person across States and cultures, and through time.

# LAW 2100

# **Commercial Equity**

- 2 units semester 1
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, LAW 2005 Equity
- Assessment: exam 100% or 50%, 3000 word essay 100% or 50%

The penetration of equity into modern commercial life; commercial fiduciaries; equitable security transactions, with particular regard to Romalpa clauses; subrogation and contribution; set-off; marshalling; trusts in a commercial context: trusts and superannuation; the Quistclose trust; the imposition of constructive trusts into commerce; commercial trustees; commercial equitable remedies, particularly Mareva injunctions and Anton Piller orders.

# LAW 2104

# **The Conflict of Laws**

- 4 units semester 2
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, Law 1002 Law of Torts,, Law 1003 Law of Contract, Law 1005 Property Law, Law 2003 Australian Constitutional Law
- · Assessment: to be advised

Courts sometimes have to deal with cases which are significantly connected to another jurisdiction. This other jurisdiction may be another Australian State or Territory, or it may be a foreign country. Questions arise as to an Australian court's jurisdiction over the parties, the appropriate law to apply to the matter, and the recognition and enforcement of judgments of courts outside the jurisdiction. These issues are examined from both a theoretical and a practical perspective.

# LAW 2107

#### Media Law 4

- 4 units winter semester
- 36 hours
- Available for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law

- Assumed Knowledge: LAW 1002 Law of Torts, LAW 2003 Australian Constitutional Law, LAW 2002 Administrative Laws
- Assessment: to be advised

The course will consider the legal regulation of the media in Australia, including defamation, privacy and confidential information, racial hatred, international and comparative perspectives, contempt of parliaments and the courts, breach of confidence, privacy, copyright, advertising, administrative regulation (Freedom of expression and media regulation, national security, freedom of information, monopolisation and trade practices laws). Concepts such as free speech, ethical practise and assess to justice will also be discussed. The focus of the course is an a critical analysis of how the law applies to the media.

# LAW 2108

# Media Law 2

- 2 units winter semester
- 36 hours
- Available for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 2003 Australian Constitutional Law, LAW 2002 Administrative Laws
- Assessment: to be advised

The course will consider the legal regulation of the media in Australia, including defamation, privacy and confidential information, racial hatred, international and comparative perspectives, contempt of parliaments and the courts, breach of confidence, privacy, copyright, advertising, administrative regulation (Freedom of expression and media regulation, national security, freedom of information, monopolisation and trade practices laws). Concepts such as free speech, ethical practise and assess to justice will also be discussed. The focus of the course is an a critical analysis of how the law applies to the media.

# LAW 2117

# Law of Contract 2

- 4 units semester 2
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law

- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised
- Note this course is compulsory at Level I

The subject will concentrate on one or more of the following: Theories of contract. Good faith. Unconscionability. Standard Form contracts, relational contracts, contract and regulation, globalisation and contract.

# LAW 2122

## Criminology

- 4 units semester 2
- 40 hours
- Available for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law,
- Assessment: exam 100% or 66.67%, optional tutorial or research paper 33.33%

Defining crime and the operation of the criminal justice process. An introduction to the historical and contemporary perspectives on the causes of crime and criminality including: physical and genetic factors; psychological theories; and sociology of crime. An introduction into the production and uses of criminal statistics.

# LAW 2132

## Remedies

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: exam 100% or 50%, 5000 or 3000 word essay 100% or 50%

An examination of general law remedies available. Specific topics will include: (i) common law damages (ii) the declaration (iii) the injunction, including an examination of specific problem areas, for example, balance of convenience, interlocutory injunctions and damages in lieu (iv) specific performance (v) constructive trusts (vi) compensation (vii) account of profits (viii) minor remedies.

# LAW 2135

### **Housing Law**

- 2 units not offered 2007
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: to be advised

This subject addresses the ways in which Housing and the right to Housing is regulated in Australia. Adequate Housing is a fundamental human requirement. The subject will focus on legal "rights" to housing, including security of tenure for tenants in the public and private housing markets; the obligations of the State in national and international law to provide adequate housing; resolution of housing related disputes, including disputes about access, occupation and neighbours, and in particular examine the formal processes established for the resolution of such disputes by way of administrative review, litigation, and expert tribunals; and access to finance, publicly or privately supplied, for housing, including social security support and regulation. The subject will also consider the rights and obligations of parties to a residential tenancy agreement; boarders and lodgers and other residential occupants; access to public housing and the particular rights and obligations of public housing tenants; the rights and obligations of retirement village residents and residential occupiers of strata title units; and housing cooperatives.

# LAW 2140

# **Expert Evidence**

- 2 units not offered 2007
- 2 hour research seminar per week
- Prerequisite: LAW Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1004 Law of Crime
- Assessment: class participation, presentation, 3500 word essay

This course provides a critical overview of contemporary approaches to expert opinion evidence from a variety of common law jurisdictions, particularly Australia, the United States and England. The use and assessment of expert evidence will be undertaken from a range of legal, sociological, philosophical and historiographical perspectives. The course is designed to critically explore prevailing models of science and expertise in legal settings. encouraging students to engage a variety of non legal critical approaches. Notwithstanding a critical theoretical orientation, the course aims to examine, and assist students contemplating. practice. Many of the theoretical approaches will provide students with innovative ways to understand the function of expert evidence and offer means of building and contesting cases incorporating such evidence. The course will cover topics such as: forensic sciences and the new investigative technologies (such as DNA typing): how to cross-examine scientists: the role of expert evidence in miscarriages of justice (such as Chamberlain and the Birmingham Six), mass torts (such as breast implants, asbestos, intra-uterine devices and Agent Orange) and medical negligence cases. It will also examine judicial representations of scientific evidence in judgements, consider social factors shaping debates and expert opinion evidence (such as concerns over 'iunk' science) and recent procedural reforms such as adoption of inquisitorial procedures.

# Level III

# LAW 3001

# Litigation Practice

- 2 units semester 1
- 24 hours
- Prerequisite: LAW 2001 Legal Research and Writing, LAW 2002 Administrative Laws
- Corequisite: LAW 3002 Civil and Criminal Procedure
- Assessment: written case files & exercises, oral applications

To be taught over one semester in conjunction with Civil and Criminal Procedure. This subject introduces students to the skills required in litigation practice through exercises concerned with the conduct of civil and criminal proceedings. Drafting and writing skills will be developed through exercises concerned with the drafting of pleadings and other pretrial documents, including discovery, admissions, and interlocutory applications. Negotiating and mediating skills will be developed through the conduct of practical exercises arising out of attempts to settle civil litigation. An introduction to advocacy skills will be given through the conduct of pre-trial conferences and applications in both civil and criminal matters.

# LAW 3002

## **Civil and Criminal Procedure**

- 4 units semester 1
- 50 hours
- Prerequisite: LAW 2002 Administrative Law, LAW 2001 Legal Research and Writing
- Corequisite: LAW 3001 Litigation Practice
- Assessment: exam 80%, 2000 word assignment 20%

Procedures applicable to the resolution of civil disputes (civil procedure) and the conduct of trials in the court system (criminal procedure). Civil procedure - the nature and extent of civil disputes and the various techniques of conciliation, mediation, arbitration, and judgement used for settling such disputes. The nature of the present civil procedure in South Australia and its conceptual underpinnings is examined, including the respective roles of parties (and their legal representatives) and courts, the responsibility for commencing, continuing and conducting proceedings and the interlocutory manoeuvrings of a civil dispute in South Australia from commencement of proceedings to trial. The course also introduces students to interlocutory injunctions, discovery, inspection, interrogatories, admissions, pre-trial conferences, mediation, conferences and judgement without trial, and includes a critique of the current system. Criminal procedure - the practice and procedure applying to criminal matters in South Australian courts, including consideration of categorisation of criminal offences, criminal pleadings, bail applications, trial procedure (trial by judge alone, jury trial, choice and role of the jury), summary procedure and the magistrates court rules, the role of witnesses, subpoenas, the application and purpose of the Dietrich principle, abuse of process principles and their applicability to criminal trials, verdicts and sentencing and the appeal process.

# LAW 3003 Law of Evidence

- 4 units semester 2
- 48 hours
- Prerequisite: LAW 3002 Civil and Criminal Procedure, LAW 3001 Litigation Practice
- Corequisite: LAW 3007 Introduction to Advocacy
- Assessment: exam 70%, 1 x 2500 word assignments 30%

The rules of evidence as applied in South Australian courts and Federal courts sitting in South Australia. These rules determine the evidence which will be received by courts in proof of facts, the form in which evidence must be presented, and the uses to which such evidence can be put. The topics will include examination of both the sources and acceptability of evidence, including rules concerning the burden and standard of proof and technical rules concerning such matters as hearsay, admissions and confessions, illegally obtained evidence and res gestae.

# LAW 3004

#### **Legal Ethics**

- 2 units semester 2
- 50 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2001 Legal Research and Writing, LAW 2002 Administrative Laws
- Assessment: exam 100% or 50%, 2000 word research essay 50%

The course considers the duties owed by lawyers to the court, clients, other lawyers and the community. The Legal Practitioners Act and the Law Society's Professional Conduct Rules are considered and the concept of professional misconduct is examined. Specific matters addressed include confidentiality and client privilege; duties with respect to the handling of client's money; frankness and integrity towards the court and other lawyers; and adherence to undertakings. The nature of disciplinary systems and public access thereto and wider questions of personal ethics and conflicting duties and values also are considered.

# LAW 3005

## **Comparative Constitutional Law**

- 4 units semester 2
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2003 Australian Constitutional Law - waived for exchange students who have studied constitutional law of their own countries
- Assessment: 5000 word research essay or 3 short papers or exam 80%, compulsory class participation 20%

This course will explore a number of the essential features of constitutional law of Western countries which are comparable to Australia and will compare them with the equivalent features of the constitutional law of one or more other jurisdictions (including Australia). In particular the subject will consider the method, technique and role of the judiciary in the interpretation of the other constitutions. Other aspects that will be investigated include: Court structure; the executive; the legislature; the protection of fundamental rights; and federalism.

# LAW 3007

#### Introduction to Advocacy

- 2 units semester 2
- 24 hours
- Prerequisite: LAW 3001 Litigation Practice, LAW 3002 Civil and Criminal Procedure
- Corequisite: LAW 3003 Law of Evidence
- Assessment: written trial notebook & exercises, oral applications

To be taught over one semester in conjunction with Law of Evidence, this course introduces students to advocacy skills through exercises concerned with the conduct of civil and criminal trials, including opening statements, applications to exclude evidence, the examination and crossexamination of witnesses and closing statements.

# LAW 3010

#### **Alternative Dispute Resolution**

- 4 units winter semester
- 40 hours
- Prerequisite: LAW 2002 Administrative Laws, LAW 3002 Civil and Criminal Procedure
- Corequisite: LAW 2002 Administrative Laws, LAW 3002 Civil and Criminal Procedure
- Assessment: 3000 word paper 70%, submission of group report, project, presentation or other exercise, to be agreed with course coordinator

The course will include a detailed examination of the philosophy and practice of ADR methods in the context of an adversarial legal system. It will assume basic knowledge of the range of ADR options available, and will develop understanding of the operation and implications of various ADR theories and practices in our legal system. It will evaluate the experience in Australia and other common law countries of the development and incorporation of ADR options in dispute resolution, the civil, administrative, family and criminal contexts. By examining both philosophy and practice, the course aims to develop ability to critically assess the legal, social and other issues intrinsically linked to the values imputed to ADR, and to understand the implications of the operation of those theories in an adversarial legal context. The course will include the following: (I) the nature of disputes, and the psychological, political, cultural, economic and social issues that affect dispute resolution; (ii) The relevance and social acceptance of ADR as a credible alternative to litigation; (iii) theory, features and values of various forms of ADR; (iv) Justice reform-the role of the courts in justice delivery-provision of court annexed ADR, the "multi-doored" court and the value of judicial decision making; (v) power and control issue in dispute resolution; (vi) the role of mediators-ethical standards; (vii) legal rights and responsibilities flowing from ADR outcomes.

# LAW 3011

#### Advanced Advocacy

- 4 units not offered in 2007
- Available for Non-Award Study
- Quota will apply
- Prerequisite: LAW 3003 Law of Evidence
- Corequisite: LAW 3003 Law of Evidence

 Assessment: demonstrated competencies in mock trial settings 50%, reflective journal 50%

This course advances students' advocacy skills through intensive practical exercises replicating components of the trial process, miscellaneous applications to judicial bodies such as applications for judicial review, the conduct of matters before boards and tribunals, and the conduct of appeals. In addition, students will be introduced to opinion work of counsel, especially in relation to the settling of pleadings. Students will learn how to conduct an opening address, examination in chief, cross-examination, and a final address at an advanced level. Students will also learn how to advise and settle pleadings. Throughout the course there will be an emphasis on the ethics and practice of the Bar. Students will be expected to examine the role of the advocate in the 21st century in reflective exercises, which will follow skills based exercises. The course will be conducted in a courtroom setting.

# LAW 3012

# **Advanced Public Law**

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Corequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2003 Australian Constitutional Law, LAW 2002 Administrative Laws

On each occasion it is offered the course will comprise an advanced study of selected issues in public law determined on the basis of importance, complexity, current relevance and staff availability and interest. Topics may include, but will not be limited to, a more detailed examination of some of the issues examined in the core public law courses in the LLB curriculum (for example Australian constitutional law, administrative laws, law of crime, corporate law) so as to develop a more advanced conceptual understanding of the underpinnings of the principles of public law including, for example, such matters as theories of constitutionalism; republicanism; the relationship between law and community; the principle of proportionality; the public/private distinction; the distinction between constitution/statute/common law; the nature of the judicial function; the nature

of legislation; and the nature of the intersection of national and international law.

# LAW 3013

### **Environmental Dispute Resolution**

- 2 units not offered 2007
- 24 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2070 Environmental Law
- Assessment: to be advised

An examination of various ways in which environmental disputes are resolved, including through litigation, Commissions of Inquiry and processes of mediation and negotiation. Considerable emphasis will be placed on practical and procedural aspects, including standing rules, requirements concerning security for costs and undertakings as to damages. Involvement of judges, practitioners and mediators will be procured as far as possible.

# LAW 3014

## Comparative Equality & Anti-Discrimination Law 2

- 2 units not offered in 2007
- 20 hours
- Prerequisite: LAW 2003 Australian Constitutional Law
- Restriction: Not to be counted with Law 3024 Comp Equality & Anti-Discrimination law 4
- Assessment: to be advised

The course will examine theories of equality and discrimination and the theoretical framework of anti-discrimination legislation. It will assess the Commonwealth and South Australian antidiscrimination legislation in terms of their conceptual underpinnings, constitutional basis, legislative structure, procedures and remedies. A comparative approach to this assessment will be adopted, through an examination of North American and European approaches to Equality and Anti-Discrimination law.

The focus will be on the specific grounds such as: sex , sexuality and race. The course will evaluate law's response to and its limits in addressing discrimination

# LAW 3015

# International Environmental Law

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 3066 Public International Law or LAW 1006 Introduction to Public International Law
- Assessment: to be advised

The course examines the development and current content of international environmental law. The course will focus on the sources of international environmental law against the underlying framework of principles of this rapidly development area of the law. The course will consider the following issues; sustainable development, the precautionary principle, biodiversity; the relationship between development and human rights, the relationship between trade and the environment, transboundary pollution, global warming and ozone depletion and international management regimes for common resources such as the world's oceans and the Antarctic.

# LAW 3016

# **Comparative Law**

- 4 units semester 1
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: exam, part A multiple choice questionnaire 30%, part B - essay questions 70% - 3000 word essay may be presented in lieu of part B

This course will cover the following topics: comparative law as an academic discipline; the world's families of legal systems; comparative evaluation of the merits of differing legal solutions to social problems; legal history and comparative law; law understood as divine revelation and law as a human creation (exemplified by an analysis of the roots of European and North American law and a survey of the history and present day practice of Islamic law); the impact of the philosophy of the Enlightenment on European and North American law (the theory and practice of human rights and the codification movement in civil law and common law countries); codified and uncodified law, highlighting prominent features of civil law and common law systems, eg, the rule of precedent (common law), reliance on good faith (civil law) and differing standards of interpretation of statute law; the investigatory civil procedure (civil law) and the adversarial civil procedure (common law). Selected civil law judgments (translated into English) and common law judgments which have similar fact patterns will be compared.

# LAW 3017

## **Technology Law**

- 4 units not offered in 2007
- 2 hour research seminars & presentations
- Available for Non-Award Study
- Quota may apply
- Prerequisite: LAW 2059 Intellectual Property Law
- Assessment: TBA

This course will consider how the law impacts on technology - both by regulation and facilitation. The roles of statute, tort and contract will be considered, along with comparative and transnational approaches and extra-legal means of control of technology. These general issues will be considered in the context of topics such as the following: the Internet (censorship, datacasting, communications, electronic transactions, cybercrime, spam); Privacy ( IT and surveillance related issues, genetic testing); Biotechnology (gene technology, assisted reproduction technologies, cloning, stem cells, novel foods); Future issues.

Students are required to make a presentation to the call on a relevant topic of their choosing (not necessarily on of those covered in the core materials) - this topic can then be expanded in the essay submission.

# LAW 3018

#### **Comparative Native Title: Australia & Canada**

- 2 units not offered 2007
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law

- Assumed Knowledge: LAW 2003 Australian Constitutional Law, LAW 1005 Property Law
- Assessment: to be advised

'Native title has profound implications for real property law in Australia and Canada'. The primary objective of this course is to explore this statement. To do that, the course is divided into two parts. In the first part, students will examine the range of techniques available in Australia and Canada for the recognition and protection of native title. These techniques include judicial and legislative responses, quasi-constitutional documents such as treaties, constitutional provisions that guarantee rights, and the establishment of semi-autonomous institutions for indigenous self-government.

second part of the course, students will identify and consider the ways in which the recognition of native title requires a reassessment of the foundations of real property law in Australia and Canada.

# LAW 3020

#### **Public Interest Litigation**

- 4 units not offered 2007
- Available for Non-Award Study
- Quota may apply
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2002 Administrative Law, LAW 2003 Australian Constitutional Law
- Assessment: 1500 word seminar paper 20%, class participation 20%, 5000 word research essay 60%

This course focuses on the law and procedural issues in using legal process to determine rights where personal rights are not at stake.

# LAW 3021

#### **Capital Gains Tax and the Taxation of Entities**

- 2 units semester 2
- 20 hours
- Prerequisite: 2011 Tax and the Revenue Concept
- Restriction: Law 2018 Revenue Law and COMMLAW 3010 Income Tax Law III
- Assessment: exam

This course will cover the provisions of part 3.1 and 3.2 of the Income Tax Assessment Act 1997, which relates to Capital Gains Tax. In addition, this course will deal with tax accounting, income assignments and the taxation of entities (in particular partnerships, companies and trusts) and tax avoidance.

# LAW 3022

#### **Immigration And Refugee Law**

- 2 units winter semester
- 24 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2002 Administrative Law
- Assessment: participation 20%, working group presentation 40%, 2000 word assignment 40%

The focus is on the role of law in immigration control and refugee admission. The course examines in detail the present law in relation to the main visa classes granting temporary and permanent protection to asylum seekers in Australia. The course will also provide an introduction to the Australian immigration system, its history, and the principal visa categories. Particular attention will be drawn to the legal status of unlawful non-citizens in Australia, rights of appeal and review, and the jurisprudence of the Federal Court, Migration Review Tribunal and Refugee Review Tribunal. Overseas asylum systems and case law will also be referred to.

# LAW 3023

### Jessup Moot

- 4 units Summer semester
- 40 hours
- Maximum 5 students
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts and LAW 1003 Law of Contract
- Assumed Knowledge: LAW 1006 Introduction to Public International Law
- Assessment: Research & skills in oral & written presentation

Students are eligible for the subject by application and selection only. Participants in the Moot Court subject will be selected as members of one or more teams of 3-5 students. The teams will prepare material for presentation in moot court competitions to be held within the Law School or in state, national or international competition. One of the selected teams will participate in the Australian Regional Rounds of the Philip C Jessup International Moot Court Competition, and the international rounds, if it qualifies to do so. Participation in the Jessup Moot will involve the preparation of written submissions (memorials) for both the Applicant and Respondent parties and the preparation of oral submissions for the purposes of practice and competition moots. The Moot Court Course has a unit loading of 4 units where 40 or more hours participation is required.

# LAW 3024

#### **Comparative Equality & Anti-Discrimination Law**

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 2003 Australian Constitutional Law
- Restriction: Not to be counted with Law 3014 Comp Equality & Anti-Discrimination law 2
- Assessment: To be advised

The course will examine theories of equality and discrimination and the theoretical framework of anti-discrimination legislation. It will assess the Commonwealth and South Australian antidiscrimination legislation in terms of their conceptual underpinnings, constitutional basis, legislative structure, procedures and remedies. A comparative approach to this assessment will be adopted, through an examination of North American and European approaches to Equality and Anti-Discrimination Law.

#### LAW 3025

#### **Statutory Interpretation**

- 4 units semester 1
- 36 hours
- Available for Non-Award Study
- · Quota may apply
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assessment: participation 20%, 1500 word discussion paper & seminar presentation 30%, 3000 word research paper (5000 words for honours admission) 50%

Introduction to the course: historical background; Literal and intention based interpretation of statutes; The revolution of the 1980s as regards purpose and use of extrinsic materials; The importance of context in understanding statutes; The impact of amendments to head legislation: interpreting the final product; The effect of legislation in time: can a statute operate to change the legal state of affairs in the past?; Statutory provisions against a backdrop of existing common law rights and presumptions; When may a court 'read' words into a statute?; Drafting styles and possible different approaches to communication of statutory values: fuzzy law.

#### LAW 3028

#### **Regulation of Competition**

- 4 units not offered 2007
- 36 hours
- Available for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2003 Australian Constitutional Law, LAW 2002 Administrative Laws
- · Assessment: to be advised

A study of the encouragement, supervision and regulation of competition in Australia, with a particular focus upon the abuse of positions of market power and other restrictive trade practices such as anti-competitive cartels. The course will also examine the role of the ACCC in enforcement & administration of the Trade Practices Act 1974, as well as the provisions for administrative authorisation of some anti-competitive conduct on public benefit grounds. A particular focus will be placed upon recent developments, including structural reforms in the light of post Hilmer competition policy.

#### LAW 3029

#### **Corporate Finance**

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 2004 Corporate Law
- Assessment: exam 100%, or exam 60% & 3000 word essay 40%, or exam 40% & 5000 word research paper 60%

This course deals with the following aspects of the law relating to financial products and markets: Types of investment capital: debt and equity; Restructuring a company's share capital: reductions of capital and share buy-backs; Investment capital raising: the fund raising provisions of the Corporations Act; The regulation of managed investment schemes.

# LAW 3030

#### **Accreditation for Mediators**

- 2 units semester 2
- 20 hours
- Prerequisite: LAW 3010 Alternative Dispute Resolution
- Assessment: to be advised

This workshop builds on theory explored in Alternative Dispute Resolution. Students will engage in simulated mediation exercises playing the role of parties and mediators. Students will have their performance as mediators formally assessed with written feedback. Associated sessions will include evaluation and critique of techniques in mediation and implications for justice access.

# LAW 3044

## Labour and Industrial Relations Law

- 4 units semester 1
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2003 Australian Constitutional Law, LAW 1003 Law of Contract, LAW 1002 Law of Torts
- Assessment: to be advised

This course examines the law governing work as it has evolved in the global era of the new economy. It explores a range of regulatory mechanisms deployed in this area, including the development of international norms as well as Australian statute and common law, and new forms of 'soft' regulation. Topics covered include: the law of work in the global era; the development of the Australian law of work, both prior to and after Work Choices; the subject of the law of work, including the distinction between employees and independent contractors, and the nature of the 'firm'; the contract of employment, and common law rights and responsibilities at work; the safety net, including the Australian Fair Pay and Conditions Standard, awards, the role of the Australian Fair Pay Commission and the Australia Industrial Relations Commission; security at work,

including dismissal law; equality at work, including discrimination law; freedom of association; workplace bargaining, and resolving conflicts at work under the law.

# LAW 3047

#### **Environmental Protection Law**

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 2070 Environmental Law
- Assessment: to be advised

This course examines measures for the protection of the environment from pollution, including hazardous substances. It includes a consideration of international controls, but focuses primarily on the Environment Protection Act 1993 (SA) and related measures. Both the land and marine environment will be covered. Specific topics include air and water pollution, noise control; waste management; the regulation of hazardous substances; and land contamination.

# LAW 3065

#### Land and Water Resources Law

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2070 Environmental Law
- Assessment: to be advised

An examination of how the principles of sustainable resource use may be applied through the legal system in relation to the management of land and water resources. Measures examined in relation to land management include common law doctrines and the effect of native title; soil conservation legislation; the use of tenurial systems especially in the arid zone; vegetation clearance controls and land management agreements. In relation to water resources the course examines the institutional structures for water management in Australia, including the Murray-Darling Basin arrangements; State and Federal Law relating to the allocation of both surface water and groundwater; the regulation of water quality; the common law doctrine of riparian rights; the concept of integrated catchment management; and a brief overview of river basin management schemes in other countries.

# LAW 3066

## **Public International Law**

- 4 units semester 2
- 36 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 2001 Legal Research and Writing
- Restriction: not to be presented with LAW 1006
   Introduction to Public International Law
- Assessment: to be advised

The basic course in public international law includes the following topics: The nature, function and relevance of international law, the structure of the international community, the sources of international law, the relationship between international law and municipal law, the participants in the international legal system, jurisdiction, state responsibility, use of force.

# LAW 3071

## **Conservation Law**

- 4 units not offered 2007
- 40 hours
- Prerequisite: LAW 2070 Environmental Law
- Assessment: to be advised

Analyses and discusses law and policy applicable to the conservation of Australia's natural and built heritage and the conservation of fundamental natural resources. The philosophy of conservation including the role of law, economics and science; conservation of biological biodiversity at the international, national and regional levels; conservation through reserved areas including national parks and world heritage areas; the National Estate concept; conservation of natural resources (land, water, air and marine).

# LAW 3080

#### **Clinical Legal Education**

- 4 units summer semester or semester 1 or 2
- 18 internal, approx. 80 placement hours
- · Eligibility: by selection only
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, completion of 54 units of LLB - some placements will include Litigation Practice, Civil and Criminal Procedure, Administrative Law, or Family Law

 Assessment: journal 50%, project 30%, journal exercises 20%

The course is designed to demonstrate the operation of theoretical and doctrinal law in a legal environment. Students are placed for one day per week in a legal office, supervised by a legal practitioner, and participate actively in all aspects of the work at the office, including case work. The Law School also offers placements at legal advice clinics run by Flinders and Adelaide Law Schools at the Adelaide Magistrates Court. The concurrent seminar program builds on students' experiences on placement, examining issues such as lawyer/client relationships, legal ethics, professionals and professions, justice access, and the role of our legal system in society.

\* When the course is offered over summer it entail 2 days of placement each week for 6 weeks between January and end of February.

# LAW 3090

#### **Planning and Heritage Law**

- 4 units not offered 2007
- 24 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2070 Environmental Law
- Assessment: to be advised

Examines regulatory mechanisms designed to give effect to the goals of planning and controlling the use and development of land, with particular reference to South Australia; to provide an understanding of the role and limits of regulation and the balance between public and private decision-making in relation to land-use. The focus of this course is upon the control of land development under the South Australian planning system and State Heritage legislation. The course commences with an examination of the historical evolution of the planning system, and then considers the nature of the planning procedures under the Development Act 1993 and of controls imposed thereunder. It examines the powers and procedures of planning authorities, and, through the seminar program, it considers the methods of dealing with selected planning issues, including shopping, housing segregation and aesthetics. The effect of heritage controls is then examined. The course also considers the role of appeal tribunals and public participation procedures;

alternative modes of planning; control of government development, particularly transport; and responsibility for housing. The course concentrates upon legal analysis of planning and heritage problems.

# LAW 3098

### **Corporate Insolvency Law**

- 4 units not offered 2007
- 40 Hours
- Prerequisite: LAW 2004 Corporate Law
- Assessment: to be advised

Policies and principles underlying corporate insolvency systems; modes of winding up; property available for distribution to creditors in a winding up; claims of creditors in winding up; the liquidator - powers, duties, liabilities; corporate rescue under the Corporations Law - the voluntary administration procedure; the nature and operation of corporate receivership.

# Honours

## LAW 3089

#### **Honours Research and Writing**

- 2 units semester 1 or 2
- Eligibility: approved honours Law students
- Assessment: attendance, participation in program & classes, identification of subject of dissertation and conduct of preliminary research, peer review presentation, preparation of synopsis to approval of supervisor

This course will introduce students who have been admitted to the honours dissertation program to advanced legal research and writing. In it students will participate in a structured program that will enable and assist them to identity the subject of their dissertation, and gain the skill necessary to enable them to undertake preliminary preparatory to the writing of the honours dissertation.

# LAW 3099

#### **Dissertation Honours Law**

- 6 units semester 1 or 2
- Eligibility: approved honours Law students
- Prerequisite: LAW 3089 Honours Research and Writing
- Assessment: 10000-12000 word dissertation

Candidates are required to conduct research on an approved topic and write an honours dissertation The dissertation will be assessed in accordance with the procedures set out in the Honours Guidelines as determined by the Law School.

# Level IV

# LAW 4144

#### International Justice and the Rule of Law

- 4 units not offered in 2007
- 36 hours
- Available for Non-Award Study
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assessment: participation 20%, working group project presentation 30%, 3000 word research paper 50%

This course examines the various paths countries take to move from conflict, dictatorship or apartheid to reestablishing the rule of law. The aim is to undertake a comparative analysis of these paths and to study their strengths and weakness. While it is generally accepted that there is no 'one size fits all' formula (as each conflict involves a myriad of factors), the challenge is to see whether countries can learn anything from each other's experiences. The course will examine and compare the measures used in the following countries: South Africa, Bosnia and Herzegovina, East Timor, Afghanistan, Rwanda, Guatemala, Sierra Leone, Cambodia, Kosovo and Irag. The processes of constitution-making, prosecutions, truth commissions, reform of the justice system including the courts, police force and military, and the promotion of human rights in these countries will be scrutinised, particularly with respect to the role of the UN, NGOs governmental institutions and local communities.

# LINGUISTICS

# Level I

# LING 1101

## **Foundations of Linguistics**

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1000 word essay, 3 practicals, 2 x 500 word reviews, test

Linguistics is the study of human language, its nature, its origins and its uses. This course will give students an overview of the field of modern linguistics and basic skills in linguistic analysis. Foundations of Linguistics develops understandings of the various subsystems of language including phonology, morphology, syntax, semantics and the lexicon. It also investigates how languages are learned and how they change over time. As language is involved in a large number of human activities, linguistics contributes to many other fields of inquiry, including anthropology, psychology, philosophy, law and the natural sciences.

# LING 1102

#### Language and Ethnography of Communication

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1500 word essay, 3 practicals, 2 x 500 word reviews, test

This course provides the theoretical foundations and basic methods commonly employed in the analysis of human communication, i.e. meaningful human behaviour. Students will become familiar with both linguistic/semiotic and ethnographic approaches to describing and understanding complex communicative events. The lectures will be concerned with a range of message forms: spoken, written, pictorial and others across a range of cultures and will discuss interpersonal as well as intercultural communication. On completion of this course students will have an understanding of the central debates in communication studies as well as the skills to analyse communicative behaviour.

# Level II

# LING 2006

#### Language and Meaning

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 3 essays

Language is embedded in everyday actions as it is used to carry out different functions. The purpose of this course is to investigate the linguistic choices which differentiate uses of language, for example the differences between spoken and written text, between academic discourse and informal language. Students are introduced to the analysis of spoken and written language using functional grammar.

# LING 2007

#### Kaurna Language and Language Ecology

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 3 practical assignments, take home (open book) exam, essay or equiv. report

Kaurna Language and Culture gives a fascinating insight into the ways in which Kaurna sources are being used to forge a new Kaurna identity and develop an associated language which is being used to address contemporary needs. This course will allow you to: learn some Kaurna language; develop an understanding of the structure of the Kaurna language; understand the context (or ecology) in which the Kaurna language existed in the 1830s and 1840s at the time of colonisation; and appreciate the circumstances under which the Kaurna language is being revived.

# LING 2010

#### Language, Cognition and Reality

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essay 50%, tutorial presentation 20%, project 30%

This course is concerned with the role the lexical and grammatical structures of languages play in shaping their users' perceptions of reality. It will begin with the classical Sapir-Whorf hypothesis of linguistic relativity and consider more recent findings in the area of categorisation, environmental discourse and political rhetoric. Particular attention will be paid to the role of linguistic and conceptual diversity in the 21st century.

## LING 2011

#### **Mass Communicative Discourses**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 2000-2500 word theoretical/analytical essay 45%, shorter writing exercises to total 1000 words 15%, 2000-2500 word writing project 40%

This course is designed to simultaneously develop students' theoretical and practical understanding of the nature of mass communicative texts, how they are constructed, their rhetorical and ideological potential and the functions they serve in society. The course will equip students to account, both descriptively and critically, for the verbal styles and textual organisations of mass media texts while developing their ability to construct such texts themselves.

The following topics will be covered: the historical evolution and current status of the news report; mass media objectivity - the nature and ideological consequences of 'impartial' language; popular persuasion and the mass media commentary; mobilising public opinion and the discourses of community activism - press releases, blogging and the online feature; mass media popularisations interpreting expert knowledge for a mass audience; words to image - pod casting and writing for video; and the art of the review - the cultural correspondent.

#### LING 2012

#### Phonology

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 5 practical assignments 75%, exam 25%

Almost all of us use spoken language everyday. We express ourselves through speech in a multitude of ways. Pronunciation immediately identifies each of us as belonging to a certain ethnic group, social class, locality, age group and gender. This course investigates the nature of speech sounds, the mechanisms of speech production and perception and the ways by which these sounds are classified into a fixed inventory of meaningful sounds, the phoneme inventory, by speakers of a language. Students will learn how to transcribe speech sounds using phonetic symbols (International Phonetic Alphabet or IPA). Students will compare and contrast the sound systems of a variety of languages. A particular focus of this course will be developing understandings of the relationship between speech and writing in a range of languages, including English. This course is essential for all linguistics students, language teachers (English or otherwise) and newsreaders. The course will also be of interest to many students of psychology, anthropology and social inquiry.

# Level III

#### **LING 3006**

#### Language and Meaning

- 6 units semester 1
- · 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 3 essays

Language is embedded in everyday actions as it is used to carry out different functions. The purpose of this course is to investigate the linguistic choices which differentiate uses of language, for example the differences between spoken and written text, between academic discourse and informal language. Students are introduced to the analysis of spoken and written language using functional grammar.

#### LING 3007

#### Kaurna Language and Language Ecology

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 3 practical assignments, take home (open book) exam, essay or equiv. report

Kaurna Language and Culture gives a fascinating insight into the ways in which Kaurna sources are being used to forge a new Kaurna identity and develop an associated language which is being used to address contemporary needs. This course will allow you to: learn some Kaurna language; develop an understanding of the structure of the Kaurna language; understand the context (or ecology) in which the Kaurna language existed in the 1830s and 1840s at the time of colonisation; and appreciate the circumstances under which the Kaurna language is being revived.

# LING 3010

#### Language, Cognition and Reality

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: essay 50%, tutorial presentation 20%, project 30%

This course is concerned with the role the lexical and grammatical structures of languages play in shaping their users' perceptions of reality. It will begin with the classical Sapir-Whorf hypothesis of linguistic relativity and consider more recent findings in the area of categorisation, environmental discourse and political rhetoric. Particular attention will be paid to the role of linguistic and conceptual diversity in the 21st century.

# LING 3011

#### **Mass Communicative Discourses**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 3000-3500 word theoretical/ analytical essay 45%, shorter 1500 word writing exercises 15%, 3000-3500 word writing project 40%

This course is designed to simultaneously develop students' theoretical and practical understanding of the nature of mass communicative texts, how they are constructed, their rhetorical and ideological potential and the functions they serve in society. The course will equip students to account, both descriptively and critically, for the verbal styles and textual organisations of mass media texts while developing their ability to construct such texts themselves. The following topics will be covered: the historical evolution and current status of the news report; mass media objectivity - the nature and ideological consequences of 'impartial' language; popular persuasion and the mass media commentary; mobilising public opinion and the discourses of community activism - press releases, blogging and the online feature; mass media popularisations interpreting expert knowledge for a mass audience; words to image - pod casting and writing for video; and the art of the review - the cultural correspondent.

# LING 3012

#### Phonology

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 3 practical assignments; phonological analysis, 25% exam

Almost all of us use spoken language everyday. We express ourselves through speech in a multitude of ways. Pronunciation immediately identifies each of us as belonging to a certain ethnic group, social class, locality, age group and gender. This course investigates the nature of speech sounds, the mechanisms of speech production and perception and the ways by which these sounds are classified into a fixed inventory of meaningful sounds, the phoneme inventory, by speakers of a language. Students will learn how to transcribe speech sounds using phonetic symbols (International Phonetic Alphabet or IPA). Students will compare and contrast the sound systems of a variety of languages. A particular focus of this course will be developing understandings of the relationship between speech and writing in a range of languages, including English. This course is essential for all linguistics students, language teachers (English or otherwise) and newsreaders. The course will also be of interest to many students of psychology, anthropology and social enquiry.

# Honours

### LING 4401

#### **Honours Linguistics**

- 24 units full year
- Prerequisite: UG degree, credit average in courses contributing to a major in Linguistics, or equiv. approved by Head of Discipline
- Assessment: coursework 50%, thesis 50%

Students wishing to take Honours Linguistics should consult the lecturers in Linguistics prior to commencing Level II to ensure appropriate course choices are made in preparation for Honours.

In some circumstances Honours Linguistics can be studied part-time over two years or be combined with Honours in another discipline.

# MANAGEMENT

# Level II

## COMMGMT 2007

#### **Organisational Behaviour II**

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Assessment: exam, test, assignments, tutorial participation & contribution as determined at preliminary lecture

This course draws on individual factors, group processes, and features of the organisational system to understand the behaviour of people at work. Topics include workforce diversity, values, personality, emotions, motivation, group behaviour, work and life stress, conflict, communication, power and politics, organisational culture, structure and work design, and organisational change.

# COMMGMT 2008

#### Management II

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Restriction: not to be counted with COMMGMT 2008 Management Principles and Practice II or

AGRIBUS 2016 Introduction to Business Management

 Assessment: written exam not less than 50%; essays, tutorial participation & contribution as determined at preliminary lecture

This course introduces students to the challenges of management and the roles and functions of managers. The content will include an introduction to organisations and the need for management as well as to the development and evolution of management theory. The course will examine types and levels of managers, as well as their organisational and natural environments. It will investigate the process of management, including planning and decision making, organising, leading and motivating, and controlling. Other issues covered may include international management and the global economy, social responsibility and ethics, and other emerging issues in management.

# Level III

# COMMGMT 3001

#### International Management III

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Assumed Knowledge: COMMGMT 2008
   Management II
- Assessment: exam, assignments as determined at first lecture

The objective of this course is to provide students with a basic understanding of the fundamental principles and practices of International Management. The course focuses on the foundations of international management, the role of culture, cross-cultural communication and negotiations, MNC strategies and structures, and international human resource management. There will be a focus on appropriate theory and the course will aim to provide opportunities for the practical implementation of the main concepts covered.

## COMMGMT 3007

#### Strategic Management III

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- Available for Non-Award Study
- Assumed Knowledge: all Level I & II courses in relevant degree program
- Assessment: exam, assignments as determined at first lecture

This course addresses the strategic management of organisations, including the formulation of longer term strategic directions, the planning of objectives and supporting strategies, and the control of strategic implementation. It provides students with an understanding of the approaches and tools for planning and controlling strategy at the organisation and sub-unit levels, as well as experience in case analysis and practical application of planning and control skills. Topics include evaluating the strategic environment, industry and competitive analysis, formulating mission and setting objectives, strategy selection and implementation, and strategic control. Also considered are specialist issues in strategic management such as technology and not-for-profit organisation management, corporate social responsibility and environmental strategies.

# COMMGMT 3014

#### Human Resource Management III

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours self-directed study per week
- · Available for Non-Award Study
- Prerequisite: COMMGMT 2007 Organisational Behaviour II (at least 45%)
- Assessment: written exam not less than 50%, assignments as determined at first lecture

It is generally agreed that, while most serious competitors in any given industry are likely to have attained nearly the same level of technological sophistication, what can set these organisations apart is the quality of their people. Thus, other things being equal, the most effective organisations (in terms of productivity, customer service, reputation etc.) are likely to be those that have the most dedicated and talented employees. Human Resource Management (HRM) is that part of management which is concerned with how organisations can make the most effective use of their human resources - their people - in order to achieve organisational and individual goals. The aim of this course is to provide students with an understanding of contemporary HRM and the important strategic role that it plays in helping an organisation build and maintain competitive advantage. More specifically, the course will examine HR policies, practices, and systems in the areas of: planning and recruitment; employee selection; training and development; performance management; compensation; employee relations; equal opportunity; employee security and safety; employee separation; and international HRM.

## COMMGMT 3015

#### **Organisational Dynamics III**

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Prerequisite: COMMGMT 2008 Management II
- Assessment: exam, assignments as determined at first lecture

Organisational Dynamics aims to assist future contemporary managers to negotiate the multitude of complexities in rapidly changing environments in order to optimise their organisations: performance for successful outcomes. This course explores the three fundamental and dynamic influences on modernday organisations - knowledge, innovation and technology, and emphasises the organisational system as a coordinated social entity. Managing that social system as an integrated part of the corporate strategy requires unique skills to ensure the successful integration of the knowledge, innovations and technologies to maximize the organisationøs performance. This course will introduce the student to the fundamental principles of organisational theory as they contribute to the interpretation and analysis of organisational dynamics. It will further facilitate understanding of organisational dynamics in relation to other areas of management study including organisational behaviour, human resource management and strategic management.

# MARKETING

# Level II

### **MARKETNG 2009**

#### Marketing II

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Prerequisite: successful completion of 1 semester of university study
- Restriction: not to be counted with MARKETNG 2009 Marketing Management II or WINEMKTG 1013 Wine and Food Marketing Principles
- Assessment: exam, assignments as determined at first lecture

The course aims to provide students with an understanding of marketing management and practices. The course introduces the marketing functions within profit and not-for-profit organisations and looks at the processes available to manage these functions. It will include topics such as environmental analysis, industry and competitor analysis, objective setting, marketing strategies, marketing mix components, implementation and control mechanisms. In addition, students will be introduced to marketing practice via an audit of a company.

# **MARKETNG 2011**

#### **Consumer Behaviour II**

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Assumed Knowledge: MARKETNG 2009 Marketing II
- Restriction: not to be counted with MARKETNG 3013 Consumer Behaviour III or WINEMKTG 2033 Consumer Behaviour Analysis
- Assessment: exam, assignments as per course outline

This course introduces the theory of consumer behaviour and relates it to the practice of marketing. It will present relevant material drawn from psychology, anthropology, social and behavioural sciences within the framework of the consumer decision process and its main influencing factors.

# Level III

## MARKETNG 3000

#### **Marketing Communications III**

- 4 units semester 1
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Prerequisite: MARKETNG 2009 Marketing II
- Assessment: exam, assignments as per course outline

The course aims to provide students with an understanding of the communication aspects of marketing. It will cover the range of tools available to marketers for the purpose of promotion such as advertising, sales promotion, personal selling, sponsorship, publicity and public relations as well as the process by which these are integrated and planned.

## **MARKETNG 3015**

#### International Marketing III

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Prerequisite: MARKETNG 2009 Marketing II
- Assumed Knowledge: MARKETNG 2011 Consumer Behaviour II
- Restriction: not to be counted with WINEMKTG 2014 International Marketing of Wine and Agricultural Products
- Assessment: group work on case studies, major project and final exam

International marketing is a rapidly growing area within the disciplines of marketing and international business. Central to international marketing is the response of international rather than domestic buyers in the marketing environment, the types of decisions that are most feasible and the information required in decision making. During this course, the student will gain insights into the pressures created by the international economic, political, legal and cultural environmental influences on marketing planning. This course will enable students to learn analytical skills required to develop international marketing plans and develop the marketing mix elements in the international environment. International marketing is one of five subjects in the marketing discipline and extends the knowledge developed in marketing management into the international rather than the domestic market. The major theories include, pathways of internationalisation, political and economic risk analysis, international strategic planning, cultural distance, product development and branding for international markets, international market entry, distribution strategies and the structure of international organisations. The conceptual material developed during this course will be implemented through class exercises, case studies and a major project.

# **MARKETNG 3017**

#### **Market Research and Project III**

- 4 units semester 2
- 2 lectures, 1 tutorial, 8 hours per week selfdirected study per week
- Available for Non-Award Study
- Prerequisite: MARKETNG 2009 Marketing II
- Assumed Knowledge: MARKETNG 2011 Consumer Behaviour II
- Restriction: not to be counted with MARKETNG 3012 Market Research & Project II or WINEMKTG 2011 Applied Marketing Research
- Assessment: group project report 45%, group presentation 5%, final exam 50%

This course will provide students with an in depth understanding of market research. Students will be involved in a practical application of market research via a group project which will focus on a real company situation. In particular, students will write a research brief, determine the research methodology and conduct interviews and surveys as required. Students will be responsible for presenting their findings in both written and oral form to their clients.

# MATHEMATICS

# Level I

# APP MTH 1000

#### Scientific Computing I

- 3 units semester 1
- 54 hours lectures, computer practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Math.Studies or equiv.
- Restriction: cannot be counted together with COMP SCI 1004 Computer Literacy I, CHEM ENG 1002 Engineering Computing I or APP MTH 2005 Financial Computing II
- Assessment: computing assignments 30%, final exam 70%

This course introduces three approaches useful in practical applications of computing. Comparisons between the three approaches will be made by using common problems from areas including Science, Engineering and Finance.

Microsoft Excel (approx. 6 lectures): Simple spreadsheets using in-built functions; optimisation using the Goal-Seek tool; finding roots using the Solver tool; data analysis. MATLAB (approx. 9 lectures): graphics, matrix computations, in-built functions, programming in MATLAB. ANSI C Programming (approx. 15 lectures): Basic C programming: data types, arithmetic and mathematical functions, flow control, arrays. Functions: passing information to and from functions. Pointers: pointer arithmetic, the relationship between arrays and pointers. File handling: opening and closing files, reading from and writing to files.

#### **MATHS 1008**

#### Mathematics for Information Technology I

- · 3 units semester 2
- 4 lectures, 1 tutorial, 1 hour computing laboratory session per week using mathematical package Matlab
- · Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies
- Restriction: cannot be counted with PURE MTH
   1004 Mathematical Applications I

• Assessment: 3 hour exam, percentage based on weekly assignments, computing work

This course provides an introduction to a number of areas of discrete mathematics with wide applicability. Areas of application include: computer logic, analysis of algorithms, telecommunications, gambling and public key cryptography. It includes discrete mathematics: sets, relations, logic, graphs, mathematical induction and difference equations; probability: sample spaces, events, discrete random variables and distributions; information security and encryption: prime numbers, congruences.

It is recommended for students intending to study Discrete Mathematics II, Algebra II, Operations Research II or undertake studies in Statistics or Computer Science.

## **MATHS 1009**

#### Introduction to Financial Mathematics I

- 3 units semester 1
- 4 lectures, 1 tutorial per week, number of computer practicals using mathematical package Matlab
- Eligibility: not available to B.Ma.& Comp.Sc. students
- · Available for Non-Award Study
- Restriction: cannot be presented with ECON 1005 Mathematics for Economists I, MATHS 1011/1012 Mathematics IA/IB, MATHS 1013/1014 Mathematics IMA/IMB
- Assessment: 3 hour exam, small percentage allocated to weekly assignments, tests

Together with Applications of Quantitative Methods in Finance I, this course provides an introduction to the basic mathematical concepts and techniques used in finance and business and includes topics from calculus, linear algebra and probability, emphasising their inter-relationships and applications to the financial area; introduces students to the use of computers in mathematics; develops problem solving skills with a particular emphasis on financial and business applications. Polynomial, exponential, logarithmic functions, interest rates and annuities, Linear Equations and matrices, Linear programming.

## **MATHS 1010**

# Applications of Quantitative Methods in Finance I

- 3 units semester 2
- 4 lectures, 1 tutorial per week, number of computer practicals using mathematical package Matlab
- Eligibility: not available to students in B.Ma.& Comp.Sc.
- Available for Non-Award Study
- Prerequisite: MATHS 1009 Introduction to Financial Mathematics I (Pass)
- Restriction: cannot be presented with MATHS 1011/1012 Mathematics IA/IB, MATHS 1013/1014 Mathematics IMA/IMB
- Assessment: 3 hour exam, small percentage allocated to weekly assignments, tests

Together with MATHS 1009 Introduction to Financial Mathematics I, this course provides an introduction to the basic mathematical concepts and techniques used in finance and business and includes topics from calculus, linear algebra and probability, emphasising their inter-relationships and applications to the financial area; introduces students to the use of computers in mathematics; develops problem solving skills with a particular emphasis on financial and business applications. Calculus: differential and integral calculus with applications; functions of two real variables. Probability: basic concepts, conditional probability; probability distributions and expected value with applications to business and finance.

# **MATHS 1011**

#### **Mathematics IA**

- 3 units semester 1 or 2
- 4 lectures, 1 tutorial each week, number of computer practicals using mathematical package Matlab
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Mathematical Studies & Specialist Mathematics or MATHS 1013 Mathematics IMA (Pass Div I)
- Restriction: may not be presented with MATHS 1001 Mathematics IH or MATHS 1000A/B Mathematics IM or MATHS 1007A/B Mathematics I or MATHS 1014 Mathematics IMB
- Assessment: 3 hour exam, small percentage allocated to weekly assignments, tests

This course, together with MATHS 1012 Mathematics 1B, provides an introduction to the basic concepts and techniques of calculus and linear algebra, emphasising their inter-relationships and applications to engineering, the sciences and financial areas; introduces students to the use of computers in mathematics; and develops problem solving skills with both theoretical and practical problems. Calculus: functions of one variable, differentiation, the definite integral, and techniques of integration. Algebra: Linear equations, matrices, the real vector space determinants, optimisation, eigenvalues and eigenvectors; applications of linear algebra.

# **MATHS 1012**

#### Mathematics IB

- 3 units summer semester or semester 1 or 2
- 4 lectures, 1 tutorial per week, number of computer practicals using mathematical package Matlab
- Available for Non-Award Study
- Prerequisite: MATHS 1011 Mathematics IA (Pass)
- Restriction: may not be presented with MATHS 1007A/B Mathematics I or MATHS 2004 Mathematics IIM
- Assessment: 3 hour exam, small percentage allocated to weekly assignments, tests

This course, together with MATHS 1011 Mathematics IA, provides an introduction to the basic concepts and techniques of calculus and linear algebra, emphasising their inter-relationships and applications to engineering, the sciences and financial areas; introduces students to the use of computers in mathematics; and develops problem solving skills with both theoretical and practical problems. Calculus: Applications of the derivative; functions of two variables; Taylor series; differential equations. Algebra: The real vector space, eigenvalues and eigenvectors, linear transformations and applications of linear algebra.

# **MATHS 1013**

#### **Mathematics IMA**

- 3 units semester 1
- 4 lectures, 1 tutorial per week, computer practicals using mathematical package Matlab
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Math.Studies

- Restriction: not available to students with combined (subject achievement) score of 35 for SACE Stage 2 Math. Studies & Specialist Maths (or equiv.), & may not to be presented with MATHS 1001 Maths IH or MATHS 1000A/B Maths IM or MATHS 1007A/B Maths I
- Assessment: 3 hour exam, small percentage allocated to weekly assignments, tests

This course provides the necessary additional mathematics to prepare students for MATHS 1011 Mathematics IA. This course contains an introduction to basic concepts and techniques of calculus and linear algebra, emphasising their inter-relationships and applications to the sciences and financial areas; introduces students to the use of computers in mathematics; and develops problem solving skills with a particular emphasis on applications. Calculus: differential calculus with applications; an introduction to differential equations; Algebra: complex numbers; vectors, linear equations and matrices; applications of linear algebra.

# Level II

# APP MTH 2000

## **Differential Equations and Fourier Series**

- 2 units semester 1
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass) or corequisite MATHS 2004 Mathematics IIM
- Restriction: may not be presented with APP MTH 2007 Differential Equations II and APP MTH 2010 Differential Equations (Civil) or APP MTH 2010 Differential Equations and Statistical Methods (Civil)
- Assessment: written and computing assignments 15%, final exam 85%

Ordinary differential equations: First order, second order, series solutions. Fourier series for functions of arbitrary period, half range expansions, even and odd functions, complex form of Fourier series. Partial differential equations: heat equation, separation of variables, wave equation, Laplace's equation. Applications in boundary value problems.

## **APP MTH 2002**

### Vector Analysis and Complex Analysis

- 2 units semester 1 or semester 2
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: pass in MATHS 1012 Mathematics IB or MATHS 2004 Mathematics IIM or
- Corequisite: MATHS 2004 Mathematics IIM
- Assumed Knowledge: concurrent/prior enrolment in APP MTH 2000 Differential Equations and Fourier Series or prior enrolment in APP MTH 2007 Differential Equations II
- Restriction: cannot be presented with APP MTH 2006 Methods in Applied Mathematics II
- Assessment: written and computing assignments 15%, final exam 85%

Vector calculus: vector fields, gradient, divergence and curl. Line, surface and volume integrals, integral theorems of Green Gauss and Stokes, with applications. Orthogonal curvilinear coordinates. Complex analysis: elementary functions of a complex variable, complex analytic functions, complex integrals, Taylor Series, Laurent Series, Residue Theorem.

# **APP MTH 2003**

#### **Modelling with Differential Equations II**

- 2 units semester 2
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II
- Assessment: written and computing assignments 15%, final exam 85%

This course introduces techniques for the use of differential equations in modelling and in particular provides introduction to nonlinear differential equations and to numerical methods. Laplace Transforms: Laplace Transform techniques are used to solve ordinary and partial differential equations and integral equations. In particular the ability is provided to handle commonly occurring non continuous input functions. Nonlinear Differential Equations: An introduction to the concepts of phase plane, trajectories and fixed

points. Applications include competing population models. Numerical solutions of Differential Equations: Initial value problems, Euler's method and Runge-Kutta method. Application of numerical techniques. Classification of Partial Differential Equations: the Laplace, heat and wave equations. Introduction to scaling and non-dimensionalisation of Partial Differential Equations. Applications of Partial Differential Equations. Numerical Solution of Partial Differential Equations by finite difference methods: explicit and implicit schemes, direct and iterative solution methods.

# **APP MTH 2004**

#### **Numerical Methods in Engineering (Chemical)**

- 2 units semester 2
- 30 hours lectures, tutorials
- Eligibility: not available to B.Ma.& Comp.Sc.or B.Comp.Sc.students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II
- Restriction: may not be presented together with APP MTH 2009 Numerical Analysis and Probability and Statistics
- Assessment: written and computing assignments 20%, final exam 80%

A problem-solving course that introduces typical problems met in engineering programs and presents numerical methods to solve these problems. Contents include heat transfer and fluid flow, with methods including numerical solution of ordinary and partial differential equations, solutions of systems of linear and non-linear equations, optimisation problems, and interpolation.

# **APP MTH 2005**

#### **Financial Computing II**

- 4 units semester 1
- 54 hours lectures, computer practicals
- Eligibility: not available to B.Comp.Sc. or B.Ma.& Comp.Sc.students
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Mathematical Studies or equiv.

- Assumed Knowledge: knowledge of spreadsheets, as from STATS 1000 Statistical Practice I, or ECON 1008 Business Data Analysis I
- Restriction: may not be counted with APP MTH 1000 Scientific Computing I or COMP SCI 1004 Computer Literacy I or CHEM ENG 1002 Engineering Computing I
- Assessment: computing assignments 30%, final exam 70%

This course introduces three approaches that are useful in practical applications of computing. Comparisons between the three approaches will be made, including problems from Mathematical Finance. (i) Microsoft Excel Simple spreadsheets using in-built functions; optimisation using the Goal-seek tool;, finding roots using the Solver tool; data analysis. (ii) MATLAB: graphics, matrix computations, in-built functions, programming in MATLAB. (iii) ANSI C Programming: Basic C Programming: data types, arithmetic and mathematical functions, flow control, arrays. Functions: passing information to and from functions. Pointers: pointer arithmetic, the relationship between arrays and pointers. File handling: opening and closing files, reading from and writing to files.

# **APP MTH 2008**

#### **Operations Research II**

- 2 units semester 2
- 30 hours lectures, tutorial
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass); or MATHS 2004 Mathematics IIM (Pass)
- Assessment: written and computing assignments 10%, final exam 90%

Linear Programming: Simplex Algorithm Phase I and Phase II, duality theory and complementary slackness, interpretation of dual variables. Probability and applications: formulation and solution of probability problems in applications. Includes topics from: gambler's ruin, dimensioning teletraffic networks, epidemic modelling, economic applications.

## **APP MTH 2009**

## Numerical Analysis and Probability and Statistics

- 2 units semester 2
- 35 hours lectures, tutorials, practicals
- Eligibility: not available to B.Comp.Sci or B.Ma.&Comp.Sc. students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series
- Restriction: may not be presented together with STATS 2004, STATS 2001, APP MTH 2004, or APP MTH 2010
- Assessment: written and computing assignments 15%, final exam 85%

Numerical analysis: numerical solution of ordinary and partial differential equations. Probability calculus. Statistical methods: estimation of means and variances; inferences on means; simple analysis of variance; simple linear regression; inferences on probabilities; contingency tables.

# **APP MTH 2010**

# Differential Equations and Statistical Methods (Civil)

- 3 units semester 1
- 41 hours lectures, tutorials, practicals
- Eligibility: not available to B.Comp.Sc. or B.Ma.& Comp.Sc. students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass) or MATHS 2004 Mathematics IIM or corequisite MATHS 2004 Mathematics IIM
- Restriction: may not be presented together with APP MTH 2007, APP MTH 2000, STATS 2001, STATS 2004 or APP MTH 2009
- Assessment: written and computing assignment 15%, final exam 85%

Ordinary differential equations: first order, second order, series solutions. Partial differential equations: heat equation, wave equation, Laplace's equation, separation of variables. Applications in boundary value problems. Probability and statistical methods: sample mean and variance, random variables, distributions, quality control, fitting straight lines.

## **MATHS 2004**

#### Mathematics IIM

- 4 units summer semester or semester 1 or -2
- 4 lectures, 2 tutorials per week (approx. double in summer semester) - some tutorials will be computing sessions using mathematical package Matlab
- Available for Non-Award Study
- Prerequisite: MATHS 1011 Mathematics IA (Pass) and MATHS 1013 Mathematics IMA (Pass)
- Restriction: cannot be counted with MATHS 1012 Mathematics IB, see Academic Program Rules for constraints on this course within B.Ma. & Comp. Sc. & B.Comp.Sc.
- Assessment: 3 hour exam, small percentage for assignments, tests

This course extends the concepts and techniques of calculus and linear algebra which were introduced in Mathematics IA and Mathematics IMA, emphasising their inter-relationships and applications to the sciences and financial areas and continues to develop problem solving skills in mathematics. Calculus: Applications of the derivative; functions of two variables; Taylor series; differential equations, techniques of integration. Algebra: The real vector space, eigenvalues and eigenvectors, linear transformations and applications of linear algebra.

# PURE MTH 2000

#### **Discrete Mathematics II**

- 2 units semester 1
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: Pass in MATHS 1012 Mathematics IB or MATHS 1014 Mathematics IMB or MATHS 1008 Mathematics for Information Technology I
- Corequisite: MATHS 2004 Maths IIM
- Assessment: 2 hour exam, small percentage may be allocated for class exercises and/or tutorials

Permutations and combinations, recurrence relations, generating functions and the inclusionexclusion principle. Additional topics of special relevance to Computer Science and other mathematical sciences courses, including geometry for Computer Graphics and Computer Vision.

# PURE MTH 2001 Complex Analysis II

- 2 units not offered in 2007
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Restriction: 2959 Complex Analysis II, PURE MTH 2006 Real and Complex Analysis II
- Assessment: final exam, small percentage for class assignment

Basic concepts, holomorphic functions, Cauchy-Riemann equations. Complex power series. Standard elementary functions. Conformal mapping including bilinear transformations and applications. Cauchy's integral theorem and consequences, including integral formula and power series representations. Residue theorem and applications. Further results on holomorphic functions.

# PURE MTH 2002

## Algebra II

- 2 units semester 2
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assessment: 2 hour exam, small percentage may be allocated for class exercises and/or tutorials

Linear Algebra: Vector spaces over the real and complex numbers, linear transformations, bases, eigenspaces and diagonalisation, inner products, Cauchy-Schwarz inequality and Gram-Schmidt process, adjoint, bilinear forms, the matrix of a form, and the orthogonal and unitary groups. Group Theory: symmetries and permutations, abstract groups, permutations and matrix groups, cyclic groups and Lagrange's Theorem.

#### **PURE MTH 2003**

#### **Real Analysis II**

- 2 units semester 2
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)

- Restriction: not to be counted with Real Analysis II (pre 2001) or PURE MTH 3017 Real Analysis III
- Assessment: 2 hour exam, small percentage may be allocated for class exercises and/or tutorials

The real numbers, infimum and supremum. Sequences: convergence, limit properties, subsequences, conditions for convergence.Series: tests for convergence. Continuous functions: Key properties, uniform continuity, existence of the Riemann integral. Differentiation: mean value theorems, l'Hopital's rules, Taylor polynomials. Power series and Taylor series.

Convergence of sequences and series of functions. Fourier series.

# PURE MTH 2005

## **Multivariable Calculus II**

- 2 units semester 1
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Corequisite: MATHS 2004 Mathematics IIM
- Restriction: cannot be counted with Real Analysis II passed before 2002, except under special arrangement with the Head of Discipline
- Assessment: 2 hour exam, small percentage may be allocated for class exercises and/or tutorials

Functions of several variables; limits, continuity and extrema; gradient, differentiability, Chain Rule; Taylor expansions, classification of critical points; implicit function theorem, Lagrange multipliers; differentiation of vector-valued functions. Line integrals, differential 1-forms; double and multiple integrals; surface integrals; Green's theorem; the Divergence theorem; Stokes Theorem.

# Level III

# **APP MTH 3000**

#### **Computational Mathematics III**

- 3 units semester 1
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)

- Assumed Knowledge: APP MTH 2007 Differential Equations II or APP MTH 2000 Differential Equations and Fourier Series and a computer programming language (such as Matlab, Fortran or C)
- Assessment: written & computing assignments 20%, final exam 80%

Mathematical models of the real world generally give rise to problems that cannot be solved exactly by hand, and an approximate numerical solution must be found instead. Computers are essential for solving important but otherwise intractable mathematical problems, from weather prediction to the earthquake response of buildings. The ability to solve problems numerically is an important tool in any mathematician's or engineer's toolkit. It is also important to be able to assess the likely accuracy (or otherwise) of the numerical solutions that you compute: computers readily generate garbage, yet humans have a tendency to believe computergenerated results, regardless. This course develops students; knowledge of appropriate numerical techniques for tackling mathematical problems and assessing the accuracy of the numerical results that are obtained. It provides methods appropriate to common mathematical models: algebraic equations, ordinary and partial differential equations and integrals. It discusses causes of numerical errors and ways to estimate the effects of those errors on the computed solution to a problem. It also gives practice in writing computer codes to implement effective numerical algorithms.

# APP MTH 3001 Applied Probability III

- 3 units semester 1
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: knowledge of Markov Chains as in APP MTH 2008 Operations Research II
- Assessment: written assignments 10%, final exam 90%

The course aims to provide a basic toolkit for modelling and analysing real-world problems in which there is a significant probabilistic component. A methodology is developed and illustrated using a variety of problems from such areas as population modelling, genetics, simple games, diffusion of gases, reservoir operation, warehouse inventories and optimal decisionmaking in various commercial contexts.

# **APP MTH 3002**

## Fluid Mechanics III

- 3 units semester 2
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations & Fourier Series or APP MTH 2007 Differential Equations II; APP MTH 2002 Vector Analysis & Complex Analysis or APP MTH 2006 Methods of Applied Mathematics II
- Assessment: written assignment 10%, final exam 90%

Fluid Mechanics is the study of fluids, whether they are gases (the air we breathe), water (as in the oceans) or more complex fluids (like the oil in our car engines). Fluid flows govern the way in which we interact with our environment. The energy we require for our survival is dependent upon the motion of fluids in the Sun. Technological society is founded upon the motion of fluids. Our entire physiology is based around the flow of fluids, from the air in our lungs through to blood flow in our arteries and veins. The weather we experience is a result of the complex motion of the oceans and the atmosphere. From the smallest scale of nanotechnology to the largest scale of astrophysical flow in stars, the motion of fluids is important.

This course will introduce students to the fascinating subject of modelling fluid flows. We derive the basic equations governing the motion of fluids and use these equations to explore a variety of practical fluid flows. The techniques that will be used in this course come from the study of differential equations (both ordinary and partial). It will provide students with an understanding of how, and why, fluids flow and how they impact upon our world.

# APP MTH 3003 Life Contingencies III

- 3 units not offered 2007
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 or MATHS 1014 and/or MATHS 1011 (Pass); at least one of: STATS 1000 (Pass), ECON 1008 (Pass Div I), 9134 (Pass), MATHS 1008 Pass), STATS 2004, APP MTH 2009, STATS 2001 or APP MTH 2010
- Assumed Knowledge: MATHS 3014 Maths. of Finance III or CORPFIN 2006 Business Finance II or ECON 2008 Economics of Finance II
- Assessment: written assignments 10%, final exam 90%

Life tables and force of mortality; select, aggregate and ultimate mortality tables; annuities immediate and due, assurances and premiums. Relations between mortality functions; policy values, reserves and mortality profit. Multidecrement tables and associated singledecrement, combined tables and monetary functions. Both practical and theoretical aspects of the above will be discussed.

# APP MTH 3004

#### **Mathematical Biology III**

- 3 units not offered 2007
- 36 hours lecture and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series
- Assessment: written assignments 10%, final exam 90%

Science and Technology was the driver for many of the developments in Applied Mathematics in the 20th century. In the 21st century much of Applied Mathematics will be driven by, and contribute to, applications in the areas of biomedical science and biology. The subject Mathematical Biology will introduce students to the fascinating world of modelling biological systems. The focus will be less on developing mathematical versatility rather on how to develop (and interpret) good biological models. No previous exposure to biology is necessary.

## **APP MTH 3005**

#### **Mathematical Programming III**

- 3 units semester 2
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: knowledge of duality theory as in APP MTH 2008 Operations Research II
- Assessment: written & computing assignments 10%, final exam 90%

Many interesting optimisation problems can be expressed as linear programs, in particular, problems related to network flows, scheduling, etc. The focus in this course will be in formulating models and developing solution methods for such optimisation problems. Topics will be chosen from: network theory, advanced linear programming, integer programming, dynamic programming and applications.

# **APP MTH 3006**

## Industrial Mathematics III

- 3 units semester 2
- 36 hours lectures, tutorials
- · Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2007 Differential Equations II, APP MTH 2000 Differential Equations & Fourier Series or APP MTH 2010 Differential Equations & Stat Methods (Civil)
- Assessment: written assignment 10%, project work 5%, final exam 85%

Mathematical modelling is the art of representing a real-world process (existing or proposed) by mathematical equations, and then investigating this "mathematical model" to obtain better insight into and understanding of the important features of the process. Mathematical modelling with differential equations has been recognised for some decades as a valuable tool in the development of modern industrial technologies and processes. Examples of industrial problems which might be modelled with differential equations include laser drilling, spontaneous ignition, contaminant dispersion, desalination, casting of sheet steel, solar heating, pasteurisation, heat exchanger design and geothermal heating.

In the context of such energy and mass transport problems from industry, this course will give students an understanding of general modelling methodology. In addition to model development, a variety of mathematical methods for solving these models will be considered. The emphasis throughout is on using mathematics to obtain practical answers to realistic problems. Case studies from the above, or similar, examples will be used to demonstrate how to develop and use models. Students will also develop their own modelling skills through a project investigation of a real-world problem. The skills acquired will be applicable across a wide range of disciplines.

## APP MTH 3009

#### **Engineering Mathematics III**

- 2 units semester 1
- 30 hours lectures, tutorial, computing practicals
- Eligibility: not available to B.Ma.& Comp.Sc. or B.Comp.Sc.students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations & Fourier Series; APP MTH 2002 Vector Analysis & Complex Analysis; APP MTH 2009 Numerical Analysis & Probability & Statistics
- Assessment: written and computing assignments 15%, final exam 85%

Mathematical formulation of some engineering problems and reductions to boundary value problems, linear and non-linear boundary value problems. Integral Transform Methods: Laplace transform, Fourier transforms and their application to boundary value problems. Finite Element Method: introduction, stiffness matrix, triangular and quadrilateral elements, choice of test functions, method of labelling nodes, method of solution of the matrix equation, illustrations. Signal Processing: energy spectrum, Rayleigh's theory, frequency domain description, signal averaging, time frequency solution. Conformal Mapping and applications.

# **APP MTH 3010**

# Variational Methods and Optimal Control III

- 3 units not offered in 2007
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000
  Differential Equations and Fourier Series or APP
  MTH 2007 Differential Equations II
- Assessment: written & computing assignment 15%, final exam 85%

Many problems of optimisation and control in the sciences and engineering seek to find the shape of a curve or surface satisfying certain conditions so as to maximise or minimise some quantity. For example, shape a yacht hull so as to minimise fluid drag. Variational methods involve an extension of calculus techniques to handle such problems. This course develops an appropriate method-ology, illustrated by a variety of physical and engineering problems.

# **APP MTH 3011**

## **Financial Modelling Techniques III**

- 4 units semester 2
- 48 hours lectures, tutorials
- Eligibility: not available to B.Ma.& Comp.Sc. or B.Comp.Sc.students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB or MATHS 1011 Mathematics IA
- Assumed Knowledge: Familiarity with excel spreadsheets; finance as in FINANCE 1000 International Financial Institutions & Markets I
- Restriction: cannot be counted together with APP MTH 3012 Financial Modelling III
- Assessment: 20% written and computing assignments, final exam 80%

The course deals with discrete time financial modelling of various financial assets, interest rates, exchange rates. It will deal with the hedging and valuation of financial products (derivative products), the modelling of yield curves and interest rate management. The emphasis will be on practical modelling, real world applications, conforming with market models used in the financial industry at the current time. Binomial lattice type models, with implementation of spreadsheets, Ho and Lee type term structure models for interest rates and their application to interest rate risk management.

# **APP MTH 3012**

#### **Financial Modelling III**

- 3 units semester 2
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: familiarity with Excel spreadsheets
- Restriction: cannot be counted with APP MTH 3011 Financial Modelling Techniques III
- Assessment: 20% written and computing assignments, final exam 80%

Discrete time financial modelling of various financial assets, interest rates and exchange rates. Valuation of financial products (derivative products) using binomial lattice models with implementation on spreadsheets. Hedging and Interest Rate Management, including the Ho and Lee Term Structure Model for interest rates and related models, together with their application to interest rate risk management with implementation on spreadsheets.

# APP MTH 3013 Differential Equations III

- 3 units semester 1
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II or APP MTH 2010 Differential Equations and Statistical Methods (Civil)
- Assessment: 10% written assignments, final exam 90%

Differential equations describe a wide range of practical problems in such areas as biology, physics, engineering, economics and finance. This course will provide students with the techniques required to solve the classes of ordinary and partial differential equations which commonly occur in applications.

The course will include discussion of (i) methods for the solution of initial value problems for systems of first order linear and non-linear ordinary differential equations; (ii) techniques for the solution of two point boundary value problems for second order linear ordinary differential equations with variable coefficients; (iii) classification of partial differential equations and the solution of boundary value problems for these equations using the methods of (a) reduction to ordinary differential equations by use of separation of variables, (b) integral transforms, (c) characteristics.

## **APP MTH 3014**

#### **Optimisation III**

- 3 units semester 1
- 36 hours lectures, tutorials
- · Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: some knowledge of linear programming as in APP MATH 2008 Operations Research II
- Assessment: written and computing assignments 15%, final exam 85%

Modern optimisation methods in areas such as Communication Network Design, Finance, etc, rely on the classical underpinnings covered in this course. One-dimensional (line) searches; multivariable unconstrained optimisation, in particular, for convex functions; a random search technique, such as Simulated Annealling or Genetic algorithms; constrained optimisation, including Kuhn-Tucker conditions and the Gradient Projection Method. Other topics such as penalty methods, quasi-convexity, etc, will be covered as time permits.

## **APP MTH 3016**

#### **Telecommunications Systems Modelling III**

- 3 units semester 2
- 36 hours lectures, tutorials
- · Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)

- Assumed Knowledge: APP MTH 2008 Operations Research II, familiarity with STATS 2002 Introduction to Mathematical Statistics or STATS 2004 Laplace Transforms and Probability and Statistic
- Restriction: may not be presented with APP MTH 3015 Stochastic Modelling for Telecommunications III
- Assessment: written assignments and project work 20%, final exam 80%

Definition of continuous-time Markov-chains, classical queueing examples, transient behaviour, the stationary distribution, hitting probabilities and expected hitting times. Stochastic Modelling of traffic streams. Effective bandwidth and quality of service. Evaluation of exact and approximate performance measures for both queueing networks and loss networks. TCP/IP protocols and performance measures. Applications of the above concepts to complex models of telecommunication systems.

# APP MTH 3017

# Waves III

- 3 units semester 1
- · 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series
- Assessment: written and computing assignments 15%, final exam 85%

The wave equation, waves on stretched strings and membranes, waves on beams, electromagnetic waves, sound waves, waves in fluids, standing/progressive waves, dispersion relations, transmission and reflection of waves at interfaces. Nonlinear waves.

## **APP MTH 3018**

#### Mathematics of Finance III

- 2 units not offered in 2007
- 2 lectures per week, 1 hour tutorial every 3 weeks
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assessment: 2 hour exam, small percentage for assignments

Theory of interest rates. Annuities. Cash flows. Valuation of securities. Loan repayments, Bonds: Prices and Yields, Stochastic interest rate models.

## **MATHS 3015**

#### **Communication Skills III**

- 3 units semester 1
- 12 lectures/tutorials, 24 workshops
- Available for Non-Award Study
- Prerequisite: Pass in MATHS 1012 Mathematics IB or MATHS 2004 Mathematics IIM or COMP SCI 1009 Computer Science IB
- Restriction: cannot be counted with CHEM ENG 3004 Engineering Communication (ESL) (H), C&ENVENG 3000 Engineering Communication ESL (C), ELEC ENG 3012 Engineering Communication ESL (E), MECH ENG 3006 Engineering Communication ESL (M), 9007 Communic. Skills (ESL) III
- Assessment: written & oral assignments, participation in workshops, exam

This course will develop students' skills in technical communication. Some of the issues covered in lectures and workshops are: the writing process, abstracts and summaries, communicating with non-technical audiences, writing professional documents, preparation and delivery of seminars, ethics and professional practice, meeting skills, interviews and job application processes.

# PURE MTH 3002

#### **Topology and Analysis III**

- 3 units semester 1
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Restriction: cannot be counted with Analysis & Topology III
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

Sets, functions, metric spaces, compactness and completeness. Banach fixed point theorem and applications, uniform continuity. General topological spaces. Introductory functional analysis: normed linear spaces, topological duals. Convexity and Hahn-Banach theorems. Hilbert spaces, operators on Hilbert spaces, the Spectral theorem.

## PURE MTH 3003

#### **Number Theory III**

- 3 units not offered in 2007
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Maths IIM (Pass Div I)
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

An introduction to classical elementary number theory, with modern applications to computer science, cryptography etc. Divisibility and primes, congruences, arithmetic functions. Primitive roots, quadratic residues. Continued fractions and rational approximation.

#### **PURE MTH 3005**

#### **Fractal Geometry III**

- 3 units not offered in 2007
- 2 lectures per week, 1 tutorial, 1 computer practical per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials and computer practicals

A survey of fractal geometry including classical fractals, fractal dimension, encoding imagery modelling nature, chaos. Feigenbaum diagram, Mandelbrot and Julia sets. Students have the opportunity to construct their own fractals.

# PURE MTH 3007 Groups and Rings III

- 3 units semester 1
- 5 lectures, 1 tutorial per fortnight
- · Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: PURE MTH 2002 Algebra II
- Restriction: cannot be counted with either Groups III or Rings, Fields and Matrices III

 Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

Groups, subgroups, factor groups, homomorphism and isomorphism theorems. Finitely generated abelian groups. Conjugacy. Cayley's and Sylow's theorems. Rings, ideals, factor rings and homomorphisms. Polynomials. Unique factorisation. Euclidean domains, Gaussian integers.

# PURE MTH 3009

#### Integration and Analysis III

- 3 units not offered in 2007
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: PURE MTH 2006 Real and Complex Analysis II or 7389 Real Analysis II (pre 2001)
- Restriction: cannot be counted with either 1845 Integration III or 4102 Geometry of Surfaces III
- Assessment: 3 hour exam, small percentage may be allocated

Set theory, outer measure, measurable sets. Measurable functions, the Lebesgue integral; Fatou's Lemma, Dominated and

Monotone Convergence theorems. General measure spaces and integration; Fubini's theorem. L ^ p spaces, Banach spaces and Hilbert spaces; Riesz representation theorem. Applications to probability.

# PURE MTH 3012

#### **Fields and Geometry III**

- 3 units semester 2
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: PURE MTH 2002 Algebra II
- Restriction: cannot be counted with Projective Geometry III
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

Fields and extensions, algebraic and simple extensions. Finite fields. Affine and projective geometries. Desargues (2 and 3-d) and Pappus

theorems. Duality. Coordinatising a plane. The Little Desargues Axiom. Translation planes. Homogeneous coordinates. Field planes. Automorphism group and the Fundamental Theorem. Conics, arcs, ovals and hyperovals. Quadrics.

## PURE MTH 3018

#### **Coding and Cryptology III**

- 3 units semester 2
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: Students who have not completed either PURE MTH 2000 Discrete Mathematics II or PURE MTH 2002 Algebra II should see Level III Pure Maths coordinator
- Restriction: cannot be counted with PURE MTH 3006 Coding and Cryptology III
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

An introduction to contemporary cryptology, including both symmetric and public key systems. Examples of cryptosystems studied include the RSA algorithm. Further topics, which may include block ciphers and the AES algorithm.

Linear codes, with topics including syndrome decoding and perfect codes. The Hamming and Golay codes and others are discussed. Further topics, which may include cyclic codes and BCH codes.

# PURE MTH 3019

#### **Complex Analysis III**

- 3 units semester 1
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Restriction: 2959 Complex Analysis II, PURE MTH 2006 Real and Complex Analysis II, PURE MTH 2001 Complex Analysis II
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

Basic concepts, holomorphic functions, Cauchy-Riemann equations. Standard elementary functions. Complex power series. Cauchy's integral theorem and consequences, including integral formula and power series representations. Residue theorem and applications. Conformal mapping and applications. Further results on holomorphic functions.

# PURE MTH 3020

## Methods of Modern Mathematics III

- 3 units semester 2
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: PURE MTH 3002 Topology & Analysis III
- Assessment: 3 hour exam, small percentage may be allocated for class exercises and/or tutorials

Vector spaces, linear operators and functionals, semigroups of operators. Classical normed spaces, Fourier series, generalised functions. Heat and Wave equations: classical, variational and generalised solutions, semigroup approach. Illustrative applications in mathematical physics, financial mathematics and quantitative risk analysis.

# PURE MTH 3021

#### Logic and Computability

- 3 units semester 2
- 30 hours lectures, 6 hours tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Maths IB (Pass) or MATHS 2004 Maths IIM (Pass) or MATHS 1008 Maths for IT (Pass)
- Restriction: Cannot be counted with PURE MTH 3010 Logic III
- Assessment: 3 hour exam, small percentage may be allocated to class exercises and/or tutorials

Mathematical foundations. Propositional calculus, first order theories, interpretations and models. Godel's completeness theorem for predicate calculus. Computability: Turing machines, recursive functions and the halting problem. Undecidability of predicate calculus. Godel's theorem for elementary number theory

# Level IV

## **APP MTH 4003**

### Aerodynamics

- 2 units semester 2
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: fluid mechanics such as in APP MTH 3002 Fluid Mechanics III; APP MTH 2002 Vector Analysis and Complex Analysis or APP MTH 2006 Methods in Applied Mathematics II, & computer programming language (Matlab, Fortran or C)
- Assessment: written and computing assignments 15%, final exam 85%

Humans have been interested in flight for thousands of years, yet it is only within the last 100 years or so that we have been able to accomplish flight with heavier-than-air machines. This course describes classical and modern aspects of aerodynamic theory, focusing on lowspeed, incompressible flow. It will present analytical and numerical techniques for solving mathematical problems in aerodynamics, with an emphasis on the concepts of lift and drag.

# **APP MTH 4004**

#### **System Modelling and Simulation**

- 2 units semester 1
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: Level II Applied Maths courses with aggregate value of 6 units
- Assessment: project work 40%, final exam 60%

The course will provide students with the skills to analyse and design systems using modelling and simulation techniques. It will involve an introduction to modelling and simulation techniques. The theory and application of simulation modelling will be discussed. Case studies will be undertaken involving hands-on use of simulation packages. The application of simulation in areas such as transport, manufacturing and telecommunications will be investigated.

## **APP MTH 4007**

### **Computational Fluid Dynamics (Engineering)**

- 2 units semester 1
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: Numerical Analysis or Numerical Methods and Fluid Mechanics
- Assessment: written & computing assignments 20%, project work 20%, final exam 60%

Review of classical hydrodynamics, the Navier Stokes equations for fluid flow, methods of computational grid generation, solution of systems of equations, modelling of turbulence and the finite volume, finite difference and finite element forms of solutions.

# **APP MTH 4012**

#### **Communication Network Design**

- 2 units semester 1
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assumed Knowledge: basic concepts of nonlinear and discrete optimisation, as in APP MTH 2008 Operations Research II, APP MTH 3014 Optimisation III and APP MTH 3005 Mathematical Programming III
- Assessment: written assignments 10%, final exam 90%

This is a very large field and the course will look at some subtopics in depth, rather than trying to cover the whole area. Nevertheless the range of topics is broad enough to give a flavour of the area. The approach is deterministic; probabilistic effects are hidden in the objective function or constraints. The principal decision to be made in network design is the routing of the offered traffic through the network; once this decision has been made, the design of the network is largely determined.

# **APP MTH 4014**

#### **Modelling Telecommunication Traffic**

- 2 units semester 2
- 30 hours lectures, tutorials
- · Available for Non-Award Study
- Prerequisite: MATH 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assessment: written & computing assignments 30%, final exam 70%

Traffic modelling is a popular area of current research due to the rapid rise of the Internet, and the discovery of interesting properties such as self-similarity in this traffic, the implications of which are still being discovered. This area has a long history of practical application in the telecommunications industry and is just as important today through application to Internet systems. Areas of application include: Network planning and optimisation, Traffic engineering, Protocol design, Network post-mortems, Network anomaly detection: which requires the ability to estimate traffic parameters and detect deviations from normal behaviour.

The course's content is geared towards the applications of traffic analysis, some of which are listed above. The course's specific content includes: basic packet network modelling, with the concept of stochastic modelling of queues; blockmatrix methods for modelling, and analysis; traffic parameter estimation; structural (flow-based) modelling of traffic (On/Off models, M/G/infinity models); traffic self-similarity, long-range dependence, and heavy-tailed distributions; and dynamic modelling of congestion controls, in particular TCP. Additional topics focus on the issues of real Internet measurements, such as inference techniques required to obtain information such as traffic matrices from the available link measurements.

# **APP MTH 4043**

# **Transform Methods and Signal Processing**

- 2 units semester 2
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: 6 units of Level II Applied Mathematics courses
- Assessment: written assignments 10%, project work 30%, final exam 60%

Introduces various transform techniques including DFT and FFT as well as wavelet transforms, and introduces the basic principles of signal processing to provide an understanding of the fundamentals, implementation and applications of signal processing. At the end of the course students should have good concepts of various transform techniques used in communication theory and information theory, discrete-time signals in both time and frequency domains use of wavelet transforms for signal analysis.

# **APP MTH 4044**

#### **Game Theory**

- 2 units not offered in 2007
- 30 hours lectures and tutorials
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assessment: written assignments 10%, final exam 90%

Games in extensive and normal forms. Zero-sum games. Finite games; minimax strategies, saddle points, mixed strategies and the minimax theorem. Dominance, simple solutions, complete solution of the finite game, linear programming formulation. Infinite games, extended mixed strategies, epsilon-good strategies, games of timing. Many person games. Negotiation problems. Non zerosum games in cooperative and non-cooperative version, solution concepts.

### **APP MTH 4045**

#### **Stochastic Analysis & Application**

- 2 units not offered in 2007
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM (Pass)
- Assessment: written assignments 10%, final exam 90%

#### **MATHS 4003**

#### Industry Practicum (Maths. & Comp. Sc.)

- 2 units semester 1 or semester 2
- Eligibility: students undertaking CEED Project in Honours year

This course provides students with the research tools required to undertake an industrial related project. Topics include research design and documentation, project planning and time management, costing and budgeting, quality assurance. An industry linked project will be commenced.

#### Honours

#### **APP MTH 4011**

## Honours Applied Mathematics & Computer Science

- 24 units full year
- Available for Non-Award Study
- Prerequisite: Level III Applied Maths courses (at least 8 units value) at a good pass standard or better - different backgrounds may be accepted at discretion of Head of Discipline
- Assessment: each course at end of semester in which it is offered, project, seminar

Candidates are required to undertake at least 3 Honours level Computer Science options and at least 3 Honours level Applied Mathematics options. Other lecture topics may be included at the discretion of the Heads of both Disciplines. They must also complete a project supervised within the Applied Mathematics discipline in a topic with a significant computing component.

#### **APP MTH 4015**

#### **Honours Applied Mathematics**

- 24 units full year
- Available for Non-Award Study
- Prerequisite: Level III Applied Maths courses (at least 8 units) at a good pass standard or better different backgrounds may be accepted at discretion of Head of Discipline
- Assessment: exams for each course at end of semester in which it is offered, project, seminar

Students should consult the Head of Applied Mathematics preferably before enrolling for Level III - Students are required to obtain the approval of Head of Applied Maths before enrolling. Candidates may apply to the Head for permission, under certain circumstances, to take Honours over two years.

Students select from lecture topics offered by Applied Mathematics, Pure Mathematics, Statistics, Computer Science, Physics and Mathematical Physics at The University of Adelaide and other disciplines as may be agreed to by Head of Applied Mathematics. Students may be allowed to take appropriate Level III Applied Mathematics courses not already taken. Students are assigned a supervisor to advise on and approve their lecture program and give guidance in writing a project on some Applied Mathematics topic. Possible topics should be discussed with staff during the preceding year. Project work is done from early February to the end of second semester lectures.

## **APP MTH 4016**

## **Honours Applied Mathematics & Genetics**

- 24 units full year
- Prerequisite: Level III Applied Maths courses at Credit standard or better, with aggregate units value of at least 6, Level III Genetics courses with aggregate units value of 6 units
- Assessment: thesis, essays, exams

## **APP MTH 4017**

#### **Honours Applied Mathematics & Statistics**

- 24 units full year
- Prerequisite: Level III Applied Maths & Statistics courses (at least 8 units value from both disciplines) at a good pass standard or better different backgrounds may be accepted at discretion of Head of Discipline
- Assessment: exams for each course at end of semester in which it is offered, project, seminar

Prospective students should consult Heads of Applied Mathematics and Statistics early in the year to obtain advice as to specific course content. Candidates should consult potential supervisors and the Heads of Applied Mathematics and Statistics during the final year of the degree program. The honours program commences at the beginning of February. Candidates are required to present a project that will constitute about 30% of the final result. The project will involve interdisciplinary work at the interface of Statistics and Applied Mathematics.

The student's project will be jointly supervised by staff of both the Statistics and the Applied Mathematics disciplines. The remainder of the program will consist of (at least) seven or eight Honours mathematics and statistics courses.

#### **APP MTH 4018**

#### Honours Applied Mathematics & Environmental Biology

• 24 units - full year

Please contact Applied Mathematics for further information

## **MATHS 4000**

#### **Honours Mathematical Science**

- 24 units full year
- Prerequisite: At least 10 units from Level III Applied Maths, Pure Maths & Statistics courses at Cr. standard or better - students with different prerequisites should contact Head of School
- Assessment: end of semester 3 hour exam for each topic (unless other arrangements notified, seminar on mathematical topic & project also contribute to final result)

Students considering taking this course are advised to see Heads of Applied Mathematics, Pure Mathematics or Statistics disciplines as soon as possible, preferably no later than the end of the year preceding their enrolment - students are required to obtain approval of the Head of School of Mathematics before enrolling

This course is suitable for students who do not have a major in any of the disciplines of Applied Mathematics, Pure Mathematics and Statistics.

The lecture program is determined from year to year. Students are required to make a selection from topics offered by the Disciplines of Applied Mathematics, Pure Mathematics, Computer Science, Physics, Mathematical Physics and Statistics at the University of Adelaide, University of South Australia and such other departments agreed to by the School of Mathematics. It is possible for students to take some appropriate Level III Applied Mathematics, Pure Mathematics and Statistics courses not already taken.

A candidate may apply to the Heads of Schools for permission, under certain circumstances, to spread the work for the Honours degree over two years.

Each student will be assigned a supervisor who will advise on and approve the choice of lecture program and give guidance in the writing of a project on some topic in Mathematics. Possible topics should be discussed with the staff before the end of the preceding year. Work on the chosen project should begin in the School in the first week of February and should be completed by the end of the second semester's lecture program.

#### PURE MTH 4001

#### **Honours Pure Mathematics & Statistics**

- 24 units full year
- Prerequisite: credit standard, or better, in at least 8 units of Pure Mathematics III units and 8 units of Statistics III units
- Assessment: project 30%, exam 70%

Candidates should consult potential supervisors and Heads of both Disciplines during the final year of the degree program. The honours program commences at the beginning of February. Candidates are required to present a project that will constitute about 20% of the final requirement. The project will involve interdisciplinary work at the interface of Statistics and Pure Mathematics.

The student's project will be jointly supervised by staff of both Statistics and Pure Mathematics disciplines. The remainder of the program will consist of (at least) eight Honours mathematics and statistics programs.

## PURE MTH 4002

#### Honours Mathematical Physics & Pure Mathematics

• 24 units - full year

Please contact the School for further information

## PURE MTH 4003

#### **Honours Pure & Applied Mathematics**

• 24 units - full year

Students considering taking this course are advised to see the Head of Discipline as soon as possible, preferably no later than the end of the year preceding enrolment.

## PURE MTH 4004

#### Honours Computer Science & Pure Mathematics

- 24 units full year
- Prerequisite: (a) at least 10 units Level III Pure Maths courses (b) at least one of PURE MTH 3007 & PURE MTH 3012 (c) at least one of PURE MTH 3002 & PURE MTH 3009 or (d) degree or major in Comp.Sc.

Candidates are required to undertake at least 3 Honours level Computer Science options and at least 3 Honours level Pure Mathematics options. Other lecture topics may be included at the discretion of the Heads of both Disciplines. A project will involve interdisciplinary work at the interface of Computer Science or Pure Mathematics and may be taken in either discipline. The size of the project is determined by the school in which it is undertaken. See COMP SCI 4999 Honours Computer Science and PURE MTH 4005 Honours Pure Mathematics for further information.

## **PURE MTH 4005**

#### **Honours Pure Mathematics**

- 24 units full year
- Prerequisite: (a) At least 10 units of Level III Pure Maths at Credit average or better; (b) at least one of PURE MTH 3007 or PURE MTH 3012, (c) at least one of PURE MTH 3017I, PURE MTH 3002 or PURE MTH 3009
- Assessment: 3 hour semester exams (unless other arrangements notified), project also contributes to final result

Students with a different Level III background to that stipulated may be accepted at the discretion of the Head of Discipline.

Students are required to make a selection from options offered by Pure Mathematics, Applied Mathematics, Computer Science, and Physics and Mathematical Physics. Options may include Level III courses under suitable conditions. Candidates may apply to the Discipline Head for permission, under certain circumstances, to take Honours over two years.

Students are assigned supervisors to advise on and approve their lecture program and give guidance in writing a project on some topic in mathematics.

## PURE MTH 4998

#### **Honours Philosophy & Pure Mathematics**

• 24 units - full year

Please contact the School for further information

# MEDIA

## Level I

# MDIA 1002 Introduction to Media: Digital Revolutions

- 3 units semester 1
- 3 contact hours per week
- Restriction: MDIA 1002 Media Engagements
- Assessment: diagnostic exercise 20%, media log 10%, annotated bibliography 20%, attendance & participation (including required tutorial tasks) 20%, final assignment 30%

This course poses a series of questions through which to explore the links between earlier communication technologies and media institutions, and contemporary digital and mobile forms. Arguments for and against the democratic potential of interactive media are examined: the course asks, for example, what makes blogging different from early print pamphleteering and autobiographical forms; how early radio differs from podcasting; how YouTube works in relation to traditional forms of broadcast television; what kind of media institution the internet is becoming; and what new relations are being formed by the open source movement, and by mobile convergences. User-generated-content, networks and 'technologies of cooperation' in digital and mobile environments are analysed in relation to: online news, citizen journalism, games, fanzines, mo:films, mobile art, pxt and digital video, community radio, polling, and music file-sharing.

Methods of media analysis are introduced, as are selected theories and debates about media's role in shaping social, cultural, economic, and political relations. A digital imaging task is included.

## Level II

## **MDIA 2202**

### Media Policy and Media Law

- 4 units semester 1
- 3 contact hours per week
- Eligibility: B.Media students only
- Prerequisite: MDIA 1002 Media Engagements, at least one other compulsory Media Level I course
- Assessment: tutorial presentation 20%, short essay 30%, attendance, participation 10%, project 40%

This course examines the various media law, policy and regulatory frameworks in Australia that affect media establishments and how they enhance or constrain media institutions and the public in their communication activities. It will also examine the media regulatory frameworks of other countries. The course will examine the success or failure of existing media policy and regulations in a technologically dynamic media environment.

## **MDIA 2203**

#### **Radio Production A**

- 4 units semester 2
- 3 contact hours per week
- · Eligibility: B.Media students only
- Quota applies selection process for entry in semester 1
- Prerequisite: MDIA 1002 Introduction to Media: Digital Revolutions /Media Engagements), ENGL 1105 Film Studies and SOCI 1002 Image, Text and Representation
- Assessment: program planning exercise 5%, broadcast writing & production exercise 5%, production exercise 10%, program design exercise 10%, in-class exercise & participation 20%, production & presentation exercise 50%

Radio Production A is a hands-on course designed to introduce students to the theoretical and practical fundamentals of radio broadcasting across public, community and commercial sectors. Students will learn the basic elements of producing and presenting a radio program, including writing in broadcast style, live to air technical production, presentation, interviewing, program planning and research, audience awareness and digital audio production and editing. This course will be taught at Radio Adelaide and is a prerequisite for Radio Production B.

#### **MDIA 2204**

#### **Media Research Methods**

- 4 units semester 2
- 3 contact hours per week
- Eligibility: B.Media students only
- Prerequisite: MDIA 1002 Introduction to Media: Digital Revolutions/Media Engagements, at least one other compulsory Level I Media course
- Assessment: attendance & research exercises 30%, individual research proposal 30%, seminar & paper submission 40%

Research is central to all media analysis and projects. This course aims to bring together the theoretical and practical elements of research in the media. Students will be exposed to various research methodologies as they affect the changing media landscape and its evaluation. Students will be exposed to different theoretical paradigms of media research, analysis of competing frameworks for defining the media as object of study, and to debate on issues such as research ethics, intellectual property and cultural sensitivity, among others. The course will also explore research design techniques and look at various styles of referencing, interview techniques, project proposals, execution and presentation.

## MDIA 2205

#### **Multimedia Production A**

- 4 units semester 2
- 3 contact hours per week
- Eligibility: B.Media students only
- Quota applies selection process for entry in semester 1
- Prerequisite: MDIA 1002 Introduction to Media: Digital Revolutions (formerly Media Engagements), ENGL 1105 Film Studies and SOCI 1002 Image, Text and Representation
- Assessment: attendance & professional conduct 10%, 3 small projects 10% each, major project 60%

The focus in Multimedia Production A is on creative approaches to networked media, specifically electronic publishing and design for web and print. Approaches to narrative and digital storytelling will be explored. Students will encounter and gain skills in aspects of website production ranging from concept development, audio-graphic design literacy, interface design, and the integration of media elements such as video, still image, animation, sound, and text. Students may work individually or in small groups to produce a website. The site could be a zine, an electronic journal, a promotional site for an event, or a special interest site.

## **MDIA 2206**

#### **Video Production A**

- 4 units semester 2
- 3 contact hours per week
- Eligibility: B.Media students only
- Quota applies selection process for entry in semester 1
- Prerequisite: MDIA 1002 Introduction to Media: Digital Revolutions (formerly Media Engagements), ENGL 1105 Film Studies and SOCI 1002 Image, Text and Representation
- Assessment: attendance and professional conduct 10%, practical exercises 40%, major project 50%

This course will introduce students to the basic skills and visual knowledges required for video production. The context for the course is within the wide field of video production from the small tele-visual of web and mobile devices, to experimental video and short work produced for festivals, television, and commercial purposes. A range of approaches to storytelling will be explored. The course will be predominantly handson, with students working in small groups in multiple roles on a variety of exercises with digital video cameras, sound recording equipment, offline non-linear editing facilities and other equipment. The course will cover such topics as camera operation and technique, shooting set-up procedures, sound recording, pre-production and script development, editing principles and off-line non-linear editing techniques. Theories of screen production, genre, style, directing and narration will be integral to the course.

## **MDIA 3205**

## **Multimedia Production B**

- 6 units semester 1
- 3 contact hours per week
- Eligibility: B Media students only
- Prerequisite: MDIA 2205 Multimedia Production A
- Assessment: attendance & professional conduct 10%, print report 30%, major project 60%

Multimedia Production B is aimed at expanding the digital literacy skills developed in Multimedia Production A. Students are encouraged to use research methods that generate ideas and projects that are critically and creatively engaged with digital media discourses. In addition, students will develop project initiation and execution skills. The emphasis will be on the ability to initiate, plan, produce and successfully complete such projects. Students will work individually and collaboratively to produce and promote a website/event. Students will also be introduced to desktop publishing software to enable dissemination and promotion of their work in a wider media field. The projects will have a public screening along with Video Production B at the end of the course.

## **MDIA 3206**

#### **Video Production B**

- 6 units semester 1
- 3 contact hours per week
- Eligibility: B.Media students only
- Prerequisite: MDIA 3205 Video Production A
- Assessment: attendance & professional conduct 20%, shot analysis 20%, major project 60%

This course aims to build upon the skills and knowledge acquired in Video Production A. The course will examine in more detail elements of pre-production (pitch, treatment and script development), production and post-production (editing techniques, rough cut to final cut, titles, transitions, sound design). Students will collaborate in the development and execution of short video projects. The projects will conform to a brief and will pass through the major stages of the production process in a workshop format so that creative development, project challenges, problemsolving and critical reflection will be utilised as the key learning processes in the course. The projects will have a public screening along with Multimedia Production B at the end of the course.

## MDIA 3301

## **Professional Practice**

- 6 units semester 2
- 3 contact hours per week
- · Eligibility: B.Media students only
- Prerequisite: 2 Level II Media core courses
- Restriction: Media Project
- Assessment: attendance & participation 20%, project plan & research 20%, final group project 60% (group mark 30%, individual contribution mark 30%) or individual project 60%

This course is divided into two parts: the first part consists of guest lectures/workshops by industry professionals from across different media specialisations. These sessions are aimed at preparing students for real world media project experiences. They will expose students to the various techniques and strategies adopted by these experts in their fields. Each session will be followed by a project preparation seminar where the topic discussed by the guest lecturer is used as a springboard in designing relevant project topics. Students' experience from Media Project management and Media Research Methods are used here. The second part of the course is a supervised execution of the chosen project stream of students or groups of students. These are internally supervised with possible input and guidance from industry professionals.

## MDIA 3302

#### **Media Industry Placement**

- 6 units summer semester or semester 1 or 2
- Eligibility: B.Media students only
- Prerequisite: 2 Level II Media core courses
- Restriction: Media Internship
- Assessment: organisation's performance evaluation of student 40%, departmental evaluation 60% (progress report 20%, portfolio 40%)

This course is open to every Bachelor of Media student as an elective. It is aimed at recognising the importance of collaborative ventures between the university and various media organisations in the community. Students should negotiate their own placements with organisations of their choice, with the approval of the Head of Discipline. Students are encouraged to take up project placements with community organisations based on joint supervision between the host organisation and Media discipline staff. The placement enables students to gain work experience within such organisations as well as requiring them to make contributions towards the growth of the organisation or community project. Projects are negotiated between the Media discipline supervising staff and the organisation's contact person. It is the responsibility of the student to ensure that the Media Industry Placement does not clash with their other courses. Students may elect to do the program during vacation time as long as there are staff to supervise them and it is agreed to between the organisation and the University.

## **MDIA 3303**

#### **Media Theory**

- 6 units semester 1
- 3 contact hours per week
- Eligibility: B.Media students only
- Prerequisite: 2 Level II Media core courses
- Assessment: participation 20%, seminar exercise 10%, seminar paper 30%, final essay/group project 40%

This course will examine the different traditions within media theory. It will map the major theoretical traditions of the field such as structuralism, postmodernism, psychoanalysis, post-colonialism, political economy, communication theory, pluralism and liberalism. It will also investigate the social and cultural processes implicated in the production and consumption of media forms. Issues will range from media as creative and cultural industry, the political economy of the media, technotransformation/post-modernity, consumers, audiences and the public, to media products as agents of globalisation.

#### **MDIA 3304**

#### **Radio Production B**

- 6 units semester 1
- 5 contact hours per week
- Eligibility: B.Media students only
- Prerequisite: MDIA 2204 Radio Production A

 Assessment: continuous assessment work performance 40%, workshop participation 10%, self-assessment exercise 10%, portfolio of work 40%

Radio Production B is a hands-on course, offering students supervised production and on-air experience at Radio Adelaide. The course aims to build upon the skills and knowledge acquired in Radio Production A. Students will have the opportunity to develop and broadcast their own on-air projects or contribute to existing radio programs. In addition, a series of advanced workshops will be offered on interviewing skills, production and editing of current affairs and feature packages, and writing for different formats.

## **MDIA 3305**

#### **Directed Study in Media**

- 6 units semester 2
- 2 hour induction, 1 hour weekly supervision, 2 hour final presentation
- Prerequisite: distinction average in MDIA 2204 Media Research Methods and one other compulsory Level II Media course
- Assessment: annotated bibliog. & research log 20%, video product. progress report, critical essay and/or ethics application 20%, work-inprogress report 10%, draft/first edit 10%, formal report & presentation/screening & exegesis/other approp. dissemination 40%

This course provides an introduction to research or research-driven practice. You design the project, apply, and agree to meet every week with supervisors to undertake a mutually interesting Directed Study. Assessment components are individually and contractually negotiated. There is an option to work in a syndicate of peers on a collaborative project, with the permission of the Coordinator. Possible topics include: text, genre or audience studies - such as user-generatedcontent, e-democracy or machinima; commentary on the theories and the histories of various media - such as global format flows or mobile technologies; analyses of policy and regulation such as internet 2 or intellectual property; process-based and self-reflexive digital productions; or industries-based research projects - such as case studies of convergence and RSS impact. Elements may be combined in your proposal. Taking an individual Directed Study in Media helps you assess your potential research

interests and capacities, your project management skills and workplace readiness. Working in a syndicate project helps to prepare you for collaborative work and research environments.

## Honours

### **MDIA 4401**

## **Honours Media**

- 24 units full year
- Prerequisite: completion of B Media at appropriate standard
- Assessment: coursework 50% ( academic & creative streams), dissertation 50% (academic stream only), project & exegesis 50% (creative stream only)

The aim of Honours Media is to provide students with a stronger and more focused intellectual context in which to carry out research in their areas of specialisation in the media. It is designed to extend the academic and creative synergies of the B.Media into higher degree and professional industry application. It is expected that by the end of the program students will be able to carry out independent research in either a higher degree or an industry related specialisation. It is also expected that students will have developed the awareness and critical skills necessary for a proper understanding of the ethical implications of professional and scholarly conduct. Honours Media enables students to develop skills in their chosen areas of specialisation within the B.Media through one of two streams - academic and creative. The academic stream is for students who wish to pursue the traditional critical and analytic research higher degree structure. The creative stream is for those wishing to combine practical with analytical inquiry in any of the production specialisations studied in the B.Media.

# MEDICINE

## Level I

# MEDIC ST 1000 First Year MBBS Examination

## MEDIC ST 1101A/B

#### Scientific Basis of Medicine I

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- · Eligibility: MBBS students only
- Assessment: details provided at start of year

Through the study of clinical cases students will develop a knowledge and understanding of the basic scientific principles that underpin the practice of medicine. The Problem Based Learning Program emphasises the need for students to be able to explain the mechanisms responsible for the production of symptoms and signs of diseases and to be able to relate these to pathophysiology and related underlying scientific disciplines. Student learning in this program is supported by relevant resource sessions and lectures.

## MEDIC ST 1102A/B

## **Clinical Skills I**

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- · Eligibility: MBBS students only
- Assessment: details provided at start of year

Students are introduced to the skills of medical practice. Emphasis is placed on developing the clinical interviewing skills required to elicit and record a clinical history and to perform a physical examination. Clinical skills will be gained within the Medicine Course's Clinical Skills Laboratory Located within the Medical School building.

## MEDIC ST 1103A/B

#### Medical Professional & Personal Development I

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- Eligibility: MBBS students only
- Assessment: details provided at start of year

Through this stream students will develop competency in communication with patients, relatives, allied health professionals, media and people in general. Alongside this, students are assisted to develop strategies and skills for self care and for addressing attitudinal, ethical and professional aspects of life as a medical practitioner. Supporting skills in information technology, decision making, information management, organisational factors, workflow, patient safety, evidence based medicine and epidemiology are developed.

## Level II

#### MEDIC ST 2000

## Second Year MBBS Examination

#### MEDIC ST 2101A/B

### Scientific Basis of Medicine II

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- Eligibility: MBBS students only
- Prerequisite: Year 1 MBBS Exam
- · Assessment: details provided at start of year

Through the study of clinical cases students will develop a knowledge and understanding of the basic scientific principles that underpin the practice of medicine. The Problem Based Learning Program emphasises the need for students to be able to explain the mechanisms responsible for the production of symptoms and signs of diseases and to be able to relate these to pathophysiology and related underlying scientific disciplines. Student learning in this program is supported by relevant resource sessions and lectures.

# MEDIC ST 2102A/B

## **Clinical Skills II**

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- Eligibility: MBBS students only
- Prerequisite: Year 1 MBBS Exam
- · Assessment: details provided at start of year

Students are introduced to the skills of medical practice. Emphasis is placed on developing the clinical interviewing skills required to elicit and record a clinical history and to perform a physical examination. Clinical skills will be gained within the Medicine Course's Clinical Skills Laboratory located in the Medical School building.

## MEDIC ST 2103A/B

## Medical Professional & Personal Development II

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- Eligibility: MBBS students only
- Prerequisite: Year 1 MBBS Exam
- · Assessment: details provided at start of year

Through this stream students will develop competency in communication with patients, relatives, allied health professionals, media and people in general. Alongside this students are assisted to develop strategies and skills for self care and for addressing attitudinal, ethical and professional aspects of life as a medical practitioner. Supporting skills in information technology, decision making, information management, organisational factors, workflow, patient safety, evidence based medicine and epidemiology are developed.

## Level III

## MEDIC ST 3000 Third Year MBBS Examination

## MEDIC ST 3101A/B Scientific Basis of Medicine III

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- · Eligibility: MBBS students only
- Prerequisite: Year 2 MBBS Exam
- · Assessment: details provided at start of year

Through the study of clinical cases students will develop a knowledge and understanding of the basic scientific principles that underpin the practice of medicine. The Problem Based Learning Program emphasises the need for students to be able to explain the mechanisms responsible for the production of symptoms and signs of diseases and to be able to relate these to pathophysiology and related underlying scientific disciplines. Student learning in this program is supported by relevant resource sessions and lectures.

## MEDIC ST 3102AHO/BHO

#### **Clinical Skills III**

- 6 units full year
- Weekly lectures, PBL sessions & resource sessions
- Eligibility: MBBS students only
- Prerequisite: Year 2 MBBS Exam
- · Assessment: details provided at start of year

Students are introduced to the skills of medical practice. Emphasis is placed on developing the clinical interviewing skills required to elicit and record a clinical history and to perform a physical examination. Clinical skills will be gained through placement in a hospital for one day per week.

## MEDIC ST 3103A/B

#### Medical Professional & Personal Development III

- 6 units full year
- Weekly tutorials and regular lectures
- Eligibility: MBBS students only
- Prerequisite: Year 2 MBBS Exam
- Assessment: details provided at start of semester

Through this stream students will develop competency in issues relating to public health, particularly population health, medical systems, ethics and epidemiology. Supporting skills in information technology, decision making, information management, organisational factors, workflow, patient safety, evidence based medicine and epidemiology are developed.

## Level IV

## MEDIC ST 4000

## Fourth Year MBBS Examination

# MEDIC ST 4005AHO/BHO

## **Medical Home Unit**

- 5 units full year
- Attachments, common program & research
- Eligibility: MBBS students only

- Prerequisite: Year 3 MBBS Exam
- · Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and nonpharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

## MEDIC ST 4006AHO/BHO

#### **Surgical Home Unit**

- 5 units full year
- Attachments, common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and nonpharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

## MEDIC ST 4007AHO/BHO

#### **Psychological Health**

- 3 units full year
- Attachments, common program & research
- Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- · Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and nonpharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

#### MEDIC ST 4008AHO/BHO

#### **Acute and Chronic Care 1**

- 3 units full year
- Attachments, common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- · Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and nonpharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

## MEDIC ST 4009AHO/BHO Medical and Scientific Attachment 1

- 2 units full vear
- Attachments, common program & research
- Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- Assessment: details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

### MEDIC ST 4010AHO/BHO

#### **Medical and Scientific Attachment 2**

- 2 units full year
- Attachments, common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- · Assessment: details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

## MEDIC ST 4011AHO/BHO Research Proposal

- 2 units full year
- Common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- · Assessment: details provided at start of year

Students will spend the equivalent of 1/2 day per week allocated over an academic year (including monthly one-hour meetings with a supervisor), during which they will identify a research question (agreed with their supervisor) and prepare a research proposal. This will include definition, aims and hypotheses, literature review, appropriate research methodology (including an outline of the statistical analysis) and completion of an ethics proposal including the application for appropriate ethics approvals. Students with a specific interest in research may have the opportunity to do a sixweek research elective in Year 5.

## MEDIC ST 4012AHO/BHO

#### **Common Program**

- 2 units full year
- Weekly 1/2 day program
- Eligibility: MBBS students only
- Prerequisite: Year 3 MBBS Exam
- · Assessment: details provided at start of year

The common program is a weekly 1/2 day program that integrates basic science with the clinical program.

## Honours

#### ANAES&IC 4000

#### Honours Anaesthesia & Intensive care

- 24 units full year
- Eligibility: BMedSc students. appropriately qualified B.Hlth.Sc. students, or permission of Head of Department
- · Assessment: to be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

## **MEDICINE 4000**

## **Honours Medicine**

- 24 units full year
- Eligibility: BMedSc students. appropriately qualified B.Hlth.Sc. students, or permission of Head of Department
- · Assessment: to be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

#### ORT&TRAU 4000

#### **Honours Orthopaedics and Trauma**

- 24 units full year
- Eligibility: BMedSc students. appropriately qualified B.Hlth.Sc. students, or permission of Head of Department
- · Assessment: to be advised at start of year

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

## PAEDIAT 4000

#### **Honours Paediatrics**

- 24 units full year
- Eligibility: BMedSc students. appropriately qualified BHIthSc students, BSc students or permission of Head of Discipline
- Assessment: details available on the Discipline of Paediatrics web site; includes project proposal, literature review, thesis

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Head of the appropriate discipline as early as possible.

## Level V

## MEDIC ST 5000 Fifth Year MBBS Examination

## MEDIC ST 5005AHO/BHO Medical and Scientific Attachment 3

- 2 units full year
- Attachments, common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- · Assessment: details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

# MEDIC ST 5006AHO/BHO Medical and Scientific Attachment 4

- 2 units full year
- Attachments, common program & research
- Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- Assessment: details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

# MEDIC ST 5007AH0/BH0

## **Medical and Scientific Attachment 5**

- 2 units full year
- Attachments, common program & research
- Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- Assessment: details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

# MEDIC ST 5008AH0/BH0

# **Medical and Scientific Attachment 6**

- 2 units full year
- Attachments, common program & research
- Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- · Assessment: details provided at start of year

Students will be offered options for three-week medical and scientific attachments. These attachments will have a structured program of learning activities and may be used to offer a student the opportunity for: immersion in a broad spectrum of clinical or non-clinical specialty areas and their scientific underpinning; additional research; or directed remediation.

## MEDIC ST 5009AHO/BHO Acute and Chronic Care 2

- 4 units full year
- Attachments, common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- · Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and nonpharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

#### **MEDIC ST 5010AH0/BH0**

#### **Paediatrics and Child Health**

- 5 units full year
- Attachments, common program & research
- · Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

## MEDIC ST 5011AHO/BHO Human Reproductive Health

- 5 units full year
- Attachments, common program & research
- Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- · Assessment: details provided at start of year

The clinical attachments are a program of clinical education through a selection of placements so that students will be competent in history-taking, patient examination and management. This includes problem formulation, investigations, treatment (pharmacological and non pharmacological), counselling, good communication skills, the practice of empathetic medicine, and a sound knowledge base that allows diagnosis and management of common disorders to be carried out under appropriate supervision. Some students will have the opportunity to undertake their training for an extended period of time in a rural or remote setting.

#### MEDIC ST 5012AHO/BHO

#### **Common Program**

- 2 units full year
- Weekly 1/2 day program
- Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- · Assessment: details provided at start of year

The common program is a weekly 1/2 day program that integrates basic science with the clinical program.

## MEDIC ST 5013H0

#### **External Elective**

- 0 units semester 2
- Placement in external institution
- Eligibility: MBBS students only
- Prerequisite: Year 4 MBBS Exam
- Assessment: details of placements provided to Dean of Medicine

Between Year 5 and year 6, students are required to undertake a placement at another institution, usually interstate or overseas.

## Level VI

#### MEDIC ST 6000

#### Final (Sixth Year) MBBS Assessment

- 0 units semester 2
- 4 x 4 week placements, 16 wk afternoon seminar program, 1 week program in ENT; 4 x 4 placement
- Eligibility: MBBS students
- Assessment: to be advised

The Final Year of the program for the MBBS involves:

(a) 2 x 4 week placements under the supervision of the University of Adelaide's Departments of Medicine and Surgery and their clinical teachers at the Royal Adelaide Hospital, Queen Elizabeth Hospital, Lyell McEwin Hospital, Women's and Children's Hospital and Modbury Hospital; 4 week placement under the supervision of the Emergency Medicine Department/s; 4 week clinical elective: students will have choice in selecting this elective - some students may be required to complete a clinical elective in a specified area based on decisions made at the Year 5 Board of Examiners; seminar program on Friday afternoons; 1 week program in ENT, Ophthalmology and Dermatology.

(b) Undertaking 4 x 4 week Specialist/Community or Ambulatory Placements (SCAPs) in the general areas of Medicine, Surgery, Primary Care and Psychiatry. Students have to complete a SCAP in each of these areas and they have considerable choice in defining their program. For Australian students at least one SCAP may be in a rural setting with this being optional for international students.

Through this program students will obtain results for the following component courses of MEDIC ST 6000 Final (6th Year) Assessment:

## MEDIC ST 6001AHO/BHO

#### **Clinical Elective & Specials Week VI**

- 3 units full year
- · Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- · Assessment: advised at start of year

## MEDIC ST 6002AHO/BHO

#### Medicine Internship & Common Program VI

- 3 units full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- · Assessment: advised at start of year

## MEDIC ST 6003AHO/BHO

#### **Surgery Internship VI**

- 3 units full year
- Eligibility: MBBS students only
- Perequisite: Year 5 MBBS exam
- Assessment: advised at start of year

## MEDIC ST 6004AHO/BHO

#### **Emergency Medicine Internship VI**

- 3 units full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- · Assessment: advised at start of year

## MEDIC ST 6005AHO/BHO Primary Care SCAP VI

- 3 units full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- · Assessment: advised at start of year

# MEDIC ST 6006AHO/BHO

## Psychological Health VI

- 3 units full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- Assessment: advised at start of year

## MEDIC ST 6007AHO/BHO Medicine SCAP VI

- 3 units full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- · Assessment: advised at start of year

## MEDIC ST 6008AHO/BHO Surgery SCAP VI

- 3 units full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- · Assessment: advised at start of year

# MICROBIOLOGY

## Level II

#### **MICRO 2002**

#### **Microbiology II (Biotechnology)**

- 4 units semester 1
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc (Biotech) students only
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells A/B, and BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equivs
- Restriction: MICRO 2004 Microbiology II or equiv.
- Assessment: exam on lecture material, written reports, tutorial & practical assessment

This course is an introduction to microbiology that provides a strong grounding in fundamental aspects of the basic biology of bacteria and viruses as well as aspects of molecular biology and genetics. Emphasis is placed on biotechnological applications of bacteria such as the cloning of bacterial, viral and eukaryotic genes, expression of recombinant proteins for therapeutic and industrial uses and development of biological control agents. Topics covered include: introduction to microorganisms and their environment, microbial structure and function: microbial molecular biology and genetics; bacterial viruses; structure, replication and classification of eukaryotic viruses; an introduction to virus-host interactions; new and emerging pathogens of humans and other animals; mechanisms by which micro-organisms cause disease in plants and animals; biotechnological applications of bacteria and viruses. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online

Enrolment information at www.sciences.adelaide. edu.au for further information.

#### **MICRO 2004**

#### **Microbiology II**

- 4 units semester 1
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc, B.HSc students only
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells A/B, and BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equiv
- Restriction: MICRO 2000 A Microbiology & Immunology II (Part 1) or equiv
- Assessment: exam on lecture material, written reports, tutorial & practical assessment

This course is an introduction to microbiology that provides a strong grounding in fundamental aspects of the basic biology of bacteria and viruses as well as a strong grounding in molecular biology and microbial genetics. Emphasis is placed on the study of infectious diseases of humans, other animals and plants. Topics covered include: introduction to microorganisms and their environment, microbial structure and function; microbial molecular biology and genetics; bacterial viruses; structure, replication and classification of eukaryotic viruses; an introduction to pathogenhost interactions; new and emerging pathogens of humans and other animals; infectious disease and mechanisms by which microbial pathogens interact with animals and plants; biotechnological applications of bacteria and viruses. Students enrolled in this course will attend one or more of Practicals A. B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au.further.information

#### **MICRO 2005**

#### Immunology and Virology II

- 4 units semester 2
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc, BHSc students only
- Available for Non-Award Study

- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells A/B, BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equiv.
- Assumed Knowledge: MICRO 2000A Microbiology and Immunology II or MICRO 2001A Microbiology & Immunology II (Biomed) or MICRO 2002 Microbiology II (Biotech) or MICRO 2004 Microbiology II or equiv
- Restriction: MICRO 2000B Microbiology & Immunology II (Part II) or equiv
- Assessment: exam on lecture material, practical, tutorial assessment, written reports

This course introduces immunology, provides further extension in basic virology and is complementary to Microbiology II and equivalent courses. An integrated approach is used to study the mechanisms by which our immune system deals with pathogens. Topics covered in the Immunology section comprise innate and adaptive immunity, including T and B cell development, cell mediated and humoral immunity; receptors and cvtokines: inflammatory responses: tolerance and autoimmunity; immunity to intra- and extra-cellular organisms such as bacteria, viruses and macroparasites. Topics covered in the Virology section include: virus-host interactions: epidemiology of virus infections; virus vaccines, antiviral drugs and viral diagnostics. Students enrolled in this course will attend one or more of Practicals A. B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au.for.further information

# MICRO 2101

## Microbiology II (Biomedical Sc)

- 4 units semester 1
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc (Biomed) students only
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes & Cells A/B, and BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equiv
- Restriction: MICRO 2001A Microbiology and Immunology II (Biomedical Science) Part I or equiv

• Assessment: exam on lecture material, practical, tutorial assessment, written reports

This course provides an introduction to microbiology and virology. Students studying this course will gain a strong grounding in fundamental aspects of the basic biology and molecular nature of bacteria and viruses, their molecular biology and applications for biotechnology.

Topics covered include: introduction to microorganisms and their environment, microbial structure and function; prokaryotic molecular biology and genetics; bacterial viruses; structure, replication and classification of eukarvotic viruses: virus-host interactions: new and emerging pathogens; biotechnological applications of bacteria and viruses; mechanisms by which microorganisms cause disease in plants and animals. Students enrolled in this course will attend one or more of Practicals A. B and C offered by the School of Molecular and Biomedical Science, Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information

## **MICRO 2201**

## Immunology and Virology II (Biomedical Science)

- 4 units semester 2
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc (Biomed) students only
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells A/B, and BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equiv.
- Assumed Knowledge: MICRO 2101
   Microbiology II (Biomedical Science) or equiv
- Restriction: MICRO 2001B Microbiology and Immunology II (Biomedical Science) or equiv
- Assessment: exam on lecture material, practical, tutorial assessment, written reports

This course introduces immunology, provides further extension in basic virology and is complementary to Microbiology II and equivalent courses. An integrated approach is used to study the mechanisms by which our immune system deals with pathogens. Topics covered in the immunology section comprise innate and adaptive immunity, including T and B cell development, cell mediated and humoral immunity: receptors and cytokines: inflammatory responses: tolerance and autoimmunity; immunity to intra- and extra-cellular organisms such as bacteria, viruses and macroparasites. Topics covered in the virology section include- virus-host interactions: epidemiology of virus infections: virus vaccines and antiviral drugs and viral diagnostics. The tutorial programme involves presentation and discussion of papers reviewing major biomedical aspects of immunology & virology. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au.for.further. information.

## **MICRO 2203**

#### Immunology and Virology II (Biotechnology)

- 4 units semester 2
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc (Biotech) students only
- Available for Non-Award Study
- Prerequisite: BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells A/B, and BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equiv
- Assumed Knowledge: MICRO 2002 Microbiology II (Biotechnology) or MICRO 2004 Microbiology II or equivalent
- Restriction: MICRO 2003B Microbiology and Immunology IIB (Biotechnology) or equiv
- Assessment: exam on lecture material; practical & tutorial assessment, written reports

This course introduces immunology, provides extension in basic virology and is complementary to Microbiology II and equivalent courses. An integrated approach is used to study the mechanisms by which our immune system deals with pathogens. Emphasis is also given to the fundamental roles of immunology and virology in Biotechnology. Topics covered in the immunology section include innate and adaptive immunity, including T and B cell development, cell mediated and humoral immunity; receptors and cytokines; inflammatory responses; tolerance and autoimmunity; immunity to intra- and extra-cellular organisms. Topics covered in the virology section include- virus-host interactions; epidemiology of virus infections; virus vaccines and antiviral drugs and viral diagnostics. Students enrolled in this course will attend one or more of Practicals A, B and C offered by the School of Molecular and Biomedical Science. Refer to Current Students Online Enrolment information at www.sciences.adelaide.edu.au for further information.

## Level III

## **MICRO 3000**

#### Infection and Immunity A

- 6 units semester 1
- 3 lectures, 1 tutorial, 8 hours practical work per week
- Available for Non-Award Study
- Prerequisite: MICRO 2004 Microbiology II or MICRO 2002 Microbiology II (Biotechnology)
- Assumed Knowledge: MICRO 2005 Immunology & Virology II if either MICRO 2002 Microbiology II (Biotech) or MICRO 2004 Microbiology II are presented as a prerequisite
- Restriction: MICRO 3102 Infection and Immunity A (Biomed)
- Assessment: exam on lecture material, practical component, performance in tutorials, seminars

This advanced course examines the molecular basis of interactions of microbial and viral pathogens with their environment and various hosts, especially those which infect humans. Particular emphasis is given to the use of molecular biological approaches for study of infectious disease pathogenesis, and biotechnological applications, including vaccine development.

Microbial pathogens - Global significance of infectious disease; principal approaches for investigating host-pathogen interactions; virulence factors which promote colonisation and damage to the host; role of antigenic and phase variation in virulence and disease; gene regulation, especially in relation to expression of virulence factors; invasion and intracellular survival and multiplication; resistance and avoidance of host responses; role of phage, transposons, and insertion sequences in pathogenesis and evolution of multiple drug resistance; genomic approaches to analysis of virulence; insect and parasite pathogens. Viral pathogens - structure and replication of animal viruses; comparison of virus replication strategies; pathogenesis and control of virus infections using specific examples which include hepatitis, HIV (AIDS), herpes, papilloma, polio, rabies and tumour viruses; prions.

## **MICRO 3001**

#### Infection and Immunity B

- 6 units semester 2
- 3 lectures, 1 tutorial, 8 hours practical work per week
- Available for Non-Award Study
- Prerequisite: MICRO 2005 Immunology & Virology II or equivalent
- Assumed Knowledge: MICRO 2004 Microbiology II or equiv.
- Restriction: MICRO 3202 Infection and Immunity B (Biomedical Science) or equiv.
- Assessment: exam on lecture material, written reports, practical & tutorial assessment

This is an advanced course that includes a detailed examination of the cellular and molecular biology of the immune system, immune responses to microbial pathogens and other antigenic stimuli and immunisation against infections in humans and animals. Topics to be covered include: differentiation and activation of leukocytes; functions of leukocyte subsets; cell biology of antigen processing and presentation; molecular recognition of antigen; molecular and cellular bases of inflammation; signal transduction in immune cells; characteristics and functions of cytokines; mechanisms of immunoregulation; cellular communication and leukocyte traffic through tissues; production and use of monoclonal antibodies; local immunity at mucosal surfaces; immunity to infectious agents, including bacteria, viruses and parasites; inflammatory and autoimmune diseases such as asthma and arthritis; control and prevention of infections; strategies for the design and use of vaccines and gene therapy; important diseases will be considered as specific examples.

## **MICRO 3003**

#### Medical Microbiology and Immunology III

- 6 units semester 1
- 3 lecture, 1 tutorial each week, 6 hours practicals
- Available for Non-Award Study
- Prerequisite: Biology of Disease II or Year 1
   MBBS
- Restriction: students enrolled after 2001 in MICRO 2000A/B, MICRO 2001A/B, MICRO 2003A/B or MICRO 2002
- Assessment: written exams 90%, practical exercises 10%

The microbiology component of the course deals with the following: isolation, morphology, physiology and classification of bacteria of medical importance; the principles of action of antibiotics and chemotherapeutic agents; introduction to sterilisation and disinfection; the role of microorganisms in human disease; an outline of infections caused by important bacterial pathogens; and principles of prophylaxis and prevention. Virology is discussed as principles of viral replication; an outline of human virus infections, epidemiology of virus infections; collection of specimens for viral diagnosis; an outline of common approaches to diagnosis in virology; and principles of treatment and prevention of infection. In immunology, there is discussion of the principles of host defences; an outline of mechanisms involved in adaptive immunity; application of these principles to vaccination and understanding sero-diagnosis; and an introduction to allergy, hypersensitivity, autoimmunity and transplantation. The course is related, whenever possible, to clinical material.

## **MICRO 3102**

#### Infection & Immunity A (Biomedical Science)

- 6 units semester 1
- 3 hours lectures, 1 tutorial, 8 hours practical work per week
- Eligibility: BSc (Biomed.) students only
- Available for Non-Award Study
- Prerequisite: MICRO 2101 Microbiology II (Biomed.) or MICRO 2004 Microbiology II or equiv,
- Restriction: MICRO 3002A Infection and Immunity III (Biomed) or equiv,

Assessment: exam on lecture material, practical component, performance in tutorials, seminars

This advanced course examines the molecular basis of interactions of microbial and viral pathogens with their environment and various hosts, especially those which infect humans. Particular emphasis is given to the use of molecular biological approaches for study of infectious disease pathogenesis, and biotechnological applications, including vaccine development. Microbial pathogens - Global significance of infectious disease; principal approaches for investigating host-pathogen interactions; virulence factors which promote colonisation and damage to the host: role of antigenic and phase variation in virulence and disease; gene regulation, especially in relation to expression of virulence factors: invasion and intracellular survival and multiplication: resistance and avoidance of host responses; role of phage, transposons, and insertion sequences in patho-genesis and evolution of multiple drug resistance; genomic approaches to analysis of virulence: insect and parasite pathogens. Viral pathogens - structure and replication of animal viruses; comparison of virus replication strategies; pathogenesis and control of virus infections using specific examples which include hepatitis, HIV (AIDS), herpes, papilloma, polio, rabies and tumour viruses; prions.

The lecture program is complemented by tutorials, which extend skills in exploring and critically assessing the scientific literature, and practicals which develop advanced experimental skills for the study of microbial pathogenic mechanisms.

#### **MICRO 3202**

#### Infection and Immunity B (Biomedical Science)

- 6 units semester 2
- 3 hours lectures, 1 tutorial, 8 hours practical work per week
- Eligibility: BSc (Biomed) students only
- Available for Non-Award Study
- Prerequisite: MICRO 2101 Microbiology II (Biomed) or MICRO 2004 Microbiology or equivs, and MICRO 2201 Immunology and Virology II (Biomed) or MICRO 2005 Immunology and Virology II or equiv
- Restriction: MICRO 3002A Infection and Immunity III (Biomed) or equivs
- Assessment: exam on lecture material, practical & tutorial assessment, written reports

This course includes a detailed examination of the cellular and molecular biology of the immune system, immune responses to microbial pathogens and other antigenic stimuli and immunisation against infections in humans and animals. Topics will include: differentiation and activation of leukocytes: functions of leukocyte subsets; cell biology of antigen processing and presentation; molecular recognition of antigen; molecular and cellular bases of inflammation: signal transduction in immune cells: characteristics and functions of cvtokines: mechanisms of immunoregulation; cellular communication and leukocyte traffic through tissues: production and use of monoclonal antibodies: local immunity at mucosal surfaces: immunity to infectious agents, including bacteria, viruses and parasites; inflammatory and autoimmune diseases such as asthma and arthritis, control and prevention of infections: strategies for the design and use of vaccines and gene therapy; Important diseases will be considered as specific examples. Practicals will be research-based.

## Honours

#### **MICRO 4000**

#### **Honours Microbiology and Immunology**

- 24 units full year
- Prerequisite: Satisfactory performance in Level III courses offered by School of Molecular and Biomedical Science - students from other schools/institutions who have passed suitable Level III courses may be considered

Candidates will normally be expected to start the program at the beginning of February, but this may be altered in special circumstances. Candidates are required to devote their full time to a special program of study in Microbiology, Immunology or Virology. This will involve theoretical studies, seminars and a research project under the direction and supervision of one or more staff members. Examination of a thesis presenting the results of the research project undertaken is an essential part of the assessment procedure. Full details of assessment procedures may be obtained from the Discipline.

Intending Honours candidates should consult the Discipline Leader of Microbiology and Immunology during the final year of the B.Sc.

# MODERN GREEK

## Level I

# MGRE 1001

## Modern Greek IA

- 3 units semester 1
- 4 contact hours per week
- Assessment: assignments; essays; tests; presentation; class participation

This course is designed for both beginners and those who have had some formal instruction in the language. It consists of a three or four-hour language class per week and a one-hour culture lecture, according to levels of linguistic competence (Beginners and Advanced). Beginner students will receive a systematic introduction to the Greek language through class interaction for gradually improving communication skills (all grammar explanations will be in English). Advanced students will gradually improve linguistic, conversational and compositional skills based on a variety of themes. All students will attend a one-hour culture lecture per week delivered in English, on Greek History.

## **MGRE 1002**

#### Modern Greek IB

- 3 units semester 2
- 4 contact hours per week
- Prerequisite: MGRE 1001 Modern Greek IA (formerly Modern Greek I Part 1) or permission of Coordinator
- Assessment: assignments; essays; tests; presentation; class participation

This course further develops the basic language skills acquired in MGRE 1001 and consists of classes divided according to two levels of linguistic competence (Beginners and Advanced). The three or four-hour language class for beginners reviews the fundamental aspects of Greek grammar, introduces students to the writing of simple passages and includes class interaction for the improvement of communication skills. The three or four-hour language class for Advanced students is based on contemporary themes and designed to gradually improve skills in sentence structure, paragraph connection and cohesion in expression. All students will attend a one-hour culture lecture, delivered in English, on Greek Culture, Literature and Society.

## Level II

## MGRE 2001

#### **Modern Greek IIA**

- 4 units semester 1
- 4 contact hours per week
- Prerequisite: MGRE 1002 Modern Greek IB/Modern Greek I, Part 2
- Assessment: assignments; essays; tests; presentation; class participation

There are two interconnected study components in this course: Greek language and culture. Classes are divided according to two levels of linguistic competence (Beginners and Advanced). The three-hour class per week will gradually improve conversational and compositional skills based on a variety of contemporary themes: history and the modern society and contemporary issues in the context of Greek-Australian relations. The one-hour culture lecture and discussion per week is based on a range of Greek or Cypriot cultural and historical issues eg Greek Migration to Australia; Journey and Return; Asia Minor; Cyprus: History, Culture and Tradition.

## **MGRE 2002**

#### Modern Greek IIB

- 4 units semester 2
- 4 contact hours per week

Prerequisite: MGRE 2001 Modern Greek IIA/Modern Greek II, Part 1

Assessment: assignments; essays; tests; presentation; class participation

There are two interconnected study components in this course: Greek language and culture - 3 hours of lectures and tutorials consisting of language classes for improving conversational and compositional skills based on a variety of contemporary themes: history and the modern society; Greek culture and society - 1 hour per week of lecture and discussion based on varied textural materials with themes such as language use and cultural identity.

## Level III

#### **MGRE 3001**

#### Modern Greek IIIA

- 6 units semester 1
- 4 contact hours per week
- Prerequisite: MGRE 2002 Modern Greek IIB /Modern Greek II, Part 2
- Assessment: assignments; essays; tests; presentation; class participation

There are two interconnected study components in this course: Greek language and culture. Classes are divided according to two levels of linguistic competence (Beginners and Advanced). The three-hour language class per week will gradually improve conversational and compositional skills of students, based on a variety of contemporary themes: history and the modern society and contemporary issues in the context of Greek-Australian relations. The one-hour culture lecture and discussion per week is based on arrange of Greek or Cypriot cultural and historical issues eg Greek Migration to Australia; Journey and Return; Asia Minor; Cyprus: History, Culture and Tradition.

# MGRE 3002

## Modern Greek IIIB

- 6 units semester 2
- 4 contact hours per week
- Prerequisite: MGRE 3001 Modern Greek IIIA/Modern Greek III Part 1
- Assessment: assignments; essays; tests; presentation; class participation

There are two interconnected study components in this course: Greek language and culture. Classes are divided according to two levels of linguistic competence (Beginners and Advanced). The three-hour language class per week will further develop conversational and compositional skills of students, based on a variety of contemporary themes: history and the modern society, and contemporary issues in the context of Greek-Australian relations. The one-hour culture lecture and discussion per week is based on a range of Greek or Cypriot cultural and historical issues eg Greek Migration to Australia; Journey and Return; Asia Minor; Cyprus: History, Culture and Tradition.

# MUSIC

## Level I

## COMP 1500A/B

#### **Composition I**

- 6 units full year
- 0.5 hour individual tuition, 1.5 hour seminar in technical studies, 1.5 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 7349 Composition Studies
- Assessment: folio of exercises, compositions, including recordings where possible 50%, technical studies assignments, participation 25%, composer' workshop assignments, presentations 25%

Individual tuition: develops skills in the fundamentals of composition and expands knowledge of styles, structures, notation and score presentation. Technical studies: compositional methods and analysis. Composers' workshop: the performance of students' compositions based on projects.

## ENS 1001A/B

## A Kind of Blue I

- 3 units full year
- 3 hours per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Vocal Ensemble I
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles: on-going development of choral, musical and ensemble skills to a high level.

## ENS 1002A/B Adelaide Connection I

- 3 units full year
- 3 hours per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Vocal Ensemble I
- Assessment: ensemble achievement in rehearsals/performances and individual contribution 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles: ongoing development of choral, musical and ensemble skills to a high level

## ENS 1004A/B

#### Big Band One I

- 3 units full year
- 3 hours per week, additional sectional concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble I
- Assessment: ensemble achievement in rehearsals/performances & individual contribution -100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances within the Big Band jazz tradition.

## ENS 1005A/B

#### **Big Band Two I**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble I

 Assessment: ensemble achievement in rehearsals/performances & individual contribution -100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances within the Big Band jazz tradition.

## ENS 1006A/B

## **Big Band Three I**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble I
- Assessment: ensemble achievement in rehearsals/performances & individual contribution -100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances within the Big Band jazz tradition.

## ENS 1009A/B

## Elder Conservatorium Symphony Orchestra I

- 3 units full year
- up to 5 hours p/w Orchestra rehearsal, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances and individual contribution 100% attendance required except in cases of illness or approved leave

Rehearsals and performance of repertoire for orchestra.

## ENS 1010A/B

#### Elder Conservatorium Wind Orchestra I

- 3 units full year
- 3 4 hours p/w supervised rehearsals for Wind Ensemble, additional rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Ensemble (Wind) I
- Assessment: ensemble achievement in rehearsals/performances and individual contribution -100% attendance required except in cases of illness or approved leave

Rehearsals and performance of repertoire for wind ensemble and/or orchestra.

## ENS 1011A/B

#### Jazz Guitar Band One I

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble I
- Assessment: ensemble achievement in rehearsals/performances and individual contribution -100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances of specialised arrangements.

## ENS 1012A/B

#### Jazz Guitar Band Two I

- 3 units full year
- 3 hours per week, additional sectional & rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 5889 Large Jazz Ensemble I

 Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend. Rehearsals and performances of specialised arrangements.

## ENS 1017A/B

#### **Percussion Ensemble I**

- 3 units full year
- 2 hours supervised rehearsals per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 3665 Percussion Ensemble I
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for percussion ensemble.

## ENS 1023A/B

## **Chamber Orchestra I**

- 3 units full year
- 2.5 hours classes, supervised rehearsals per week
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Restriction: 8341 Chamber Orchestra I
- Assessment: ensemble achievement in rehearsals/performances and, individual contribution -100% attendance required except in cases of illness or approved leave

Through the study of an appropriate and balanced selection of chamber orchestra repertoire, students will develop advanced techniques in ensemble playing with particular focus on musicianship, rehearsal discipline and performance experience.

## ENS 1025A/B

#### Elder Conservatorium Chorale I

- 3 units full year
- 2.5 hours rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students
   - consult relevant Academic Program Rules as
   other students may audition for remaining places
- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances and individual contribution -100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles: on-going development of choral, musical and ensemble skills to a high level.

# ENS 1026A/B

## Adelaide Voices I

- 3 units full year
- 2.5 hours rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles: on-going development of choral, musical and ensemble skills to a high level.

## ENS 1027A/B

#### **Bella Voce I**

- 3 units full year
- 2 hours rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances and individual contribution. 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works for female voices in a variety of musical and choral styles: on-going development of choral, musical and ensemble skills to a high level.

## ENS 1030

#### **Chamber Music IA**

- 1.5 units semester 1
- 1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Chamber Music I
- Assessment: satisfactory attendance at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include unconducted works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

## ENS 1031

#### **Chamber Music IB**

- 1.5 units semester 2
- 1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester
- Eligibility: music degree students only consult relevant Academic Program Rules

- · Prerequisite: audition
- Restriction: Chamber Music I
- Assessment: satisfactory attendance at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include unconducted works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

# GENMUS 1001 From Elvis to U2 I

- 3 units semester 1
- 3 hours per week
- Eligibility: ability to play/read music not a required
- Available for Non-Award Study
- Assessment: Essay 40%, exam 60%

A survey of popular music since the 1950s. The focus is on significant groups, artists, and trends from a range of styles including Rhythm and Blues, Rock and Roll, Folk Rock, The Beatles, Soul, Metal, Funk, Disco, Punk, Hip-Hop, Grunge, Alternative, Electronica and Mainstream Pop.

Throughout the course, attention is given to the impact of socio-cultural environments and evolving music technologies upon the aesthetics and production of popular music.

## GENMUS 1002A/B

#### **Keyboard Laboratory I**

- 3 units not offered 2007
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: 1933 Keyboard for Singers II
- Assessment: regular performance of set exercises, studies, repertoire

Functional keyboard skills for students with minimal musical knowledge and for students with performance skills in a non-keyboard musical instrument. Participants are expected to achieve a standard of keyboard facility which enables them to perform elementary level popular and classical repertoire, to sight-read, to improvise, to harmonise and to realise simple vocal and instrumental scores. Learning is self-paced, using the keyboard laboratory's individual workstations with recording and sequencing capability for classwork and for practice.

#### **GENMUS 1003**

#### **Musics of the World I**

- 3 units semester 2
- 3 hours per week
- Available for Non-Award Study
- · Eligibility: ability to play/read music not a required
- Restriction: 5448 Music of the Non-Western World I, 9751 Music of the Non-Western World I (Arts), 1423 Introduction to Ethnomusicology I, 2673 Introduction to Ethnomusicology IIA
- Assessment: essay 40%, exam 60%

Introduction to the music of selected world cultures. Representative examples may be drawn from Australia and the Pacific, Asia, Africa, the Americas, Europe, and the Middle East. The course presents music as a form of cultural expression in a range of traditional and contemporary contexts, from ceremonial and other traditional modes of performance to popular hybrid forms referred to as 'world music'.

## **GENMUS 1006**

#### **Blues All Around My Head I**

- 3 units not offered in 2007
- 3 hour lecture per week
- Prerequisite: ability to read music, familiarity with basic chord progressions
- Assessment: exam, essay

The course offers a multi-faceted look at the music(s) known as the Blues. It will consider the development of a new genre from its African and New World origins through its maturity in early 20th century Mississippi Delta Blues style. It will also look at the role of Blues in Jazz and Folk, the Chicago Electric Blues scene, Blues revivals in 1960s Rock, and a range of other manifestations of Blues in popular and world music. Apart from discussion of historical and cultural elements, the course will focus on music-stylistic and structural elements of Blues including the use of scales, chord progressions, rhythm, details of melodic style, and the use of lyrics. Presentations by vocal and instrumental practitioners will demonstrate how Blues is incorporated by contemporary musicians today.

## GENMUS 1010A/B Studies in Composition I

- 3 units full year
- 1.5 hour seminar in technical studies, 1.5 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: Practical Study: Composition I,/II/III
- Assessment: semester 1-technical studies assignments & participation 20%, composers' workshop assignments & participation 20%; semester 2 - technical studies assignments & participation 30%, composers' workshop assignments & participation 30%

Study of the fundamentals of composition in various styles and genres. Technical studies seminar: compositional methods and analysis. Workshop: project-based composition leading to performance of students' works.

## GENMUS 1014

#### Sound & Media Technology I

- 3 units semester 2
- 3 x 1 hour lectures per week
- Assessment: essay 50%, exam 50%

Study of: the use of sound in the media, with particular attention to film and television; the concepts of montage and collage and their application to sound, music, film and image; detailed scene analysis of examples from classic movies; psychological and aesthetic aspects of sound in film; the role of sound in the media.

## GENMUS 1020

#### **Choral Masterworks I**

- 3 units semester 1
- 2 hour workshop
- Eligibility: music degree students only -consult relevant Academic Program Rules
- Assessment: 2 written assignments 50% each

A consideration of aspects of the School's current opera, music theatre project and / or major choral

#### **GENMUS 1021**

#### **Choral Repertoire I**

- 3 units not offered 2007
- 2 hour workshop per week
- Eligibility: music degree students only -consult relevant Academic Program Rules
- Assessment: 2 written assignments 50% each

A consideration of aspects of the School's current opera, music theatre project and / or major choral work.

## GENMUS 1026A/B

#### Perspectives in Music Technology I

- 3 units not offered 2007
- 2 x 1 hour seminars p/w 24 weeks
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places
- Assessment: papers/presentations: 50%, exams: 50%

Seminar 1: Cultural and historical analysis of new technologies and their impact on the creation, performance, representation and reception of music. Seminar 2: Scientific analysis and understanding of the physics and psychophysics of sound; synthesis and processing; audio and MIDI theory.

## JAZZ 1000A/B

#### Jazz Performance I

- 9 units full year
- 1 hour indiv. tuition p/w 24 wks, jazz forum (using small jazz ensembles)1.5 hours p/w, technique/ repertoire class (masterclass) according to instrumental/vocal specialisation 1.5 hours p/w - 24 wks, small jazz ensemble 1 hour supervised p/w - 24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules
- Quota may apply
- Prerequisite: audition
- Restriction: 1662 Performance I (Jazz) , ENS 1019A/B Small Jazz Ensemble I
- Assessment: sem 1: 20 min technique performance exam 20%, Small Jazz Ensemble 15%, teacher's report 5%; sem 2 final 25 min prac. exam 40%, teacher's report 5%, Small Jazz

Ensemble 15% (end of year practical exam must be passed in order to pass course)

Through the study of appropriate technical and jazz repertoire, students develop advanced technical skills together with a sound understanding of jazz style/interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed creative and expressive sense. They need to demonstrate jazz improvisation in appropriate styles and a strong conceptual understanding of the compositions performed together with an ability to communicate with their audience.

Small Jazz Ensemble: Studies the roles of band leader, soloist, sideman, rhythm section player in rehearsal, recording band and concert stage environments. Topics include: repertoire - analysis of tune structure; playing in different tempi & kevs: arrangements: leader roles: ensemble communication: solo and accompaniment roles: group awareness, active listening and response; levels of density; balance; group phrasing; matching time and feel; changing feel; playing in different styles: colla voce: solo structure: solo intensification; soloing within constraints; playing in different combinations; trading 4's & 8's; stop choruses and solo breaks; playing in context, maintaining mood: recovering from mistakes: group dynamics (personal); tuning; individual sound; relaxation; playing with confidence; energy: dynamics: articulation and colour.

## JAZZ 1003A/B

#### Improvisation I

- 3 units full year
- 1 hour lecture, 2 hour tutorial per week (incl. 1 hour Afro-American rhythms)
- Eligibility: music degree students only consult relevant Academic Program Rules
- · Quota may apply
- Restriction: 7321/4391 Improvisation I (New)
- Assessment: assignments & participation in class 20%, end of semester written & prac exams 60%, rhythm class exam 20%

Provides a foundation of common practice Jazz improvisational skills in the areas of rhythmic feel/flow, simple formulaic harmonic structures, line construction and motivic application. Students develop and apply jazz improvisational techniques and apply basic improvisational techniques of rhythm, scales & patterns in jazz repertoire. The study of various styles beginning with dixieland, swing and blues through to early Bebop styles is considered. One hour of contact time each week will be devoted to the practical application of Afro-American rhythms.

#### **MUSCORE 1005**

#### **Music Foundations I: Jazz**

- 3 units semester 1
- 1 hour aural, 1 hour choir, 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: 1268 Introduction to Music Literature I, 5549 Aural Development I, 7705 Aural Training IM, 7320 Jazz Theory I (New), 2107 Jazz Theory I
- Assessment: choir demonstration of individual sight singing ability & involvement in one performance per semester 30%; aural - as required for stream/level 30%; workshop (assignments & ongoing assessment 50%, exam 50%) 40%

#### Aural: Refer to MUSCORE 1008.

Choir: Development of music aural skills through choral singing, emphasis on sight-reading, aural development and vocal skills.

Workshop: study of jazz theory as applied through the keyboard and taught in the keyboard laboratory including guidelines for critical listening, study and practical application of scales (tetrachords, modes of the major and minor scales, blues scale), major and minor harmony concepts including diatonic chord function and chord voicing, chord and scale relationship, smooth voice leading, diatonic and tritone substitution, chord extensions, reading and playing chord progressions. Introduction to acoustics and the perception of sound.

#### **MUSCORE 1006**

#### **Music in Context I: Jazz**

- 3 units semester 2
- 1 hour aural, 1 hour choir, 2 hour workshop
   per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSCORE 1005 Music Foundations I: Jazz

- Restriction: 5549 Aural Development I, 7705 Aural Training IM, 7320 Jazz Theory I (New), 2107 Jazz Theory I
- Assessment: choir demonstration of individual sight singing ability & involvement in one performance per semester 30%; aural - as required for stream/level 30%; workshop (assignments & ongoing assessment 50%, exam 50%) 40%

Aural: Refer to MUSCORE 1008.

Choir: Development of music aural skills through choral singing, emphasis on sight-reading, aural development and vocal skills.

Workshop: Study of jazz theory as applied through the keyboard and taught in the keyboard laboratory including study and practical application of secondary dominants, cyclic progressions and turnarounds, rhythm changes, extended and altered chords, diminished scales and harmony, cadences and deceptive/delayed resolution, tune analysis, chord-scale relationships, reading and playing chord progressions.

#### **MUSCORE 1007**

#### Introduction to Theory & Analysis of Music I

- 3 units semester 1
- 1 hour lecture, 1 hour tutorial, 1 hour aural per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Musicianship or AMEB Grade 5 Theory
- Restriction: MUSCORE 1001 Approaches to Music I; MUSCORE 1003 Music Foundations I: Classical
- Assessment: Theory assignments 40%, exam (including repertoire listening test) 30%, Aural as required for stream/level 30%

The components of Concept of Theory and Analysis IA collectively provide a strong basis for the development of musicianship and musical understanding.

Lectures: Introduction to musical acoustics and perception; concepts of consonance, dissonance and other core elements in Western and non-Western music; survey of analytical approaches to music, including traditional harmonic analysis, analyses of rhythm and timbre, and analyses incorporating non-Western concepts. Tutorials: Reinforcement of lecture material through exercises, discussion and expanded repertoire listening. Aural: Development of skills in identifying and notating melodic, harmonic and rhythmic units: development of critical listening skills through study of basic musical elements such as texture. timbre, articulation, dynamics, form, and structure. Aural is divided into five progressive streams for varving skill levels and areas of particular development. Beginning students will be allocated their stream on the basis of a placement test.

## MUSCORF 1008

#### **Contrapuntal Analysis & Composition I**

- 3 units semester 2
- 1 hour lecture, 1 hour tutorial, 1 hour aural per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Musicianship or AMEB Grade 5 Theory
- Assessment: Theory assignments 40%, exam (including repertoire listening test) 30%, Aural as required for stream/level 30%

The components of Concept of Theory and Analysis IA collectively provide a strong basis for the development of musicianship and musical understanding.

Lectures: Introduction to technique of C16th species counterpoint; introduction to analysis and technique of C18th counterpoint especially as represented in inventions and partitas of J.S. Bach; harmonic conventions as applicable to understanding counterpoint.

Tutorials: Reinforcement of lecture material through exercises, discussion and expanded repertoire listening.

Aural: Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form, and structure. Aural is divided into five progressive streams for varying skill levels and areas of particular development. Beginning students will be allocated their stream on the basis of a placement test.

#### **MUSCORE 1009**

#### Foundations of Music History IA

- 3 units semester 1
- 1 hour lecture, 1 hour tutorial, 1 hour choir per week
- Available for Non-Award Study

- Assumed Knowledge: SACE Stage 2 Musicianship or AMEB Grade 5 Theory
- Assessment: History essay 40%, short written assignments 20%: Library Skills Workbook 10%: Choir - demonstration of individual sight-singing ability & involvement in one performance 30%

Lectures will cover the broad sweep of Western music history from ancient Greece to the present day, with excursions into popular and non-Western musics.

Tutorials will reinforce lecture material through discussion and expanded repertoire listening, and will develop research and writing skills. Choir will develop aural skills through choral singing, with emphasis on sight-reading, aural development and vocal skills.

#### **MUSCORE 1010**

#### Foundations of Music History IB

- 3 units semester 2
- 1 hour lecture, 1 hour tutorial, 1 hour choir per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Musicianship or AMEB Grade 5 Theory
- Assessment: History essay 45%, short written assignments 25%; Choir - demonstration of individual sight-singing ability & involvement in one performance 30%

Lectures will cover the broad sweep of Western music history from ancient Greece to the present day, with excursions into popular and non-Western musics.

Tutorials will reinforce lecture material through discussion and expanded repertoire listening, and will develop research and writing skills. Choir will develop aural skills through choral sining, with emphasis on sight-reading, aural development and vocal skills.

#### **MUSST 1000A/B**

#### Studies In Music I

- · 6 units full vear
- 2 x 1 hour lectures. 1 hour tutorial per week
- Restriction: GENMUS 1001 Elvis to U2 I: GENMUS 1003 Musics of the World I
- Assessment: Research project (2000 words) due end sem.2, short assignments, assessments as for listed courses

Semester 1 consists of lectures from the course Elvis to U2 I. Semester 2 consists of lectures from the course Musics of the World I. These semester studies are supported by weekly tutorials throughout the year to develop an understanding of music in its social context, consolidate research and communication skills and provide an integrated disciplinary approach.

## MUSTECH 1003A/B

#### **Music Technology I**

- 6 units full year
- 4 hours per week (2 hr laboratory practical , 2 hr workshop) /24 weeks
- Eligibility: Music degree students only consult relevant Academic Program Rules
- Prerequisite: Audition
- Assessment: Minor assignment 60%, Major project 40%

Laboratory practical: Through the practical study of software and hardware students will develop skills in the use and application of studio and desktop music technology. This will include editors, processors, sequencers, microphones, mixing desks and recording devices used in the areas of studio, audio, MIDI, sound design and media production.

Workshop: Students will engage with the concepts of music technology through the development of creative, theoretical and technical skills via workshops, presentations, listening, industry focus and research.

#### **PERF 1002A/B**

#### **Keyboard Musicianship I**

- 3 units full year
- 2 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- · Available for Non-Award Study
- · Prerequisite: audition
- Assessment: regular practical exercises, 1 individual practical assessment per semester

Development of practical skills in the areas of sight reading, transposition, keyboard harmony and improvisation (semester 1), figured bass, score reading, modulation and rapid learning (semester 2).

#### PERF 1500A/B

#### Classical Performance I

- 9 units full year
- 1 hour indiv. tuition p/ w 30 wks; Classical Performance Forum 1.5 hours p/week - 24 wks; technique/repertoire class, organised according to instrumental/vocal specialisation, 1.5 hours p/w - 24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules
- · Quota may apply
- · Prerequisite: audition
- Assessment: sem 1: 20 min. technique assessment or equiv. 30%, teacher assessment 10%; sem 2: 25 min end of year prac. exam 50%, teacher's assessment 10% (end of year exam must be passed in order to pass course)
- Specialisations: Brass, Keyboard, Percussion, Strings, Voice and Woodwind

Through the study of appropriate technical and recital literature, students develop advanced technical skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed expressive sense. They need to demonstrate a strong conceptual understanding of the works performed together with an ability to communicate with their audience.

## PERF 1600A/B

#### **Practical Study I: Performance**

- 6 units full year
- 12 hours indiv. tuition over 24 wks; Practical study Forum 1.5 hours p/w - 24 wks; technique/ repertoire class, organised according to instrumental/vocal specialisation, 1.5 hours p/w -24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules
- Quota may apply
- Prerequisite: audition
- Assessment: sem 1: teacher assessment 5%, 10 min prac. assessment 35%; sem 2: teacher assessment 5%, 15 min prac. assessment 55% (end of year exam must be passed in order to pass course)
- Specialisations: Brass, Keyboard, Percussion, Strings, Voice and Woodwind

Development of technique and repertoire on an instrument or voice at levels appropriate to an individual student's potential.

## Level II

## COMP 2500A/B

## **Composition II**

- 6 units full year
- 0.5 hour individual tuition, 1.5 hour seminar in technical studies, 1.5 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: COMP 1002 Practical Study IB: Composition
- Restriction: Composition Studies II
- Assessment: folio of exercises, compositions, including recordings where possible 50%, technical studies assignments, participation 25%, composers' workshop, participation 25%

Individual tuition: develops skills in composition for various instrumental and vocal ensembles and expands knowledge of styles, structures, notation and score presentation. Technical studies: advanced study in the resources, techniques and styles of 20th century music. Composers' workshop: the performance of students' compositions based on projects.

## ENS 2001A/B

## A Kind of Blue II

- 3 units full year
- 3 hours per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Vocal Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 2002A/B Adelaide Connection II

- 3 units full year
- 3 hours per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Vocal Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 2004A/B

## **Big Band One II**

- 3 units full year
- 3 hours per week, additional sectional and concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution -100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances within the Big Band jazz tradition.

## ENS 2005A/B

## **Big Band Two II**

- 3 units full year
- 3 hours per week, additional sectional and concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 4557 Large Jazz Ensemble II

 Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances within the Big Band jazz tradition.

## ENS 2006A/B

## **Big Band Three II**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances within the Big Band jazz tradition.

## ENS 2009A/B

#### Elder Conservatorium Symphony Orchestra II

- 3 units full year
- Up to 5 hours p/w for Orchestra, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules - other students may also audition for limited number of places Prerequisite: relevant Level I Ensemble
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for orchestra.

## ENS 2010A/B

#### Elder Conservatorium Wind Orchestra II

- 3 units full year
- 3 4 hours supervised rehearsals for the Wind Ensemble, additional rehearsals for concerts may be required
- Prerequisite: audition
- Restriction: Large Ensemble (Wind) II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for wind ensemble.

## ENS 2011A/B

#### Jazz Guitar Band One II

- 3 units full year
- 3 hours per week, additional & sectional concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 4557 Large Jazz Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution -100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances of specialised arrangements.

## ENS 2012A/B

## Jazz Guitar Band Two II

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 4557 Large Jazz Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances of specialised arrangements.

## ENS 2017A/B

## Percussion Ensemble II

- 3 units full year
- 2 hours supervised rehearsals per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Percussion Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for percussion ensemble.

## ENS 2023A/B

#### **Chamber Orchestra II**

- 3 units full year
- 2.5 hours classes, supervised rehearsals per week
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Restriction: Chamber Orchestra II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Through the study of an appropriate and balanced selection of chamber orchestra repertoire, students will develop advanced techniques in ensemble playing with particular focus on musicianship, rehearsal discipline and performance experience.

### ENS 2025A/B

#### **Elder Conservatorium Chorale II**

- 3 units full year
- 2.5 hours rehearsal per week, performance as scheduled, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Restriction: 8463 Large Vocal Ensemble II
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

# ENS 2026A/B

## Adelaide Voices II

- 3 units full year
- 2.5 hours rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

# ENS 2027A/B Bella Voce II

- 3 units full year
- 2 hours per week, performances as scheduled, additional concert rehearsals may be required
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places

- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works for female voices in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 2030

#### **Chamber Music IIA**

- 1.5 units semester 1
- 1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Chamber Music II
- Assessment: satisfactory attendance at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include unconducted works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

## ENS 2031

## **Chamber Music IIB**

- 1.5 units semester 2
- 1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Chamber Music II
- Assessment: satisfactory attendance at workshops, participation in rehearsals and performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include unconducted works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

#### **GENMUS 2003**

#### Instrumental Music Pedagogy II

- 3 units semester 1
- 2 hour lecture, 1 hour tutorial per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Quota may apply
- Prerequisite: well-established instrumental performance skills & theoretical knowledge
- Assessment: folio 70%, essay 30%

Introduction to the principal elements of instrumental music pedagogy. It is designed to equip those who may wish to undertake a limited amount of instrumental teaching with the knowledge and understanding to work empathetically and effectively with pupils, especially in a one-to-one situation. Lecture topics include the principles and philosophies underpinning the discipline, the structure and history of the profession, its examination systems and some if its recognised methodologies. Tutorials in string, wind, keyboard and other instruments concentrate on instrumental specific approaches at elementary levels with a pupilcentred focus.

## GENMUS 2005

#### Music, Media & Contemporary Society II

- 3 units not offered in 2007
- 3 hours per week
- Prerequisite: ability to play or read music not a requirement for this course
- Restriction: GENMUS 3005 Music, Media and Contemporary Society IIIA, 9801/5307 Music in Popular Culture II/III, 4293/8324 Music in Popular Culture II/III (Arts)
- Assessment: essay 40%, exam 60%

This course offers an examination of musical practice in contemporary society. Drawing upon a range of examples from popular music, classical music, film music, and background music, the course considers the varied aesthetic and cultural uses of music and music media. At the same time, it looks at the interconnectedness of musical practices brought about through music-oriented technology. This may be seen especially in the general impact of recording technology on all forms of music-making and consumption, but also in the business and promotional practices associated with the global music industry, and in current issues related to music copyright. Throughout the course, an emphasis will be placed on developing students' ability to critically examine and discuss aspects of musical aesthetics, behaviour, function, and meaning.

## **GENMUS 2006**

#### **Orchestration II**

- 3 units semester 2
- 3 hours per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSCORE 1003 Music Foundations I: Classical, MUSCORE 1004 Music in Context I: Tonality & Form in Western Practice
- Restriction: 7736 Orchestration Workshop II, 4851 Music Theory III (Orchestration topic)
- Assessment: participation in class 20%, folio of orchestration exercises 80%

The study of the development and techniques of orchestration from the Classical period to the present day through the analysis and transcription of examples in a variety of styles and genres.

## **GENMUS 2009**

#### Music, Media & Contemporary Society II (Arts)

- 4 units not offered in 2007
- 3 hours per week
- Prerequisite: Ability to play or read music not a requirement for this course
- Restriction: GENMUS 3005 Music, Media and Contemporary Society IIIA, 9801/5307 Music in Popular Culture II/III, 4293/8324 Music in Popular Culture II/III (Arts)
- Assessment: essay 40%, exam 60%

This course offers an examination of musical practice in contemporary society. Drawing upon a range of examples from popular music, classical music, film music, and background music, the course considers the varied aesthetic and cultural uses of music and music media. At the same time, it looks at the interconnectedness of musical practices brought about through music-oriented technology. This may be seen especially in the general impact of recording technology on all forms of music-making and consumption, but also in the business and promotional practices associated with the global music industry, and in current issues related to music copyright. Throughout the course, an emphasis will be placed on developing students' ability to critically examine and discuss aspects of musical aesthetics, behaviour, function, and meaning.

## GENMUS 2010A/B

#### **Studies in Composition II**

- 3 units full year
- 1.5 hour seminar in technical studies, 1.5 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: Practical Study: Composition I/II/III
- Assessment: semester 1- Technical Studies assignments & participation 20%, Composers' Workshop assignments & participation 20%; semester 2 - Technical Studies assignments 30%, Composers' Workshop assignments & participation 30%

Study of the fundamentals of composition in various styles and genres. Technical studies seminar: compositional methods and analysis. Workshop: project-based composition leading to performance of students' works.

#### **GENMUS 2020**

#### **Choral Masterworks II**

- 3 units semester 1
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Assessment: 2 written assignments 50% each

A consideration of aspects of the School's current opera, music theatre project, and / or major choral work.

#### **GENMUS 2021**

#### **Choral Repertoire II**

- 3 units not offered 2007
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Assessment: 2 written assignments 50% each

A consideration of aspects of the School's current opera, music theatre project, and / or major choral work.

## **GENMUS 2023**

#### **Conducting IIA**

- 1.5 units semester 1
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Assessment: practical and written assessments and viva voce

Introduction to conducting techniques (all standard beat patterns; initial development of expressive gestures and skills for reflection of musical character; use of the left hand; entries, releases, fermata, tempo and character changes); score reading, analysis and marking; developing appropriate aural skills; effective rehearsal techniques and planning; repertoire and resources, including set works.

## **GENMUS 2024**

#### **Conducting IIB**

- 1.5 units semester 2
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: Pass Div I or higher in GENMUS 2023 Conducting IIA
- Assessment: practical and written assessments and viva voce

Continued development of conducting techniques (all standard beat patterns; initial development of expressive gestures and skills for reflection of musical character; use of the left hand; entries, releases, fermata, tempo and character changes); leadership skills; score reading, analysis and marking (orchestra, band and choir); developing appropriate aural skills; effective rehearsal techniques and planning; program building and concert planning; repertoire and resources, including set works; introduction to specific choral and instrumental techniques.

## GENMUS 2026A/B

#### Perspectives in Music Technology II

- 3 units full year
- 2 x 1 hour seminars p/w 24 weeks
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places

- Prerequisite: Perspectives in Music Technology I
- Assessment: papers/presentations 50%, exams 50%

Seminar 1: Musical, cultural and historical analysis of new technologies and their application to computer music electro-acoustic composition and sound art.

Seminar 2: Analysis and understanding of compositional concepts and technology including generative systems, theory, grammars and probability.

#### **GENMUS 2027**

#### **Blues All Around My Head II**

- 3 units semester 2
- 3 hour lecture per week
- · Available for Non-Award Study
- Assumed Knowledge: Basic familiarity with music notation and rudimentary chord progressions
- Restriction: GENMUS 1006 Blues All Around My Head I
- Assessment: 2 hour exam 50%, essay 50%

Blues has had an enormous aesthetic and social impact over the past 100 years. This impact may be seen in the development of Blues as a musical form in its own right, but also through Blues' influence upon Jazz, Rock and most other genres of popular music, and through its iconic representation in popular culture. This course has two main aims. First, it offers a chronological survey of the Blues, from its African and New World origins through its maturity in early 20th century Mississippi Delta Blues and beyond, including the role of Blues in Jazz and Folk, the relationship of Blues and Gospel singing, the Chicago Electric Blues scene and emergence of R&B, the British and U.S. Blues revivals of the 1960s, and more contemporary manifestations of Blues. The other aim of the course is to understand Blues as music which in its development, promotion, and stylistic evolution, has been closely linked to media technology, and to ideas about authenticity and entertainment in a racially charged social context. Here the emphasis is on understanding the ways in which musical production, distribution and promotion, and archiving of recordings has been fundamental in the invention and reinvention of the Blues.

#### **GENMUS 2028**

## Blues All Around My Head II (Arts)

- 4 units semester 2
- 3 hour lecture per week
- Available for Non-Award Study
- Assumed Knowledge: Basic familiarity with music notation and rudimentary chord progressions
- Restriction: GENMUS 1006 Blues All Around My Head I
- Assessment: 2 hour exam 50%, essay 50%

Blues has had an enormous aesthetic and social impact over the past 100 years. This impact may be seen in the development of Blues as a musical form in its own right, but also through Blues' influence upon Jazz, Rock and most other genres of popular music, and through its iconic representation in popular culture. This course has two main aims. First, it offers a chronological survey of the Blues, from its African and New World origins through its maturity in early 20th century Mississippi Delta Blues and beyond, including the role of Blues in Jazz and Folk, the relationship of Blues and Gospel singing, the Chicago Electric Blues scene and emergence of R&B, the British and U.S. Blues revivals of the 1960s, and more contemporary manifestations of Blues. The other aim of the course is to understand Blues as music which in its development, promotion, and stylistic evolution. has been closely linked to media technology, and to ideas about authenticity and entertainment in a racially charged social context. Here the emphasis is on understanding the ways in which musical production, distribution and promotion, and archiving of recordings has been fundamental in the invention and reinvention of the Blues

## JAZZ 2000A/B

## Jazz Performance II

- 9 units full year
- 1 hour individual tuition p/w -24 wks, jazz forum (using small jazz ensembles) 1.5 hours p/w; technique/repertoire class (masterclass) according to instrumental/vocal specialisation 1.5 hours p/w - 24 wks; small jazz ensemble 1 hour supervised p/w - 24 wks
- Eligibility: music degree students only -consult relevant Academic Program Rules
- Prerequisite: JAZZ 1000B Jazz Performance I Part 2 at Pass 1

- Restriction: 8010 Performance II (Jazz), JAZZ 2004A/B Jazz Ensemble Practicum II
- Assessment: sem 1: 20 min. technique/performance exam 20%, Small Jazz Ensemble 20%; sem 2 - 30 min practical exam 40%, Small Jazz Ensemble 20% (end of year practical exam must be passed in order to pass course)

Through the study of appropriate technical and jazz repertoire, students develop advanced technical skills together with a sound understanding of jazz style/interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed creative and expressive sense. They need to demonstrate jazz improvisation in appropriate styles and a strong conceptual understanding of the compositions performed together with an ability to communicate with their audience.

Small Jazz Ensemble: Studies the roles of band leader, soloist, sideman, rhythm section player in rehearsal, recording band and concert stage environments. Further develops skills in Jazz Improvisation, in the styles of Standards, Bop, Modal and Contemporary. Analysis of tune structure; playing in different tempi & keys; arrangements; leader roles; ensemble communication; solo and accompaniment roles; group awareness, active listening and response; levels of density; balance; group phrasing; matching time and feel; changing feel; playing in different styles; colla voce; solo structure; solo intensification; soloing within constraints; playing in different combinations; trading 4's & 8's; stop choruses and solo breaks; playing in context, maintaining mood; recovering from mistakes; group dynamics (personal) tuning; individual sound; relaxation; playing with confidence; energy; dynamics; articulation & colour.

## JAZZ 2006A/B

#### Jazz Improvisation II

- 3 units full year
- 1 hour lecture, 2 hours tutorial per week (incl. 1 hour Afro-American rhythms)
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: JAZZ 1003B Improvisation 1 Part 2
- Restriction: 9314 Improvisation II

• Assessment: assignments, class participation 20%, written, prac exam at end of each assessment 60%, rhythm class exam 20%

Improvisation: development of phrasing and rhythm; forward motion, chromaticism, digital patterns, guide tones, use of altered scales; relaxation/playing at speed; accompanying, polyrhythms, reharmonisation, application of modes, pentatonic scales, melodic development techniques, polychords in contemporary improvisation; playing an introduction; playing a cadenza; unaccompanied playing ; chord substitution systems.

## JAZZ 2007A/B

#### **Jazz Arranging Class II**

- 3 units full year
- 1 hour lecture, 1 hour tutorial per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Assessment: assignments 65%, end of year submission of arrangement 35%

Advanced techniques of textural and harmonic procedures in jazz arranging for small and medium jazz ensembles, including choirs. Study of the rhythm section, saxophone section, sketch score, score layout. Score reading and study of styles of contemporary arrangers & composers. Score and parts creation using computer software.

## JAZZ 2600A/B

#### **Practical Study II: Jazz**

- 6 units full year
- 12 hours individual tuition/24 wks, 1.5 hours performance class & 1.5 hours Jazz Performance forum per wk, 1 hour supervised small jazz ensemble laboratory p/w - 24 wks
- Eligibility: students enrolled in a music degree consult relevant Academic Program Rules
- Prerequisite: JAZZ 1000B Jazz Performance I Pt 2
- Restriction: 7558 Performance IIB (Jazz)
- Assessment: sem 1: teacher's report 5%, ensemble laboratory 10%, 10 min mid-year assessment 20%: sem 2: teacher's report 5%, 20 min practical assessment 50%, ensemble laboratory 10% (end of year prac exam must be passed in order to pass course)

Technique and repertoire on an instrument or voice at levels appropriate to an individual student's attainments. All students must attend an individual lesson and a 1.5hour performance class particular to their major study.

## **MUSCORE 2003**

#### Music in Context IIA: Jazz

- 3 units semester 1
- 1 hour ea; aural, theory lecture, theory tutorial, history lecture, history tutorial per week
- Eligibility: only available to students enrolled in a music degree -consult relevant Academic Program Rules
- Prerequisite: MUSCORE 1005 Music Foundations I: Jazz, MUSCORE 1006 Music in Context I: Jazz
- Restriction: 1222 Aural Development II, 1930 Aural Training IIM, 2008 Jazz Theory II, JAZZ 2003A/B Jazz History II
- Assessment: aural: as required for stream 20%; theory (weekly assignments & tests 50%, exam 50%) 40%; history (written exam 60%, ongoing assessment - assignments & tutorial participation 20%, 2000 word essay 20%) 40%

Aural: Refer to MUSCORE 1008.

Theory: development of an advanced knowledge of jazz harmony and melody. Considers the harmony of jazz standards (topics include minor key harmony, modal interchange, secondary and substitute dominants, tonicisation and modulation), theoretical aspects of the bebop style (rhythmic aspects, synchronised lines, harmonic superimposition), symmetrical scales and diminished harmony, and the function of diminished chords in jazz harmony. History: Facilitate understanding of social, economic and political factors involved in the development of Afro-American music from its West African roots to the present day; develop the ability to analyse the specific stylistic features of each historical period of jazz, including transitional and related forms, and to identify major trends in the development of the music; develop ability to assess and place into historical perspective the innovations and developments of the major contributors from early jazz to contemporary styles. Topics include: analysis of various styles of jazz ranging from New Orleans to contemporary; musical concepts in jazz styles; roles of instruments; study of set works.

## **MUSCORE 2004**

#### Music in Context IIB: Jazz

- 3 units semester 2
- 1 hour ea: aural, 1 theory lecture, theory tutorial, history lecture, history tutorial per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSCORE 2003 Music in Context IIA: Jazz
- Restriction: 1222 Aural Development II, 1930 Aural Training IIM, 2008 Jazz Theory II, JAZZ 2003A/B Jazz History II
- Assessment: aural: as required for stream 20%; theory (weekly assignments & tests 50%, exam 50%) 40%; history (written exam 60%, ongoing assessment - assignments & tutorial participation 20%, 2000 word essay 20%) 40%

#### Aural: Refer to MUSCORE 1008.

Theory: development of an understanding of the tonal organisation and rhythmic structure of contemporary jazz. Considers modal harmony (distinctive pitches within modes, modal cadences, modal composition and analysis), pentatonics (construction and usage of pentatonics, harmonising in fourths), and chord substitution (including study of diatonic and tritone substitution, use of altered and extended chords, and reharmonisation).

History: Facilitate understanding of social, economic and political factors involved in the development of Afro-American music from its West African roots to the present day; develop the ability to analyse the specific stylistic features of each historical period of jazz, including transitional and related forms, and to identify major trends in the development of the music; develop ability to assess and place into historical perspective the innovations and developments of the major contributors from early jazz to contemporary styles. Topics include: analysis of various styles of jazz ranging from New Orleans to contemporary; musical concepts in jazz styles; roles of instruments; study of set works.

#### **MUSCORE 2005**

# Western Music in Theory & Practice IIA: 1750-1850

- 3 units semester 1
- 2 lectures, 1 hour tutorial, 1 hour aural per week
- · Available for Non-Award Study
- Prerequisite: Contrapuntal Analysis & Composition IB; Foundations of Music History I A/B
- Restriction: MUSCORE 1004 Music in Context I: Tonality & Form in Western Music
- Assessment: Theory assignments 40%, History - essay 25%, repertoire listening test 15%, Aural - as required for stream/level 20%

History - Lectures: Key historical, aesthetic and philosophical trends in Western art music from early C18th to mid-C19th.

Theory & Analysis - Lectures: Analytical studies of thematic, harmonic, stylistic and formal aspects of Classicism and early Romanticism. Topics include: voice leading, chord functions and progressions, secondary chord function, modulation, altered chords (+6, N6); formal procedures: phrase and period structures, binary and ternary forms, sonata form, variation form, song forms: contrapuntal techniques. Topics will be explored through analysis of a range of set works and through the study of composers including JS Bach, Haydn, Mozart, Beethoven, Schubert and Schumann. Tutorials: Reinforcement of lecture material through exercises, discussion and expanded repertoire listening.

Aural: Further development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. Aural is divided into five progressive streams for varying skill levels and areas of particular development.

## **MUSCORE 2006**

# Western Music in Theory & Practice IIB: 1850-1950

- 3 units semester 2
- 2 lectures, 1 hour tutorial, 1 hour aural per week
- Available for Non-Award Study
- Prerequisite: Musicianship and Concepts of Theory and Analysis IB; Group Singing and Foundations of Music History IA/B

- Restriction: MUSCORE 2002 Music in Context IIB: Nineteenth Century Music
- Assessment: Theory assignments 40%; History - essay 25%; repertoire listening test 15%; Aural - as required for stream/level 20%

History: Idea and Ideology in late C19th and early C20th music.

Lectures: An exploration of aesthetic, intellectual and ideological trends in art and popular music from Richard Wagner to WWII.

Theory & Analysis -Lectures: Analytical studies of thematic, harmonic, stylistic and formal aspects of late C19th- and C20th music. Topics will include chromatic harmony; the progressive expansion and subsequent dissolution of tonality; use of folk and modal materials, atonality and 12-tone composition. Tutorials: Reinforcement of lecture material through exercises, discussion, and expanded repertoire listening.

Aural: Further development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form, and structure. Aural is divided into five progressive streams for varying skill levels and areas of particular development.

#### **MUSED 2001**

#### **Music Education IIA**

- 3 units semester 1
- 1 hour lecture, 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction : 5553 Music Education IIM (New).
- Assessment: assignments 30%, exam 40%, journal of observation visits 30%

Stylistic aspects of writing for percussion and rhythm section instruments. Developing experience in percussion and rhythm section playing techniques. Introduction to the principles and processes of music learning, including the nature of musical ability, learning styles, environmental influences, and skill acquisition. Observation visits to a variety of schools.

## MUSED 2002 Music Education IIB

- 3 units semester 2
- 1 hour lecture, 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSED 2001 Music Education IIA
- Restriction: 5553 Music Education IIM (New)
- Assessment: woodwind methodology journal & practical demonstration 30%, essay 40%, journal of improvisation & composition 30%

Woodwind methodology involving learning about the woodwind family, gaining experience in writing for and playing woodwind instruments and basic methodology. Functional musical skills including techniques of improvisation and composition in a variety of genres and styles. Music education history and philosophies. The development of music education in Australia. An overview of music education methodologies, including Orff, Kodaly, Dalcroze, Suzuki and Yamaha.

## MUSED 2003A/B

#### **Music Education Ensembles II part 2**

- 3 units full year
- 2 hour ensemble (jointly with Music Education Level III), 1 hour lecture per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: 5553 Music Education IIM (New)
- Assessment: arranging exercises 20%, arrangement/s 60%, participation 20%

Participation in rehearsals and performance of the Music Education Band and Choir involving repertoire of classical and popular genres. Basic conducting and rehearsal techniques. Principles of arranging music for instrumental and vocal ensembles.

## **MUSST 2001**

#### Approaches to Music IIA

- 3 units semester 1
- 2 hour lecture/discussion, 1 hour tutorial per week
- Prerequisite: MUSCORE 1001 Approaches to Music I
- Assessment: assignment 30%, 2000 word essay 40%, exam 30%

Approaches to the cultural study of music. Investigation of the intellectual development and methods of music research drawing from Ethnomusicology and Musicology through seminars and tutorial exercises

## **MUSST 2002**

#### Approaches to Music IIB

- 3 units semester 2
- 2 hour lecture, 1 hour tutorial per week
- · Assessment: assignment 20%, 3000 word essay 60%, oral presentation of research 20%

Case studies and methods for understanding traditional and contemporary music and culture.

#### MUSTECH 2003A/B

#### **Music Technology II**

- 6 units full year
- 4 hours p/w (2 hr laboratory practical, 2 hr workshop) - 24 weeks
- Eligibility: Music degree students only consult relevant Academic Program Rules
- Prerequisite: Music Technology I
- Assessment: Minor assignments 60%, Major Project 40%

Laboratory practical: Through the practical study of software and hardware students will develop skills in the application of studio and desktop music technology. This will include modular computer music programming, gestural and interactive control, microphone techniques, mixing, production and mastering used in the areas of studio, audio, MIDI, game sound, sound design and media production.

Workshop: Students will engage with the concepts of music technology through the development of creative, theoretical and technical skills via workshops, presentations, listening, industry focus and research.

## **PERF 2001A/B**

#### Accompanying II

- · 3 units full year
- 2 hour lecture/workshop per week
- · Eligibility: music degree students only consult relevant Academic Program Rules
- · Quota may apply

- Prerequisite: PERF 1002A/B Keyboard Musicianship I
- Assessment: 3 practical assessments 25% each, log book 25%

Introduction to the art of accompanying. Development of ensemble skills, rehearsal techniques and management of the rehearsal process. Experience of piano duets and work as an accompanist and associate artist in first rehearsal situations with a variety of instrumentalists and vocalists.

## **PERF 2003A/B**

#### Stagecraft II

- · 3 units full year
- 2 hour workshop, 1 hour movement class per week
- · Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: 7255 Stagecraft II
- Assessment: weekly log 60%, attendance & participation 40%

Development of skills in presentation and stagecraft, movement, posture, gesture and acting, integration of movement skills with dramatic expression, characterisation and analysis

## **PERF 2004A/B**

#### Voice Practicum II

- · 3 units full year
- 3 hours per week
- · Eligibility: Music degree students only consult relevant Academic Program Rules
- Restriction: 3135 Italian for Singers
- Assessment: language class assignments 80%, repertoire class 20%

Repertoire class; language (Italian).

#### **PERF 2500A/B**

## **Classical Performance II**

- 9 units full year
- 1 hour indiv. tuition p/w 30 wks; Classical Performance Forum 1.5.hours p/w - 24 wks; technique/repertoire class, organised on instrumental/vocal specialisation, 1.5 hours p/w -24 wks

- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: PERF 1500B Classical Performance I
   Part 2 at Pass 1 level or above in the relevant
   instrument
- Assessment: sem 1:25 minute technique assessment or equiv. 40%; sem 2: 35 min end of year practical exam 60%, (end of year exam must be passed in order to pass course)
- Specialisations: Brass, Keyboard, Percussion, Strings, Voice and Woodwind

Through the study of appropriate technical and recital literature, students develop advanced technical skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well-developed expressive sense. They need to demonstrate a strong conceptual understanding of the works performed together with an ability to communicate with their audience.

## PERF 2600A/B

#### **Practical Study II: Performance**

- 6 units full year
- 12 hrs indiv. tuition /24 weeks, Practical Study Forum 1.5 hrs p/w - 24 wks, technique/repertoire class organised on instrumental/ vocal specialisation, 1.5 hrs p/w - 24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: PERF 1600B Practical Study I: Performance part 2
- Assessment: sem I: teacher assessment 5%, 10 min prac. assessment 35%; sem 2 - teacher assessment 5%, 20 min practical assessment 55% (end of year exam must be passed in order to pass course)

Development of technique and repertoire on an instrument or voice at levels appropriate to an individual student's potential.

## Level III

## COMP 3500A/B

## **Composition III**

- 6 units full year
- 0.5 hour individual tuition, 1.5 hour technical studies seminar, 1.5 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: COMP 2002 Practical Study IIB
- Restriction: 4862 Composition Studies III
- Assessment: folio of exercises, compositions, including recordings where possible 50%, technical studies assignments, participation 25%, composers' workshop assignments, participation 25%

Individual tuition: Develops skills in composition for various instrumental and vocal ensembles and expands knowledge of styles, structures, notation and score presentation. Technical studies: Advanced compositional and analysis techniques. Composers' workshop: The performance of students' compositions based on projects.

## ENS 3001A/B

## A Kind of Blue III

- 3 units full year
- 3 hours rehearsals per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Vocal Ensemble II
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 3002A/B

#### Adelaide Connection III

- 3 units full year
- 3 hours per week, additional concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Vocal Ensemble II
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of jazz styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 3004A/B

#### **Big Band One III**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble II
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances within the Big Band jazz tradition.

## ENS 3005A/B

## **Big Band Two III**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- · Prerequisite: audition
- Restriction: Large Jazz Ensemble II

 Assessment: ensemble achievement in rehearsals/performances, individual contribution
 100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances within the Big Band Jazz tradition.

## ENS 3006A/B

#### **Big Band Three III**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble II
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances within the Big Band jazz tradition.

## ENS 3009A/B

#### **Elder Conservatorium Symphony Orchestra III**

- 3 units full year
- Up to 5 hours supervised rehearsals (or equiv) per week, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules - but other students may also audition for limited number of places
- Prerequisite: audition
- Restriction: Orchestra III
- Assessment: ensemble achievement in rehearsals and performances, individual contribution - 100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for symphony orchestra.

## ENS 3010A/B

## **Elder Conservatorium Wind Orchestra III**

- 3 units full year
- 3 4 hours supervised rehearsals for Wind Ensemble, additional rehearsals for concerts may be required
- Prerequisite: audition
- Restriction: Large Ensemble (Wind) III
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for wind ensemble

## ENS 3011A/B

#### **Jazz Guitar Band One III**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: Music degree students only consult relevant Academic Program Rules
- Prerequisite: Audition
- Restriction: Large Jazz Ensemble II
- Assessment: Ensemble achievement in rehearsals/performances and individual contribution - 100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances of specialised arrangements.

## ENS 3012A/B

## **Jazz Guitar Band Two III**

- 3 units full year
- 3 hours per week, additional sectional & concert rehearsals may be required
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Large Jazz Ensemble III
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Develops musicianship in the large ensemble context by focussing on the skills of reading, listening, stylistic interpretation, intonation, blend rehearsals and performances of specialised arrangements.

## ENS 3017A/B

#### Percussion Ensemble III

- 3 units full year
- 2 hours supervised rehearsals per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Percussion Ensemble III
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Rehearsal and performance of repertoire for percussion ensemble.

## ENS 3023A/B

#### Chamber Orchestra III

- 3 units full year
- 2.5 hours classes, supervised rehearsals per week
- Eligibility: priority given to music degree students, consult relevant Academic Program Rules - other students may audition for limited number of places
- Prerequisite: audition
- Restriction: Chamber Orchestra III
- Assessment: ensemble achievement in rehearsals/performances, individual contribution - 100% attendance required except in cases of illness or approved leave

Through the study of an appropriate and balanced selection of chamber orchestra repertoire, students will develop advanced techniques in ensemble playing with particular focus on musicianship, rehearsal discipline and performance experience.

#### ENS 3025A/B

#### Elder Conservatorium Chorale III

- 3 units full year
- 2.5 hour rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required

- Eligibility: priority given to music degree students - consult relevant Academic Program Rules - other students may also audition for a limited number of places
- Prerequisite: audition
- Restriction: Large Vocal Ensemble II
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 3026A/B

#### Adelaide Voices III

- 3 units full year
- 2.5 hour rehearsal per week, performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules - other students may also audition for a limited number of places
- Prerequisite: audition
- Assessment: ensemble achievement in rehearsals/performances, individual contribution
   100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied chamber choral works in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 3027A/B

#### **Bella Voce III**

- 3 units full year
- 2 hours per week, performances as scheduled, additional concert rehearsals may be required
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules - other students may also audition for a limited number of places
- · Prerequisite: audition

 Assessment: ensemble achievement in rehearsals/performances, individual contribution -100% attendance required except in cases of illness or approved leave

Rehearsal and performance of accompanied and unaccompanied choral works for female voices in a variety of musical and choral styles; on-going development of choral, musical and ensemble skills to a high level.

## ENS 3030

#### **Chamber Music IIIA**

- 1.5 units semester 1
- 1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester
- Eligibility: music degree students only consult relevant Academic Program Rules
- · Prerequisite: audition
- Restriction: Chamber Music III
- Assessment: satisfactory attendance at workshops, participation in rehearsals, performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include unconducted works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

## ENS 3031

#### **Chamber Music IIIB**

- 1.5 units semester 2
- 1 hour workshop, 1 hour unsupervised rehearsals per week; 5 hours supervised rehearsals per semester
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: Chamber Music III
- Assessment: satisfactory attendance at workshops, participation in rehearsals, performances, end of semester practical exam

Rehearsal and performance of works for chamber ensemble (i.e. one person to a part). This may include unconducted works prepared in Early Music Workshop, Brass Ensemble, Percussion Ensemble and Guitar Ensemble.

## **GENMUS 3004**

#### Instrumental Music Pedagogy III

- 3 units semester 2
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Quota may apply
- Prerequisite: GENMUS 2003 Instrumental Music Pedagogy III or equivalent prior knowledge and experience
- Restriction: GENMUS 2004 Instrumental Music
   Pedagogy IIB
- Assessment: 2 class presentations 40%, teaching practice 60%

Development of an ability to foster the learning potential of pupils and designed for students who have already begun to teach an instrument. Congruent verbal and non-verbal behaviours, use of appropriate vocabularies, the development of diagnostic, evaluative and planning techniques, the encouragement of creative thinking in pupils and teaching for musical meaning are included in a non instrument specific workshop situation using demonstrating, video recording and reporting techniques.

## **GENMUS 3005**

#### Music, Media & Contemporary Society III

- 3 units not offered 2007
- 3 hours per week
- Restriction: GENMUS 3005 Music, Media and Contemporary Society IIIA, 9801/5307 Music in Popular Culture II/III, 4293/8324 Music in Popular Culture II/III (Arts)
- Assessment: essay 40%, exam 60%

This course offers an examination of musical practice in contemporary society. Drawing upon a range of examples from popular music, classical music, film music, and background music, the course considers the varied aesthetic and cultural uses of music and music media. At the same time, it looks at the interconnectedness of musical practices brought about through music-oriented technology. This may be seen especially in the general impact of recording technology on all forms of music-making and consumption, but also in the business and promotional practices associated with the global music industry, and in current issues related to music copyright. Throughout the course, an emphasis will be placed on developing students' ability to critically examine and discuss aspects of musical aesthetics, behaviour, function, and meaning.

## **GENMUS 3009**

#### Music, Media & Contemporary Society III (Arts)

- 6 units not offered 2007
- 3 hours per week
- Eligibility: ability to play/ read music not required
- Restriction: GENMUS 3005 Music, Media and Contemporary Society IIIA, 9801/5307 Music in Popular Culture II/III, 4293/8324 Music in Popular Culture II/III (Arts)
- Assessment: essay 40%, exam 60%

This course offers an examination of musical practice in contemporary society. Drawing upon a range of examples from popular music, classical music, film music, and background music, the course considers the varied aesthetic and cultural uses of music and music media. At the same time, it looks at the interconnectedness of musical practices brought about through music-oriented technology. This may be seen especially in the general impact of recording technology on all forms of music-making and consumption, but also in the business and promotional practices associated with the global music industry, and in current issues related to music copyright. Throughout the course, an emphasis will be placed on developing students' ability to critically examine and discuss aspects of musical aesthetics, behaviour, function, and meaning.

## GENMUS 3010A/B Studies in Composition III

- 3 units full year
- 1.5 hour technical studies seminar, 1.5 hour practical workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: Practical Study: Composition I/II/III
- Assessment: sem 1: technical studies assignments & participation 20%, composers' technical studies assignments & participation 20%, sem 2: technical studies assignments & participation 30%, composers' workshop assignments and participation 30%

Study of the fundamentals of composition in various styles and genres. Technical studies seminar: compositional methods and analysis. Workshop: project-based composition leading to performance of students' works.

## **GENMUS 3020**

#### **Choral Masterworks III**

- 3 units semester 1
- 2 hour workshop
- Eligibility: music degree students only consult relevant Academic Program Rules
- Assessment: 2 written assignments, each 50%

A consideration of aspects of the School's current opera, music theatre project, and / or major choral work.

#### **GENMUS 3021**

#### **Choral Repertoire III**

- 3 units not offered 2007
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Assessment: 2 written assignments 50% each

A consideration of aspects of the School's current opera, music theatre project, and / or major choral work.

## **GENMUS 3023**

#### **Conducting IIIA**

- 1.5 units semester 1
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: credit or higher in GENMUS 2024 Conducting IIB
- Assessment: assignments including score preparation, rehearsal planning, repertoire study, development of specific aural skills, observation & review 40%, 2 x viva voce and practical assessments 60%

Instrumental ensemble techniques. Continued development of specific skills and techniques for working with orchestras, concert bands and other instrumental ensembles; working with a variety of musical styles; advanced ensemble skills; developing a conductor's working knowledge of relevant instruments; effective rehearsal and problem solving; development of specific aural skills; working with a variety of musical styles and performance practices; repertoire and resources study including detailed score study of selected set works.

#### GENMUS 3024

#### **Conducting IIIB**

- 1.5 units semester 2
- 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: 55% or higher in GENMUS 3023 Conducting IIIA
- Restriction: Conducting IIIB
- Assessment: assignments including score preparation, rehearsal planning, repertoire study & development of specific aural skills, observation & review 40%, 2 x viva voce and practical assessments 40%, class participation 20%

Choral techniques. Continued development of specific skills and techniques for working with choirs including developing choral tone; diction; working with a variety of musical and choral styles; introduction to choral singing in languages other than English; advanced ensemble skills; effective rehearsal and problem solving; development of specific aural skills; working with a variety of musical styles and performance practices; repertoire and resources study including detailed score study of selected set works.

#### GENMUS 3026A/B

#### Perspectives in Music Technology III

- 3 units full year
- 2 x 1 hour seminar p/w 24 weeks
- Eligibility: priority given to music degree students
   consult relevant Academic Program Rules as other students may audition for remaining places
- Prerequisite: Perspectives in Music Technology II
- Assessment: papers/presentations 50%, exams 50%

Seminar 1: cultural and historical analysis of new technologies and music. Areas examined include critical models, cultural industry and products, the philosophy of sound, new media and new modes of music/sound representation. Seminar 2: specific scientific analysis and

understanding of innovative sound and music technologies. This includes perception and understanding of signal manipulation, new processing, interface and instrument building.

#### **GENMUS 3027**

#### **Blues All Around My Head III**

- 3 units semester 2
- 3 hours lecture per week
- Available for Non-Award Study
- Assumed Knowledge: Basic familiarity with music notation and rudimentary chord progressions
- Restriction: GENMUS 1006 Blues All Around My Head I
- Assessment: 2 hours exam 50%; essay 50%

Blues has had an enormous aesthetic and social impact over the past 100 years. This impact may be seen in the development of Blues as a musical form in its own right, but also through Blues' influence upon Jazz, Rock and most other genres of popular music, and through its iconic representation in popular culture. This course has two main aims. First, it offers a chronological survey of the Blues, from its African and New World origins through its maturity in early 20th century Mississippi Delta Blues and beyond, including the role of Blues in Jazz and Folk, the relationship of Blues and Gospel singing, the Chicago Electric Blues scene and emergence of R&B, the British and U.S. Blues revivals of the 1960s, and more contemporary manifestations of Blues. The other aim of the course is to understand Blues as music which in its development, promotion, and stylistic evolution, has been closely linked to media technology, and to ideas about authenticity and entertainment in a racially charged social context. Here the emphasis is on understanding the ways in which musical production, distribution and promotion, and archiving of recordings has been fundamental in the invention and reinvention of the Blues.

#### **GENMUS 3028**

#### **Blues All Around My Head III (Arts)**

- 6 units semester 2
- 3 hours lecture per week
- Assumed Knowledge: Basic familiarity with music notation and rudimentary chord progressions

- Restriction: GENMUS 1006 Blues All Around My Head I
- Assessment: 2 hours exam 50%; essay 50%

Blues has had an enormous aesthetic and social impact over the past 100 years. This impact may be seen in the development of Blues as a musical form in its own right, but also through Blues' influence upon Jazz, Rock and most other genres of popular music, and through its iconic representation in popular culture. This course has two main aims. First, it offers a chronological survey of the Blues, from its African and New World origins through its maturity in early 20th century Mississippi Delta Blues and beyond, including the role of Blues in Jazz and Folk, the relationship of Blues and Gospel singing, the Chicago Electric Blues scene and emergence of R&B, the British and U.S. Blues revivals of the 1960s, and more contemporary manifestations of Blues. The other aim of the course is to understand Blues as music which in its development, promotion, and stylistic evolution, has been closely linked to media technology, and to ideas about authenticity and entertainment in a racially charged social context. Here the emphasis is on understanding the ways in which musical production, distribution and promotion, and archiving of recordings has been fundamental in the invention and reinvention of the Blues.

## JAZZ 3000A/B

#### Jazz Performance III

- 9 units full year
- 1 hr individual tuition p/w -24 wks, jazz forum (using small jazz ensembles) 1.5 hrs p/w, technique/repertoire class (master class) organised by instrumental/vocal specialisation 1.5 hrs p/w, small jazz ensemble
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: JAZZ 2000B Jazz Performance II Pt 2, Pass 1 or above
- Restriction: 7054 Performance III (Jazz), 3395 Jazz Ensemble Small III
- Assessment: sem 1: 30 min mid year practical exam with a technical focus 20%, Small Jazz Ensemble 20%; sem 2 final 45 min practical exam 40%, Small Jazz Ensemble 20% ( final practical exam must be passed in order to pass course)

Through the study of appropriate technical and jazz repertoire, students develop advanced technical skills together with a sound understanding of jazz style/interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well developed creative and expressive sense. They need to demonstrate jazz improvisation in appropriate style and a strong conceptual understanding of the compositions performed together with an ability to communicate with their audience.

Small Jazz Ensemble: Studies the roles of band leader, soloist, sideman, rhythm section player in rehearsal, recording band and concert stage environments. Further develops advanced techniques of jazz improvisation in all styles, with an emphasis on contemporary techniques and styles. Small jazz ensemble: Topics include: repertoire - analysis of tune structure; playing in different tempi & keys; arrangements; leader roles: ensemble communication: solo and accompaniment roles: group awareness, active listening and response; levels of density; balance; group phrasing; matching time and feel; changing feel; playing in different styles; colla voce; solo structure: solo intensification soloing within constraints; playing in different combinations; trading 4's & 8's; stop choruses and solo breaks; playing in context, maintaining mood; recovering from mistakes; group dynamics (personal); tuning; individual sound; relaxation; playing with confidence; energy; dynamics; articulation & colour.

#### JAZZ 3005A/B

#### Jazz Improvisation III

- 3 units full year
- 1 hour lecture, 1 hour tutorial per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: JAZZ 2006B Jazz Improvisation II
   part 2
- Restriction: 8075 Improvisation III
- Assessment: ongoing (including original contemporary jazz composition) 40%, end of semester exams (20% written, 40% practical)

Further development of 'Standard' & 'Bop' material, in conjunction with Theory and third year Tunes List; modal styles: applications & exercises in pentatonics, altered pentatonics & fourths; solo development techniques, particularly application of tension/outside devices & methods; analysis of modal solos (eg Coltrane); contemporary jazz styles; contemporary & polychord harmonies; chord/scale relationships; rhythmic devices/techniques (eg cross-rhythms, metric modulation, etc); playing/improvising in unusual forms, time-signatures and harmonies. Principles and practice of 'Free Jazz'.

## JAZZ 3600A/B

#### **Practical Study III: Jazz**

- 6 units full year
- 12 hours indiv. tuition 24 wks, 1.5 hours performance class per week, 1.5 hours jazz performance forum per week, 1 hour supervised small jazz ensemble workshop (laboratory) p/w -24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: JAZZ 2006B Practical Study II: Jazz Part 2
- Restriction: 7268 Performance IIIB (Jazz)
- Assessment: sem 1: 15 min mid-year assessment 20%, teacher's report 5%, ensemble laboratory 10%: sem 2: teacher's report 5%, 25 min prac. assessment 50%, ensemble laboratory 10% (end of year prac exam must be passed in order to pass course)

Technique and repertoire on an instrument or voice at levels appropriate to an individual student's attainments. All students must attend an individual lesson and a 1.5 hour performance class particular to their major study.

#### **MUSCORE 3001**

#### Music in Context III: Music since 1900

- 3 units semester 1
- 1 hour lecture, 1 hour tutorial per week
- Assumed Knowledge: harmonic conventions and formal procedures of western music, including a knowledge of the harmonic idioms of late 19th century music
- Assessment: history assignment 40%, theory assignments 40%, Repertoire listening exam 20%

Lectures: Historical and cultural studies of music since 1900, and the currents of thought, social and political changes, and technological developments that have shaped it. Tutorials: theoretical and analytical studies of the thematic, harmonic, stylistic, and formal aspects of music since 1900.

## **MUSCORE 3002**

## **Music in Context IIIA: Jazz**

- 3 units semester 1
- 1 hour theory lecture, 2 hour tutorial, 1 hour jazz arranging lecture per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSCORE 2003 Music in Context IIA: Jazz, MUSCORE 2004 Music in Context IIB: Jazz, JAZZ 2007B Jazz Arranging Class II
- Restriction: 4838 Jazz Theory III
- Assessment: theory (weekly assignments & tests 25%, exam 75%) 50%; jazz arranging (small assignments 100%) 50%

Jazz Theory: extensive study of chords, scales and modes and their relationships; research of standard harmonic progression and standard tunes; advanced chord substitution and polytonality. Jazz arranging and composition: further development of jazz arranging techniques and skills for medium to large ensembles (eg Big Band).

## **MUSCORE 3003**

#### **Music in Context IIIB: Jazz**

- 3 units semester 2
- 1 hour theory lecture, 2 hour tutorial, 1 hour jazz arranging lecture per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite : MUSCORE 3002 Music in Context IIIA: Jazz
- Restriction: 4838 Jazz Theory III
- Assessment: theory: (weekly assignments, tests 25%, exam 75%) 50%, jazz arranging (small assignments 50%, major assignment 50%) 50%

Jazz Theory: Advanced level study of the tonal organisation and rhythmic structure of contemporary jazz. Topics include: Investigation and study/application of the 'Lydian Chromatic Concept' by George Russell; study of other techniques/systems such as 12 tone techniques, Eastern scales/techniques, and systems used by 20th century composers - Bartok, etc. Jazz arranging and composition: further development of jazz arranging techniques and skills for medium to large ensembles (eg Big Band) - submission of big band arrangement and compositions

#### **MUSCORE 3004**

## Music & Music Making in the Australian Context III

- 3 units semester 2
- 1 hour lecture, 8 x 1.5 hour workshops
- Assessment: history assignment 40%, careers assignment 40%, repertoire listening exam 20%

Lectures: the practice of music in Australian society, from traditional Aboriginal music, through popular and high art forms of transplanted Western culture, to the highly diverse musical culture of contemporary Australia. Tutorials: focus on career paths in music in Australia, and the acquisition of relevant career skills.

## MUSCORE 3999A/B

## Jazz Theory for Music Education III

- 3 units full year
- 1 hour theory lecture, 1 hour tutorial per week
- · Eligibility: Music Education students only
- Prerequisite: MUSCORE 2004 Music in Context IIB Jazz
- Assessment: theory, weekly assignments, tests 25%, exam 75%

Extensive study of chords, scales and modes and their relationships; research of standard harmonic progression and standard tunes; advanced chord substitution and polytonality.

Advanced level study of the tonal organisation and rhythmic structure of contemporary jazz. Topics include: Investigation and study/application of the 'Lydian Chromatic Concept' by George Russell; study of other techniques/systems such as 12 tone techniques, Eastern scales/techniques, and systems used by 20th century composers -Bartok, etc.

## MUSED 3001 Music Education IIIA

## 3 units - semester 1

- 1 hour lecture, 2 hour workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSED 2001/2002 Music Education IIA & IIB
- Restriction: 5364 Music Education III

 Assessment: strings methodology journal & practical demonstration 30%, essay 30%, curriculum assignments 40%

String instrument methodology involving learning about the orchestral string family, gaining experience in writing for and playing string instruments, and basic methodology. Classroom music curriculum studies - introduction to teaching principles, lesson planning, classroom management, and communication. Teaching strategies for junior secondary level (i.e. Years 8-10) music classes. Current curriculum documents. Psychological approaches to musical development and learning, including personality, motivation, creativity and social influences. An introduction to the application of technology in music education.

## **MUSED 3002**

#### Music Education IIIB

- 3 units semester 2
- 1 hr lecture, 2 hr workshop (may be taught in condensed format to accommodate Music Educ. Practicum III) per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: Music Education IIIA
- Restriction: 5364 Music Education III
- Assessment: brass methodology journal & practical demonstration 30%, seminar presentation 20%, curriculum assignments 50%

Brass instrument methodology involving learning about the brass family, gaining experience in writing for and playing brass instruments, and basic methodology. Teaching strategies for secondary school music classes, particularly for aural, theory and listening areas. Issues in Music Education research including theories of learning, musical ability, and perception, technology, assessment and evaluation. Research in instrumental instruction

## **MUSED 3003A/B**

#### Music Education Ensembles III

- · 3 units full vear
- 2 hour ensemble (with Music Education Level II), 1 lecture per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Restriction: 5364 Music Education III.

• Assessment: arranging exercises 20%, arrangement/s 60%, participation 20%

Participation in and direction of rehearsals and performances of the Music Education band and choir involving repertoire in a broad range of genres and styles. Instrumental and vocal ensemble rehearsal techniques. Advanced principles of arranging and composing music for ensembles.

## **MUSED 3004**

#### Music Education Practicum III

- 3 units semester 2
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: MUSED 3001 Music Education IIIA
- Restriction: 5364 Music Education III

Students will undertake one placement of supervised teaching practice (equiv. to 20 days/4 weeks) in a school. Students who successfully complete the course are given a non-graded pass.

## **MUSST 3001**

#### Approaches to Music III

- 3 units semester 1
- 2 hour lecture/discussion, 1 hour workshop per week
- · Eligibility: only available to students enrolled in a music degree -consult relevant Academic **Program Rules**
- Assessment: assignment 20%, 3000 word essay 60%, oral presentation of research 20%

Development of theory and techniques of music studies with detailed investigation of case studies. A theme such as Festivals may serve as the focus for the semester.

## **MUSST 3002**

#### Advanced Music Seminar IIIA

- 3 units semester 2
- 2 hour seminar per week
- Assessment: essay or research/creative project equivalent appropriate to topic, seminar presentation

In-depth study of an area (or a comparative study of areas) of music history, culture, theory or practice (or combination of these). The topic offered for any given year will be advertised prior to enrolment. The topic for semester 2: Composing for film.

## MUSST 3003

## Advanced Music Seminar IIIB

- 3 units semester 1
- 2 hour seminar per week
- Assessment: essay or research/creative project appropriate to topic, seminar presentation

In-depth study of an area (or a comparative study of areas) of music history, culture, theory or practice (or combination of these). The topic offered for any given year will be advertised prior to enrolment.

The topic for semester 1: Australian Indigenous Music and Performance. This course introduces students to a range of contemporary and traditional forms of Indigenous musical performance. Emphasis is placed on cultural as well as musical aspects of songs and performance, including the importance of Indigenous performance both within local communities and for Australian society at large. Featured Topics include ceremonial songs and dances of Arnhem Land, the Central Desert, and other remote communities; Indigenous popular music of urban, pastoral and remote communities; the use of Indigenous elements in work by non-Indigenous composers; and relevant links between these different types of music.

## **MUSST 3005**

## Foundation for Honours III: Music Studies

- 3 units semester 2
- 2 hour seminar per week
- Assessment: assignment appropriate to student's major area of interest 30%, 3000 word essay 60%, oral presentation of research 10%

Further studies of approaches to researching music and scholarly presentation of outcomes. It provides foundations for honours level work in composition, ethnomusicology, musicology, music education, music technology and performance.

## **MUSST 3010**

#### Studies in Japanese Music III

- 3 units not offered in 2007
- 2 hour seminar per week
- Quota may apply
- Assumed Knowledge: music reading skills, advanced theory background
- Assessment: 3000 word essay 60%, oral presentation of research 20%, exam 20%

An overview of performance practice and music genres in Japan. Method and concepts for studying Japanese music in traditional and contemporary forms.

## **MUSST 3011**

#### Pathfinders in American Music III

- 3 units not offered 2007
- 2 hour seminar per week
- Quota may apply
- Assumed Knowledge: music reading skills, advanced theory background
- Assessment: 5000 word seminar paper

The study of two of the most original and freethinking composers of any age or nationality: Charles Ives and John Cage. A study of the philosophers (Thoreau, Emerson), writers (Poe, Melville, Hawthorne), painters (Pollock, Rauschenberg).

## **MUSST 3012**

#### The String Quartets of Bartok III

- 3 units semester 2
- 2 hours seminar per week
- Eligibility: Music degree students only
- Assumed Knowledge: All Level I core music history & theory
- Assessment: 5000 word seminar paper

The six String Quartets of Bela Bartok are universally acclaimed as being amongst the greatest achievements in the musical repertory. The course will touch on all six of these Quartets but will focus in particular depth on numbers 4, 5 and 6 including - the influence of Eastern European folk idioms, structural symmetry, manipulation of interval cells, transformation of fold based rhythms. Detailed reference to the scores will be required.

## **MUSST 3013**

#### The Music of Messiaen III

- 3 units semester 1
- 2 hours seminar per week
- Eligibility: Music degree students only
- Assumed Knowledge: All Level I core music history & theory
- Assessment: 5000 word seminar paper

Both organ and piano formed a central focus of Olivier Messiaen's musical activity, reinforced through the influence of Roman Catholic ritual and of Yvonne Loriod, his virtuoso pianist wife. Music selected from Messiaen's extensive and richly varied corpus of keyboard works is considered in the context of the composer's total creative output and pre and postwar French compositional practice.

## **MUSST 3014**

#### **Rhythm in the 20th Century III**

- 3 units semester 2
- 2 hours seminar per week
- Eligibility: Music degree students only
- Assumed Knowledge: All Level I core music history & theory
- Assessment: 5000 word seminar paper

The twentieth century witnessed an explosion in different approaches towards the composition of musical rhythm. Of all the aspects of traditional music theory rhythm has been the most neglected. This course tries to redress the balance: the aspects of rhythm that will be examined include those of relevance to the classical and jazz worlds. The following composers will be considered: Stravinsky, Bartok, Messiaen, Ives, Carter, Reich, Riley, Lutoslawski, Ligeti, Nancarrow.

#### **MUSST 3015**

#### The Science of Music III

- 3 units semester 1
- 2 hour seminar per week
- Eligibility: Music degree students only
- Assumed Knowledge: All Level I core in music history & theory

This course will address certain theoretical foundations of music theory and harmony from Pythagorus to the present day. It will be of relevance to all Music students including those specialising in performance or music technology or composition but would also be accessible to students from other program areas.

Content will be a combination of concepts that are at the same time musical, physical or mathematical; it will include areas such as the Music of the spheres, Pythagorean observations on the behaviour of musical sound, the actual overtones developing into aesthetic principles of harmony, consonance and dissonance etc.

## MUSST 3016 The Music of Debussy III

- 3 units semester 2
- 2 hour seminar per week
- Assessment: 3 assignments: 2 x 1500 words 25% ea, 1x 3000 words 50%

This course will examine particular works in detail from perspectives that will be equally relevant to students from the classical and jazz streams. Topics to be covered will include: harmonic language; non-functional harmony; harmonic parallelism; types and treatment of modes; analysis of proportions (drawing on the book by Roy Howat); Debussy's influence (e.g. on Messiaen and other French composers, on the jazz pianist-composer Bill Evans). The following works will be considered from an analytical perspective: Prelude a l'apres-midi d'un faune; La Mer; Jeux; selected piano works.

## MUSTECH 3003A/B

## **Music Technology III**

- 6 units full year
- 4 hours p/w (2 hr laboratory practical , 2 hr workshop) 24 weeks
- Eligibility: Music degree students only
- Prerequisite: Music Technology II
- Assessment: minor assignments 60%, major Project 40%

Laboratory practical: Through the practical study of software and hardware students will develop advanced specialist skills in the application of studio and desktop music technology. This will include procedural computer music programming, control systems, mixing, post-production, mastering and sound design for moving image.

Workshop: Students will engage with the concepts of music technology through the development of creative, theoretical and technical skills via workshops, presentations, listening, industry focus and research.

## PERF 3003A/B Stagecraft III

- 3 units full vear
- 2 hour workshop, 1 hour movement class per week
- Prerequisite:: PERF 2003A/B Stagecraft II

 Assessment: sem 1- weekly log 30%, attendance & participation 20%; sem 2 - 1000 word essay 30%, participation in stagecraft productions 20%

Development of skills in presentation and stagecraft, movement, posture, gesture and acting, integration of movement skills with dramatic expression, characterisation and analysis.

## **PERF 3004A/B**

#### **Voice Practicum III**

- 3 units full year
- 3 hours per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: PERF 2004B Voice Practicum II Pt 2
- Restriction: 8434 German for Singers
- Assessment: repertoire 20%, language class assignments 40%, final exam 40%

Repertoire class, language (German).

#### **PERF 3010**

#### Accompanying III

- 3 units semester 1
- 2 hour lecture/workshop per week
- Eligibility: music degree students only consult relevant Academic Program Rules
- Quota may apply
- Prerequisite: PERF 2001B Accompanying II Pt 2
- Assessment: practical assessment, written assignment

Investigation of the nature of the pianist's role as accompanist, associate artist, chamber musician and rehearsal pianist. Further development of ensemble skills, rehearsal techniques and management of the rehearsal process.

## **PERF 3500A/B**

#### **Classical Performance III**

- 9 units full year
- 1 hour indiv. tuition p/w 30 wks, Classical Performance Forum 1.5 hours p/w - 24 wks, technique/repertoire class organised on instrumental/ vocal specialisation 1.5 hours p/w -24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules

- Prerequisite: PERF 2500B Classical Performance II Part 2 at Pass 1 level or above in the relevant instrument
- Assessment: sem 1: 30 min. technique assessment or equiv. 40%, ; sem 2: 45 min end of year prac. exam 60% ( end of year exam must be passed in order to pass course)
- Specialisations: Brass, Keyboard, Percussion, Strings, Voice and Woodwind

Through the study of appropriate technical and recital literature, students develop advanced technical skills together with a sound understanding of interpretative principles. They are expected to perform their chosen repertoire with accuracy and fluency, displaying rhythmic control together with a well-developed expressive sense. They need to demonstrate a strong conceptual understanding of the works performed together with an ability to communicate with their audience.

Subject to special audition and interview and to the availability of suitably qualified teachers, selected students will be permitted to specialise in the area of orchestral studies. This will include a focus upon orchestral excerpts and audition material (including concerti). Individual contracts, incorporating content and assessment, will be developed for each student.

## **PERF 3600A/B**

## Practical Study III: Performance

- 6 units full year
- 12 hours indiv. tuition over 24 wks, Practical Study Forum 1.5 hours p/w - 24 wks, technique/ repertoire class organised according to instrumental/ vocal specialisation 1.5 hours p/w - 24 wks
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: PERF 2600B Practical Study II: Performance part 2
- Restriction: any Level III Performance course worth 6 units
- Assessment: sem 1 teacher assessment 5%, 15 min practical assessment 35%; sem 2 teacher assessment 5%, 25 min practical assessment 55% (end of year exam must be passed in order to pass course)

Development of technique and repertoire on an instrument or voice at levels appropriate to an individual student's potential.

## MUSED 4001A/B

## **Music Education IV**

- 3 units full year
- 2 hours per week workshop (24 hrs per year scheduled around teaching practice blocks in sem 1 & 2)
- Eligibility: music degree students only consult relevant Academic Program Rules
- Prerequisite: Music Education IIIB

Assessment: curriculum assignment/s 60%, project 40%

Classroom music curriculum studies for senior secondary level (Years 11 and 12), including SACE, IB and VET music studies. Current developments in arts education policies. Professional issues including ethics, copyright and policies.

## MUSED 4002A/B

#### **Music Education Project IV**

- 3 units full year
- 12 x 1 hour workshops
- Prerequisite: MUSED 3004 Music Education Practicum III, MUSED 3002 Music Education IIIB
- Assessment: Assignments 50%, Arrangement 25%, Essay 25%

The course seeks to further develop ensemble direction and arranging skills, and to provide opportunities to evaluate conducting and arranging skills of self and others. The course seeks to extend knowledge pf playing standards of published repertoire either for school ensembles or for individual instrument families.

Workshop topics include: advanced arranging techniques; rehearsal management, ensemble techniques and conducting skills. Fieldwork will involve observation of at least 4 different ensembles.Where appropriate, students will be encouraged to participate whilst observing each ensemble, to assist the conductor with any sectional rehearsals, and to conduct at least one piece with each ensemble.

## Honours

## **ETHNO 4003**

#### **Honours Ethnomusicology**

- 24 units full year
- · Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.5
- Assessment: 5000 word research seminar paper 20%, 30 min. oral presentation 5%, negotiated project- variety of assessments by negotiation with supervisor & Honours Coordinator 25%, 10,000 word thesis 50%

A program of seminars and individual supervision in the theory and practice of ethnomusicology. Students will A program of seminars and individual supervision in the theory and practice of ethnomusicology. Students will complete: 1) research seminar (6 units): theory and methods of ethnomusicology including major concepts, research issues, transcription and editing, analysis, case studies. 2) negotiated project (6 units): an activity that complements major study e.g. editing, professional activity (such as affiliation with a professional society), fieldwork, a research project, a recording project, performance project or component from another Music Honours program. 3) major research project (12 units) - topic of choice as approved by Honours Coordinator.

## MUSCOMP 4010

#### **Honours Composition**

- 24 units full year
- · Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.5
- Assessment: a variety of assessment modes, depending on the choice of topics / components

A program of seminars and individual tuition in composition and analysis of music, with studies in electronic or computer music in appropriate cases. Candidates will be required to submit a major work, or group of works, the general nature of which has been approved in advance by the candidate's supervisor. Compositions: at least 12 units. Research paper or analysis: at least 6 units; in approved cases, students may take 6 or more units from a course/component of another Music honours course.

#### **MUSICED 4006**

#### **Honours Music Education**

- 24 units full year
- · Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.6
- Assessment: 2 x 3000 word seminar papers (3 units each), 6000 word minor project (6 units), 12,000 word dissertation or equiv. (12 units)

A program of seminars and individual tuition. Students will complete individual research assignments and a balanced proportion of related fieldwork. Subject to audition, a minor recital of 35 minutes may be presented in lieu of a minor project.

#### **MUSICOL 4011**

#### **Honours Musicology**

- 24 units full year
- · Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.5
- Assumed Knowledge: reading knowledge of language s necessary for program of study
- Assessment: 5000 word research seminar paper 20%, 30 min. oral presentation 5%, negotiated project - variety of assessments by negotiation with supervisor & Honours Coordinator 25%, 10000 word thesis 50%

A program of seminars and individual supervision in the theory and practice of musicology. Students will complete: 1) research seminar (6 units): theory and methods of musicology including major concepts, research issues, transcription and editing, analysis, contemporary and historical studies); 2)negotiated project (6 units): an activity that complements major study e.g. editing, professional activity (such as affiliation with a professional society), music criticism, a research project, a recording project, performance project or component from another Music Honours program; 3) major research project (12 units): topic of choice as approved by Honours Coordinator.

## **MUSTECH 4001**

#### **Honours Music Technology**

- 24 units full year
- Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.5
- Assessment: a variety of assessment modes, depending on the choice of topics. Composition

or creative work may be submitted on CD or DVD, through live performance or installation. (All components must be passed to pass the course.)

A program of seminars and/or individual supervision in the theory and practice of music technology. Students will complete individual research projects in areas that may include software development, practical applications of audio theory, algorithmic composition, or media integration. Major research project (which may include dissertation, research reports, software documentation, or other approved forms of submission relevant to the research): at least 12 units; composition or creative work: at least 6 units; in approved cases, students may take 6 units from a course/component of another Music Honours program.

## **PERF 4005**

#### **Honours Performance**

- 24 units full year
- 30 hours individual tuition in performance (1 hour p/w - 30 wks) supported by fortnightly 1.5 hour performance workshops - both provide emphasis on style and interpretation
- · Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.4
- Assessment: recital assessments in form of public recitals, negotiated projects assessed as satisfactory/unsatisfactory - all components must be passed in order to pass the course

The course consists of a number of topics : Recital 1 (12 units) (65 minute recital)- content and format will not be prescribed as the repertoire may include solo works, chamber music, orchestral material, concerti, accompaniment etc. Recital programs will be subject to approval. Recital 2 (6 units) (35 minute recital) - content and format will not be prescribed as the repertoire may consist of solo works, chamber music, orchestral material, concerti, accompaniment etc. Recital programs will be subject to approval. Negotiated Project (6 units or 2x3 units) - this is intended to allow for a variety of activities, including (but not limited to) ensemble work (small or large), professional activity (such as ASO), research project, concerto, recording project, involvement in some form of stage production or a course/component from another Music Honours program.

#### **PERF 4006**

#### **Honours Music Pedagogy**

- 24 units full year
- Eligibility: approved honours music students
- Prerequisite: see Program Rule 6.4
- Assumed Knowledge: GENMUS 2003/GENMUS 3004 or equiv.
- Assessment: 2 x 20 min seminar presentations/demonstrations 25%, 6000 word or 2 x 3000 word projects 25%, 12,000 word thesis 50%

A program of seminars, individual supervisions and workshops with a focus on the teaching, learning and related processes involved in piano or stringed instrument performance practice. Fieldwork is likely to include involvement in instrumental teaching programs on and off campus.

## MUSIC - VET

#### **VETMUS 1501**

#### **Music Industry & Business Management**

- 1 units semester 2
- 6 hours lectures
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular short tests concerned with knowledge & understanding of essential elements

Matters concerned with the music industry, its organisations, products and issues relevant to working in the industry will be explored. Students will be encouraged to strategically monitor their participation in relevant music and other networks. Copyright requirements to protect creative work and performance from unauthorised use will be investigated.

#### **VETMUS 1502**

#### **Occupational Health & Safety**

- 1 units semester 1
- 6 hours workshops
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular short tests concerned with knowledge & understanding of essential elements

Occupational health and safety, emergency situations and personal safety in the music industry will be examined and evaluated. Students will develop essential knowledge and skills in established procedures and understanding of legal requirements.

## **VETMUS 1503**

#### **Assignment Writing and Research Skills**

- 1 units semester 1
- 5 x 1 hour workshops
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: assignment 70%, library skills workbook 30%, study skills

Identification, location and use of a wide variety of research instruments in both electronic and nonelectronic systems will be investigated. Effective application of this research, its notation and acknowledgment will also be examined.

## VETMUS 1504A/B

#### **Career Management**

- 2 units full year
- 8 x 1.5 hour workshops per semester
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: written test & folio concerned with knowledge & understanding of essential elements

Image development, planning promotional activities, communicating strategically to achieve planned commercial outcomes and the development and expansion of artistic product will be explored. Students will be encouraged to strategically monitor their participation in relevant music and other networks.

## **VETMUS 1505**

#### **Copyright Law**

- 1 units semester 2
- 4 x 1 hour workshops
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular short tests concerned with knowledge & understanding of essential elements

The skills and knowledge required to protect creative work and performance from unauthorised use are examined and evaluated. Students will develop essential knowledge and skills in established procedures and understanding of legal requirements.

## VETMUS 1601A/B

#### **History & Literature**

- 2 units full year
- 1 hour lecture per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: assignments 70%, exam 30%

Students will increase their understanding of the general trends in the evolution of western music, the major styles, composers and works of the standard musical eras, and the basic analysis techniques which can be applied to this field of study.

## VETMUS 1602A/B

#### **Aural Development (VET)**

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: as required by stream/level

Students will be allocated to an appropriate stream based on a placement test. Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into five progressive streams for varying skill levels and areas of particular development.

## VETMUS 1605A/B

#### **Ensemble (C4)**

- 2 units full year
- 2 hours rehearsal per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular performances in appropriate ensemble

Students will increase their effectiveness as members of an instrumental group by developing musically interactive skills, empathy, diagnostic and evaluative ability through regular performance in a small or large ensemble at an appropriate level.

## VETMUS 1607A/B

#### **History of 20th Century Music**

- 2 units full year
- 1 hour lecture per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: presentation 20%, 2 exams 80%

Students will expand their knowledge and understanding of 20th century western art music. Significant developments in music language styles, noteworthy composers and their works will be investigated and students will gain facility in researching, evaluating and writing about these developments.

## VETMUS 1608A/B

#### **Theory of Music**

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: 2 exams

Students will develop an understanding of the fundamental principles of music theory, particularly with regard to functional harmony, music notation, harmonic and melodic construction and learn to view these historically.

## VETMUS 1609A/B Individual Tuition (C4)

- 4 units full year
- 24 hours individual tuition per year
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: mid year exam 30%, end of year exam 60%, teacher's report 2 x 5%

Students will develop to appropriate levels on an instrument or voice their technical skill, scope of repertoire, stylistic awareness and interpretive ability.

## VETMUS 1610A/B

## Individual Tuition (C3)

- 3 units full year
- 24 hours individual tuition per year
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: mid-year exam 30%, end of year exam 60%, teacher's report 2 x 5%

Students will develop to appropriate levels on an instrument or voice their technical skill, scope of repertoire, stylistic awareness and interpretive ability.

## VETMUS 1611A/B

#### Aural Development (C3)

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: 2 exams

Students will develop secure basic knowledge, understanding and critical listening skills in the construction, notation and constituent elements of elementary level instrumental music and song.

## VETMUS 1612A/B

#### Ensemble (C3)

- 2 units full year
- 2 hours rehearsal per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular performances in appropriate ensemble

Students will increase their effectiveness as members of an instrumental group by developing musically interactive skills, empathy, diagnostic and evaluative ability through regular performance in a small or large ensemble at an appropriate level.

## VETMUS 1613A/B

#### Theory of Music (C3)

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: 2 exams

Students will develop secure basic knowledge, understanding and written skills in elementary level music theory and song writing in various genres.

## VETMUS 1614A/B

## Aural Development (Dip)

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: as required for stream/level

Students will be allocated to a stream based on a placement test. Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into five progressive streams for varying skills levels and areas of particular development.

## VETMUS 1615A

#### **Concepts of Music (C4)**

- 6 units full year
- 1 hr lecture, 1 hr tutorial, 1 hr aural per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: assignments 50%, exams 50%

Theory: Students will study and apply scales, chord types, chord progressions, digital patterns, 12-bar blues and rhythm changes in all keys. Scales will include the blues scale, modes, bebop scales, diminished and whole-tone scales.

Aural: Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into five progressive streams for varying skill levels and areas of particular development. Students will be allocated to an appropriate stream based on a placement test. Refer to MUSCORE 1008.

History: The history and development of jazz, rock and other forms of popular music are studied in order to develop an understanding of the various styles and artists who have significantly contributed to the evolution of commercial music. The development of research skills is emphasised.

## VETMUS 1701A/B

#### **Jazz Styles 1**

- 3 units full year
- 1 hour lecture per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: ongoing assignments 50%, listening exams 50%

A broad study, analysis and application of the various styles of jazz, ranging from early New Orleans to Contemporary.

## VETMUS 1702A/B

#### **Jazz Theory 1**

- 2 units full year
- 1 hour lecture per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: 2 written exams 50%, research project 25%, presentations 25%

This course aims to provide a theoretical framework which students can apply within jazz improvisation, composition and arranging. It considers the nomenclature of chords, functional harmony and the study of advanced harmony, aural aspects, jazz rhythms and phrasing. All theoretical aspects are followed by practical applications.

## VETMUS 1703A/B

## **Jazz Piano Class 1**

- 2 units full year
- 1 hour per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Corequisite: VETMUS 1702A/B Jazz Theory 1
- Assessment: assignments, projects, exercises 25%, written & practical semester exams 75%

This course aims to provide sufficient stylistic knowledge and technique to allow the student to use keyboard as a means of self accompaniment and relating to other courses (eg, Theory, Arranging, Performance)

## VETMUS 1704A/B

#### Jazz Performance 1

- 4 units full year
- 24 hours individual tuition per year
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: attendance at Jazz Forum & relevant performance class, mid-year exam 30%, end of year exam 60%, teacher's report 2 x 5%

Students will develop to appropriate levels on an instrument or voice their technical skill, scope of repertoire, stylistic awareness and interpretive ability

#### VETMUS 1705A/B

#### **Improvisation 1**

- 3 units full year
- 1 hour lecture, 1 hour tutorial, 1 hour applied rhythm class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: assignments, participation in class, written & practical exams - improvisation 80%, rhythm 20%

This course enables students to develop and apply improvisation techniques. It considers the application of basic jazz improvisational techniques such as rhythm, modal scales and patterns to jazz repertoire.

## VETMUS 1707A/B

#### **Small Ensemble 1**

- · 2 units full year
- 3 hours rehearsal per week (1 hour supervised)
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: exams (30 min. playing time) 50%, continuous assessment 50% - students will also attend Jazz Forum

Students will gain ensemble experience and sensitivity by developing musically interactive skills, empathy, improvisation, through a regular rehearsal and performance schedule of various styles of jazz.

## VETMUS 1708A/B

#### Jazz Masterclass

- 2 units full year
- 1 hour tutorial per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: ongoing exercises/assignments and performances

Jazz Instrumental or Vocal Masterclass for each specialisation provides technical and stylistic support for the major study (instrument or voice). Discussions, demonstrations and performances will be used to inform on specific issues of the major study.

## VETMUS 1709A/B

## Jazz Forum

- 1 units full year
- 1.5 hours workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: attendance, participation, written comments by students

This course provides listening, performing and critical analysis experience for small jazz ensembles (typically 2-7 players). All students enrolled in Small Jazz Ensemble courses will perform several times each year at Jazz Forum, and in addition be called upon for comments within discussion sessions, regarding the performances of ensembles.

## VETMUS 1750A/B

## Individual Tuition (Jazz Diploma)

- 4 units full year
- 24 hours individual tuition
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: sem 1: teacher assessment 5%, 10 min. practical exam 30%; sem 2: teacher assessment 5%, 15 min. practical exam 60%

Students will develop their technical skill, scope of repertoire, stylistic awareness and interpretive ability to appropriate levels on an instrument or voice.

## VETMUS 1751A/B Small Ensemble (Jazz Diploma)

- 3 units full year
- 3 hours rehearsal per week (1.5 hours supervised)
- Eligibility: VET music students only consult relevant Academic Program Rules
- Corequisite: Ensemble and Sound Production
- Assessment: 2 exams (30 min. playing time) 50%, continuous assessment 50% - attendance & performance at Jazz Forum at least once per semester

Students will gain ensemble experience and sensitivity by developing musically interactive skill, empathy, and improvisation expertise through a regular rehearsal and performance schedule of various styles of jazz.

## VETMUS 1752A/B

#### Jazz Diploma Workshop

- 4 units full year
- 2 hour workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: weekly class exercises & participation 50%, written & practical exam at end of each semester 50%

Students will study and practically apply improvisational concepts, including rhythmic and motivic improvisation, understanding chord progressions, applying scales to chord progressions, and constructing an improvised solo.

## VETMUS 1753A

## Jazz Diploma Forum

- 1 units full year
- 1.5 hours jazz performance forum per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: attendance, participation, written comments by students

The course provides listening, performing and critical analysis experience for small jazz ensembles (typically 2-7 players). All students enrolled in Small Jazz Ensemble will perform once each semester in Jazz Forum, and in addition will be called upon for comments within discussion sessions regarding the performances of ensembles.

## VETMUS 1754A/B

#### **Jazz Accompaniment**

- 2 units full year
- 1 hour tutorial per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: weekly class exercises/participation 50%, practical exam end of each semester 50%

Students will study jazz rhythm section instruments including basic piano skills in chord voicing and accompaniment and basic skills on the drum kit playing a variety of styles and rhythmic patterns. Students will develop knowledge of jazz accompaniment through listening and discussion, and will practically apply their learning through opportunities to act as accompanists in ensembles on both keyboard and drum kit.

## **VETMUS 1755**

## Sound Production A

- 2 units semester 1
- 2 hours workshops per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Corequisite: Ensemble and Sound Production

Assessment: theoretical exams 50%, practical exams 50%

Students will develop the skills and knowledge required to operate a sound reinforcement system for a production in the cultural industries, the technical, communication and leadership competencies required to plan and manage technical production for a music recording.and the skills and knowledge required to record sound, using a variety of digital and analogue recording equipment in a studio or on location for a production in the cultural industries.

## **VETMUS 1756**

#### Sound Production B

- 2 units semester 2
- 2 hours workshops per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Corequisite: Ensemble and Sound Production

• Assessment: theoretical exams 50%, practical exams 50%

Students will develop the skills and knowledge required to operate a sound reinforcement system for a production in the cultural industries, the technical, communication and leadership competencies required to plan and manage technical production for a music recording.and the skills and knowledge required to record sound, using a variety of digital and analogue recording equipment in a studio or on location for a production in the cultural industries.

## VETMUS 1801A/B

#### **Composition Class**

- 2 units full year
- 1.5 hours class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: serial composition (written, performed & recorded) 40%, composition in 20th century style (written, performed & recorded) 40%, contribution to class, attendance 20%

Practical skills in composing works relevant to 20th Century musical thinking and hands-on familiarity with compositional techniques associated with this thinking will be developed.

## VETMUS 1802A/B Keyboard Musicianship (Majors)

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- · Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship (sight reading, reading from chord symbols, transposition, score reading), keyboard technique and stylistic performance practice.

## VETMUS 1804A/B

#### **Performance Class**

- 2 units full year
- 1.5 hours class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular performances in class

The knowledge, critical evaluation and communication skills of participants will be extended in the context of a broadly based performance forum.

## VETMUS 1807A/B

## **Technique & Repertoire Class**

- 3 units full year
- 1.5 hours class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: regular performances in class

Technical accuracy, stylistic fidelity and interpretive ability will be developed in the context of a performance forum with a specialist focus.

## VETMUS 1808A/B

#### **Keyboard Musicianship (Minors)**

- 2 units full year
- 1 hour class per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship (sight reading, reading from chord symbols, transposition, score reading), keyboard technique and stylistic performance practice.

## VETMUS 1850A/B

## Individual Tuition (Class Dip)

- 4 units full year
- 24 hours individual tuition
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: sem 1: teacher assessment 5%, 10 min. practical exam 30%; sem 2: teacher assessment 5%, 15 min. practical exam 60%

Students will develop their technical skill, scope of repertoire, stylistic awareness and interpretive ability to appropriate levels on an instrument or voice.

## VETMUS 1851A/B Ensemble (Class Dip)

- 3 units full year
- 3 hours rehearsal per week (1.5 hrs supervised)
- Eligibility: VET music students only consult relevant Academic Program Rules
- Corequisite: Ensemble and Sound Production
- Assessment: 2 exams (20 min. playing time)

Students will gain ensemble experience and sensitivity by developing musically interactive skill, empathy, and improvisation expertise through a regular rehearsal and performance schedule of various styles of classical music.

#### VETMUS 1852A/B

#### **Classical Diploma Forum**

- 1 units full year
- 1.5 hours VET/Practical Study Forum
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: attendance, participation

The course provides listening, performing and critical analysis experience. All enrolled students will perform at least one solo item and will be asked for comments concerning the performances being audited

## VETMUS 1853A/B

#### **Music Language Studies**

- 4 units full year
- 2 hour workshop
- Eligibility: VET music students only
- · Assessment: exam at end of each semester

Students will study and apply theoretical and constructional concepts in music through discussion, examination and evaluation of the principal developments in classical music compositional practice during the 18th, 19th and 20th centuries.

## VETMUS 1855A/B

#### Keyboard Musicianship (Class Dip) Minor

- 2 units full year
- 1 hour workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship, keyboard techniques and styles with particular reference to the principal developments in classical music compositional practice during the 18th, 19th and 20th centuries.

## VETMUS 1856A/B

## Keyboard Musicianship (Class Dip) Major

- 2 units full year
- 1 hour workshop per week
- Eligibility: VET music student only consult relevant Academic Program Rules
- Assessment: exam at end of each semester

Students will expand their skills and knowledge in applied harmony, keyboard musicianship, keyboard techniques and styles with particular reference to the principal developments in classical music compositional practice during the 18th, 19th and 20th centuries.

## VETMUS 1911A/B

## Audio Studies (C4)

- 4 units full year
- 1 hour lecture, 1 hour tutorial per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical & creative assignments, exams

Students will study music software for digital audio sequencing, editing, processing and mixing with a practical emphasis. Students will gain technical knowledge whilst achieving creative outcomes. Other areas examined include recording, tracking, mixing, post-production, mastering, looping and sound-design. Software may include Cubanese, Logic, Pro Tools and Live.

## VETMUS 1912A/B MIDI Studies (C4)

- 4 units full year
- 1 hour lecture, 1 hour tutorial per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical & creative assignments, exams

Students will study music software for MIDI sequencing and editing with a practical emphasis. Students will gain technical knowledge whilst achieving creative outcomes. Areas examined include the MIDI protocol, systems setup, software and hardware implementation, virtual instrumentation, MIDI scoring and performance and advanced techniques. Software may include ProTools, Cubase, Logic and Reason.

## VETMUS 1913A/B Music Technology Forum (C4)

- 3 units full year
- 2 hour workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical & creative assignments, exams

Students will embrace and extend the concepts of music technology. This will be achieved through the development of creative and technical skills in workshop topics, project participation, industry and artist talks and fulfilment.

## VETMUS 1951A/B

#### **Concepts of Music (Dip)**

- 3 units full year
- 1 hour lecture, 1 hour aural session per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: assignments 50%, exams 50%

Theory: Students will study and apply scales, chord types, chord progressions, digital patterns, 12-bar blues and rhythm changes in all keys. Scales will include the blues scale, modes, bebop scales, diminished and whole-tone scales.

Aural: Development of skills in identifying and notating melodic, harmonic and rhythmic units; development of critical listening skills through study of basic musical elements such as texture, timbre, articulation, dynamics, form and structure. This part of the course is divided into five progressive streams for varying skill levels and areas of particular development. Students will be allocated to an appropriate stream based on a placement test. Refer to MUSCORE 1008.

## VETMUS 1952A/B

#### Sound Engineering (Studio)

- 4 units full year
- 2 hour workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical and creative assignments

Students will learn about the process of studio sound engineering and production. Areas covered include signal flow and gain structure, studio equipment, microphone placement and selection, recording, mixing, post-production, mastering and session management.

## VETMUS 1953A/B

#### Audio Studies (Dip)

- 4 units full year
- 1 hour lecture, 1 hour tutorial per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical and creative assignments

Students will study music software for digital sequencing, editing, processing and mixing with a practical emphasis. Students will gain technical knowledge whilst achieving creative outcomes. Other areas examined include recording, tracking, mixing, post-production, mastering, looping and sound-design. Software may include Cubase, Logic, Pro Tools and Live.

## VETMUS 1954A/B

#### **MIDI Studies (Dip)**

- 4 units full year
- 1 hour lecture, 1 hour tutorial per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical and creative assignments

Students will study music software for MIDI sequencing and editing with a practical emphasis. Students will gain technical knowledge whilst achieving creative outcomes in the field of screen and media sound, arranging and composing. Areas examined include the MIDI protocol, systems setup, software and hardware implementation, virtual instrumentation, MIDI scoring and performance and advanced techniques. Software may include Pro Tools, Cubase, Logic and Reason.

## VETMUS 1955A/B

#### Music Technology Forum (Dip)

- 3 units full year
- 2 hour workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- Assessment: technical & creative assignments, presentations

Students will embrace and extend the concepts of music technology. This will be achieved through the development of creative and technical skills in workshop topics, project participation, industry and artist talks and fulfilment.

#### **VETMUS 1956**

#### Sound Engineering (Live)

- 2 units semester 1
- 2 hour workshop per week
- Eligibility: VET music students only consult relevant Academic Program Rules
- · Assessment: technical and creative assignments

Students will learn about the process of live sound engineering, reinforcement, production and management. Areas covered include PA setup, signal flow and gain structure, live sound equipment, microphone placement and selection, troubleshooting, pre-production, setup and session management.

## NURSING

## Level I

#### NURSING 1000

## **Human Sciences IA**

- 6 units semester 1
- Lectures, tutorials, workshops, labs, online teaching
- Assessment: to be advised

This course will introduce students to the human sciences that provide the foundation of effective nursing practice. It will be comprised of the following modules that will facilitate student learning of: (i) Human Biology IA: the functional organisation of the body, the cell and its function, body fluids and chemistry. Homeostasis and control of the body functions. (ii) Microbiology, Immunology and Infection Control IA: classification of microbes and the basic principles of infection control. (iii) Health and Illness A: the physiological basis of health and illness, terminology, body image, sexuality and theories of health, illness and disease. Evidence based practice (EBP) and research in health care. (iv) Medication and Management IA: safe use of medicines, legislation governing administration and prescribing, modes of administration, fundamental skills for basic drug dose calculations and nomenclature and classification systems.

## NURSING 1001

## **Nursing Practice IA**

- 6 units semester 1
- Workshops & clinical placement
- Assessment: to be advised

This course will be comprised of the following modules: (i) Nursing as a Profession IA: the role of nurses in the provision of health care, history and nursing knowledge. Regulation of practice, legislation governing practice, The Australian Nursing and Midwifery Council Competencies, professional codes of practice and standards of practice. (ii) Therapeutics of Clinical Nursing IA: integration of the knowledge and attitudes learned throughout the program with the skills required for effective nursing practice. The foundation nursing skills involved in supporting patients in the activities of daily living, providing basic hygiene, principles of basic nutrition, manual handling, standard precautions and an introduction to basic life support will be practiced. Technology used in nursing care and occupational health and safety of nurses will be considered. Learning will be facilitated through workshops and clinical placements. The clinical cycle placement will be in an acute setting. (iii) Health Assessment IA: skills of interviewing, inspection, palpatation, percussion and auscultation and recording vital signs. (iv) Communication and Psychosocial Care IA: effective communication between nurses and their patients and with members of the community and other health professionals. Human emotions, spirituality and death and dying. Transcultural nursing: cultural safety in nursing.

#### NURSING 1002

#### Human Sciences IB

- 6 units semester 2
- Lectures, tutorials, workshops, labs, online learning
- Assessment: to be advised

This course will build on Human Sciences IA and Nursing Practice IA. It will be comprised of the following modules that will facilitate student learning of: (i) Human Biology IB: structure and function of the body using the systems approach. (ii) Microbiology, Immunology and Infection Control IB. (iii) Medication Management IB: complex concepts of pharmocokinetics in relation to nursing practice. (iv) Health and Illness B: building on student's prior learning regarding the physiological basis of health and illness, nutrition, terminology, body image and sexuality. Student learning will be progressed regarding the theories of health , illness and disease. EBP and research in health care.

## NURSING 1003

## **Nursing Practice IB**

- 6 units semester 2
- Workshops & clinical placements
- Assessment: to be advised

The course will be comprised of the following modules: (i) Nursing as Profession IB: ethics law, accountability and responsibility. (ii) Therapeutics of Clinical Nursing IB: this module will build on prior student learning in Therapeutics of Clinical Nursing IA with further integration of knowledge, attitudes and skills required for practice. Introduction to more complex skills required for safe and therapeutic nursing care. Students will have the opportunity to begin to learn how to practice in accordance with the ANC National Nursing Competency Standards for the Registered Nurse. Learning will be facilitated through workshops and clinical placements. The clinical cycle placement will be an acute setting. (iii) Health Assessment IB: continuing student's learning of nursing assessment. (iv) Communication and Psychosocial Care IB: building on student's learning of psychosocial care that developed from their learning in Nursing Practice IA and their experiential learning. (v) Transcultural Nursing IB: further concepts of cultural safety in nursing will be explored. Issues relating to providing care for Aboriginal and Torres Strait islander people and their families will be considered. The factors that need to be considered in caring for people with diverse cultures such as migrants will also be explored.

#### Level II

#### NURSING 2000

## Human Science 2A

- 6 units semester 1
- · Lectures, tutorials and workshops
- Eligibility: B.Nurs. students only
- Prerequisite: Human Science 1A,/1B
- Assessment: to be advised

This course will build on the learning from Human Sciences and Nursing Practice 1A & 1B. It will be comprised of the following modules that will facilitate studnent learning: (i) Human Pathophysiology A: human pathophysiology, nursing therapeutics and treatment and health promotion relating tot he cardiovascular and respiratory systems. (ii) Human Pathophysiology, nursing therapeutics and treatment and health promotion relating to endocrine, reproductive, haematological and lymphatic systems. (iii) Human Development Across the Life Span: human development conception to aging. (iv) Pharmacology and Complementary Therapies A: the pharmacological treatment of diseases using evidence based, systems approach. Natural remedies and therapies for common pathophysiological conditions.

## NURSING 2001 Nursing Practice 2A

- 6 units semester 1
- · Lectures, tutorials, clinical placement
- Eligibility: B.Nurs. students only
- Prerequisite: Nursing Practice 1A/1B
- Assessment: to be advised

This course will build on the learning from Human Sciences and Nursing Practice 1A & 1B. It will be comprised of the following modules that will facilitate student learning of: (i)Nursing as a Profession 2A: further learning of legal and ethical issues. (ii)Therapeutics of Clinical Nursing 2A: this module will introduce students to further nursing and technological skills that when integrated with theory and professional attitudes, provide the foundation for competent nursing practice. Students will have the opportunity to begin to practice in accordance with the ANC National Nursing Competency Standards for the Registered Nurse. Learning will be facilitated through workshops and clinical placements. The Clinical Cycle will be a placement rural, paediatric, midwifery and community setting. (iii) Health Assessment 2A: this module will assist students in learning more advanced assessment skills. The recognition of abnormal finding of physical, and psychosocial assessments relating to the systems considered in Pathophysiology A & B will be explored. Basic assessment skills for specific populations will also be introduced. (iv) Communication & Psychosocial Care 2A: building on the student's learning of psychosocial care and developed from their learning in Nursing Practice 1A and their experiential learning. This module will assist students to communicate effectively and provide care of people with particular needs.

## NURSING 2002

## Human Science 2B

- 6 units semester 2
- · Lectures, tutorials and workshops
- · Eligibility: B.Nurs. students only
- Prerequisite: Human Science 1A/1B
- · Assessment:to be advised

This course will build on previous Human Sciences and Nursing Practice courses. It will be comprised of the following modules that will facilitate student learning of: (i) Human Pathophysiology C: this topic will further facilitate student learning in human pathophysiology, nursing therapeutics and treatment and health promotion relating to the neurological, special senses: gastrointestinal systems. (ii) Human Pathophysiology D; this topic will further facilitate student learning in human pathophysiology, nursing therapeutics and treatment and health promotion relating to the urinary and renal, musculoskeletal and integumentary systems. (iii) Child & Youth Health: this module will facilitate student learning of the issues surrounding child and youth health. In particular the factors that influence the physical and social development of children and adolescents will be considered. (iv) Pharmacology & Complementary Therapies B: this module will facilitate student learning of the pharmacology treatment of disease for common pathological conditions using evidence based, systems approach. Natural remedies and complementary therapies for pathophysiological conditions will also be considered.

#### NURSING 2003

#### **Nursing Practice 2B**

- 6 units semester 2
- · Lectures, tutorials, clinical placement
- · Eligibility: B.Nurs. students only
- Prerequisite: Nursing Practice 1A/1B
- Assessment: to be advised

This course will build on previous Human Sciences and Nursing Practice Courses. It will be comprised of the following modules that will facilitate student learning of: (i) Nursing as a Profession 2B: this module will facilitate student learning of the legal and ethical issues surrounding professional nursing practice. This module will also assist students to continue to develop skills necessary for the planning and coordination of nursing care. (ii) Therapeutics of Clinical Nursing 2B: this module will introduce students to further nursing and technological skills that, when integrated with theory and professional attitudes, provide the foundation for competent nursing practice. Students will have the opportunity to begin to practice in accordance with the ANC National Nursing Competency Standards for the Registered Nurse. Learning will be facilitated through workshops and clinical placements. The Clinical Cycle will be placement rural, paediatric, midwifery, community and acute setting. (iii) Health Assessment 2B: this module will assist students in learning more advanced assessment

skills. The recognition of abnormal finding of physical, and psychosocial assessments relating to the systems considered in Pathophysiology C & D will be explored. (iv) Communication and Psychosocial Care 2B: this module will assist students' learning of issues relating to communication and psychosocial care of children and youths and those with special needs including and those relating to the pathophysiological conditions explored in Human Pathophysiology C & D. These issues will also be discussed in relation to the particular need of indigenous people and their communities.

## OBSTETRICS & GYNAECOLOGY

## Level III

## OB&GYNAE 3000 Human Reproductive Health III

- 6 units semester 2
- Lecture, 3 hours problem based learning workshops & laboratory based research training per week
- Eligibility: B.Health.Sc, B.Psych(Hons) students; Sc students subject to approval by their Faculty
- Prerequisite: ANAT SC 1102A/1102B Human Biology I, PATHOL 2000 Biology of Disease
- Assessment: written, oral assessment 70%, peer assessment of contribution to problem based learning & retraining: must be satisfactory, exam 30%

This course presents major aspects of human reproductive biology and function and technologies. Students will obtain insights into current understanding of the developmental biology of reproduction in humans and the application of reproductive technology to human health and disease. Students will be introduced to the social, medical, scientific, moral and ethical issues associated with human reproduction and its regulation, in the control of fertility, treatment of infertility and other applications such as stem cell biology. Students will gain sufficient understanding to critically evaluate past, present and emerging methods of investigation and management of reproductive function. The topic will be introduced through focused studies of human population dynamics and the contribution of developmental biology to adult health. The biology and pathology

of fertilisation, implantation, embryonic and fetal growth and development and of adaptation to pregnancy will be addressed, together with developmental programming of physiological fitness throughout life and the risk of cardiovascular and related diseases in humans. The course concludes with the influence of reproductive hormones on human behaviour. Understanding will be developed at the molecular, cellular and physiological levels, through lectures, problem-based learning and research training, involving reproduction and relevant technologies.

#### Honours

#### **OB&GYNAE 4000**

#### **Honours Obstetrics and Gynaecology**

- 24 units full year
- Eligibility: approp. qualified B.Hlth.Sc, B.Med.Sc, B.Sc students or permission of Head of Discipline
- Assessment: advised at start of year includes literature review, research seminars & thesis

Students requiring further information concerning syllabuses and work required for the Honours degree are advised to consult the Head of Discipline as early as possible. Potential projects are listed on the discipline web site.

## OENOLOGY

#### Level I

## OENOLOGY 1000EX/NW

#### Introductory Grape and Wine Knowledge

- 3 units semester 1
- 4 or 5 day residential school during mid semester break; Internal: up to 2 lectures, 3 hours tutorial/practical per week - practical components may be held in mid semester break
- Eligibility: Bachelor/Dip.Wine Marketing students
- Assessment: semester written exams, practical tests

Grapevine morphology, growth and development; grape berry development; changes in grape berry composition during ripening; physiology of smell and taste; basic winemaking principles. Practical exercises sessions designed to train student's palate in wine sensory evaluation and to differentiate between Australian wine types and styles.

#### **OENOLOGY 1001EX/NW**

#### **Vineyard and Winery Operations I**

- 3 units semester 2
- Average 6 hours per week including lectures, practicals θ/or tutorials - practicals may be held in mid semester break
- Eligibility: Bachelor/Dip.Wine Marketing students
- Prerequisite: OENOLOGY 1000NW/1000EX Introductory Grape and Wine Knowledge
- Assessment: semester written exams, practical tests

Climatic requirements for grapevines; vineyard design, establishment and operations including pruning, irrigation, canopy management, soil management and pest and disease management; characteristics of major white wine grape varieties; principles and practices of white and sparkling wine production; major white wine styles of the world; oak in winemaking.

Practical sessions relate to lecture topics and include viticulture exercises and wine sensory evaluation.

#### **OENOLOGY 1018NW**

#### **Foundations of Wine Science**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials 6/or practicals - some practical components may be held in mid semester break
- Eligibility: B.Sc. (Viti), B.Oen. students only
- Assessment: written exam & practical exam

Grapevine morphology, growth and development; grape berry development; changes in grape berry composition during ripening; physiology of smell and taste; basic winemaking principles. Practical exercise sessions designed to train student's palate in wine sensory evaluation and to differentiate between Australian wine types and styles. This course shares lectures and practicals with Introductory Grape and Wine Knowledge (OENOLOGY 1000NW) Extra material is provided for Viticulture and Oenology students covering some aspects in greater scientific depth.

## **OENOLOGY 2004EX/NW**

#### **Vineyard and Winery Operations II**

- 4 units semester 1
- Residential school during mid semester break; internal: 2 lectures per week, practical component held in mid semester break
- Eligibility: Bachelor/Dip.Wine Marketing students
- Prerequisite: OENOLOGY 1001NW/1001EX Vineyard and Winery Operations I
- Assessment: to be advised

Characteristics of major red wine grape varieties; principles and practices of red wine production; major red wine styles of the world; techniques for grapevine improvement and biotechnology, as applied to the wine industry; wine packaging, bottling operations and quality standards; sensory science. Practical sessions relate to lecture topics and will include tasting sessions.

## **OENOLOGY 2022WT**

#### **Sensory Studies**

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1101/1102, Biology I: Molecules, Genes and Cells; OENOLOGY 1018NW Foundations of Wine Science; CHEM 1100 Chemistry IA or CHEM 1101 Foundations of Chemistry A; CHEM 1102 Chemistry IB or CHEM 1201 Foundations of Chemistry
- Assessment: written & practical exams, written exercises, group oral presentations

This course provides a scientifically based introduction to sensory evaluation and its relationship to the winemaking process, and promotes the development of technically accurate wine assessment skills. The physiology of taste receptors, olfaction and the structure of oral mucosa are examined. Recent advances in knowledge including the function of signal transduction molecules and protein structure are used to explain current models of flavour, astringency and taste perception. Basic flavour chemistry of grapes and wine is introduced. An introduction to sensory measurement theory, psychophysics, aroma and taste interactions, threshold measurement and the psychological and physiological factors affecting perception is presented. The concept of adaptation and its application to the sensory evaluation of wines, and elements of good sensory practice including data collection and statistical analysis are described. The practical program will be used to develop basic skills in sensory assessment of wines leading to the interpretation of wine characteristics in terms of wine style and quality. This is achieved by a progressive development of sensory skills, using model solutions to depict basic tastes and their interactions, followed by detailed examination of white and red table, fortified and sparkling wines.

#### **OENOLOGY 2024WT**

#### Introductory Winemaking

- 4 units semester 2
- Average 7 hours per week including lectures, practicals & visits to winery sites
- Assumed Knowledge: 6 units Level I Biology & Chemistry, Foundations of Wine Science or equiv.
- Assessment: practical reports, written assignments, written exam

Introduction to the Australian wine industry. Chemistry and unit processes of winemaking. Production of table wines, including dry floral fruity white, full bodied white, sweet white, rose, medium and full bodied red wines. Introduction to wine stabilisation and maturation processes.

## **OENOLOGY 2025WT**

#### **Microbiology for Viticulture and Oenology**

- 4 units semester 1
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells; OENOLOGY 1018NW Foundations of Wine Science or equiv.
- Assessment: written exam (mid-year & final), practical exercises, practical exams (theory & practice)

An introduction to the biology of microorganisms and invertebrates of importance in agriculture, viticulture, oenology and natural ecosystems. Topics to be considered include: microbial growth, energy sources and nutritional categories; form and function of major groups of microorganisms; classification and identification; beneficial and deleterious activities of microorganisms; features of saprophytic, pathogenic, symbiotic and commensal lifestyles; determinants of pathogenicity and resistance; interactions of microorganisms and environment; nature, occurrence and influence or application of fungi, yeast and bacteria in viticulture and oenology, practical skills for manipulating microorganisms and invertebrates and studying their activities.

#### Level III

## **OENOLOGY 3001WT**

#### **Research Project: Oenology**

- 3 units not offered in 2007
- 10 hours per week/1 semester or equiv.
- Eligibility: enrolment subject to approval of Head of Discipline
- Assessment: literature review, research proposal, seminar

The course comprises a small research project to be undertaken during the 4th year of the course under the supervision of a staff member in the Discipline. Students wishing to undertake a research project should consult the Course Coordinator before the beginning of the 4th year.

## **OENOLOGY 3003WA/WT**

#### Wine Packaging and Quality Management

- 3 units semester 2
- 2 lectures, 4 hours practicals/field trips per week
- Prerequisite: OENOLOGY 3007WT Stabilisation and Clarification, OENOLOGY 3047WT Winemaking at Vintage
- Assessment: practicals, reports, written assignments & exams

Science and technology of bottling and packaging systems including chemical and physical properties of packaging materials, principles of filling machinery, design and process control of wine filling/packaging systems.

Wine and food laws and commercial forces as quality standards. Taints and residues in grapes and wine as quality issues. Approaches and systems of quality management using the wine industry as a focus, including the development of corporate quality cultures, standards and specifications. Visits will be made to commercial plants.

#### **OENOLOGY 3007WT**

#### **Stabilisation and Clarification**

- 3 units semester 1
- Average 6 hours per week incl. lectures, tutorials  $\theta$ /or practicals
- Prerequisite: OENOLOGY 2024WT Introductory Winemaking
- Assessment: practicals, reports, written assignments, exam

Principles and practices of wine clarification and stabilisation. Protein, tartrate, metal, colour oxidative, and microbiological stability and stability testing of wine. Wine clarification by means of settling, centrifugation, filtration and fining.

#### **OENOLOGY 3016WT**

#### **Cellar and Winery Waste Management**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, practicals &/or field work
- Prerequisite: OENOLOGY 2024WT Introductory
   Winemaking
- Corequisite: OENOLOGY 3047WT Winemaking at Vintage
- Assessment: final exam, practical reports & tutorial papers

Vintage planning; occupational health and safety, winery record keeping; microbial control, cellular hygiene; winery waste management, environmental management.

## **OENOLOGY 3033WT**

#### Industry Experience (Oenology) A

- 4 units semester 1
- 10 weeks work experience
- Prerequisite: OENOLOGY 3011WT Winemaking or OENOLOGY 3047WT Winemaking at Vintage, OENOLOGY 3016WT Cellar and Winery Waste Management
- Assessment: written diary, written report, poster presentation

This course is largely practically orientated, based on work experience at a commercial winery during vintage. A specified level of proficiency in the following operations is expected: grape receival and weighbridge; crushing; draining and pressing; fermentation and postfermentation operations and quality control procedures. Furthermore, an understanding of the contribution of each of the specified unit operations to the overall winemaking process is required.

## **OENOLOGY 3037WA/WT**

#### **Distillation, Fortified and Sparkling Winemaking**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials 6/or practicals - some practical may be held in mid semester break
- Prerequisite: OENOLOGY 2024WT Introductory Winemaking, OENOLOGY 2022WT Sensory Studies, OENOLOGY 3016WT Cellar and Winery Waste Management
- Assessment: practical reports, assignments, written exam

Distillation principles and wine distillation practices. Production of Australian and overseas grape spirits for fortified wine and brandy production. Production of potable distilled beverages other than brandy. Legal requirements of fortified wine production and distillation. Production of Australian and overseas sparking wine styles. Sensory evaluation of spirits, fortified and sparkling wines.

## **OENOLOGY 3045WA/WT**

#### **Advances in Oenology**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, practicals &/or field work
- Assumed Knowledge: OENOLOGY 2024WT Introductory Winemaking
- Assessment: written exam, reports on practical exercises, industry visits

Current research and practices in oenology. Particular emphasis will be placed on grape and wine phenolics and flavour compounds; methods of analysis in wine science; yeast biochemistry including nutrition, sugar transport, nitrogen and organic acid metabolism, ethanol toxicity, sulphur dioxide production and tolerance, yeast aroma compounds; the malolactic fermentation biochemical and molecular approaches. Wine industry visits will focus on modern practices and recent developments to increase production efficiencies and wine quality

## OENOLOGY 3046WA/WT

#### **Fermentation Technology**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, practicals &/or field work
- Eligibility: B.Oenology students
- Prerequisite: OENOLOGY 2024WT Intro. Winemaking, OENOLOGY 2022WT Sensory Studies
- Assessment: exam, written work, practical reports, group oral presentations

This practical course provides students with the opportunity to gain hands on winemaking experience that expands on areas of fermentation technology and preparation of wine for bottling post vintage. The course introduces students to the planning and managing of winemaking strategies, and importantly complements the theory covered in the other wine technology courses for table wine production. Another objective of this course is to help students make a considerable progression in the development of their wine sensory evaluation skills

#### OENOLOGY 3047WA/WT

#### Winemaking at Vintage

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Eligibility: B.Oenology students
- Prerequisite: OENOLOGY 2024WT Introductory Winemaking, OENOLOGY 2022WT Sensory Studies
- Corequisite: OENOLOGY 3016WT Cellar and Winery Waste Management
- Assessment: to be advised

This practical course provides students with the opportunity to gain hands on winemaking experience over the vintage period. The course introduces students to the planning and managing of winemaking strategies. It covers all aspects of grape processing, white juice preparation and red wine fermentation and is designed to complement the theory covered in the other wine technology courses for table wine production. This course also aims to help students make a considerable progression in the developments of their wine sensory evaluation skills.

## **OENOLOGY 4001WT**

## Honours Oenology (BAgSc)

- 12 units full year
- Prerequisite: credits in at least two level III courses offered by the Discipline
- Assessment: coursework, essays or other assignments not part of the research project, research project, research proposal, seminar, thesis and viva voce

Intending candidates should consult the Head of Discipline and potential supervisors before October of Year III, and should be prepared to commence studies in the Discipline on or about 1 February or July. After consultation, each candidate will be assigned a research project, which will be carried out under supervision. The results will be presented in a dissertation at the end of the course. A candidate may also be required to prepare an essay and give a seminar.

## **OENOLOGY 4002WT**

#### **Honours Oenology**

- 12 units full year
- 40 Hours per week
- Prerequisite: Credit or higher in two relevant Level III courses as approved by the Head of Discipline
- Assessment: thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Discipline of Wine and Horticulture, two seminars on that topic, and coursework, essays or other assignments deemed appropriate to the individual student's honours program.

## ORAL HEALTH

## Level I

#### **ORALHLTH 1200H0**

#### **First Annual Oral Health Examination**

#### **ORALHLTH 1201AHO/BHO**

## **Dental and Health Science IOH**

- 6 units full year
- 7 hours per week including class meetings/ learning laboratories/tutorials
- · Eligibility: BOH students only
- Corequisite: DENT 1202AHO/BHO Clinical Practice IOH, DENT 1203AHO/BHO Human Biology IOH, DENT 1204AHO/BHO General Studies IOH
- Assessment: practical assessments, written assignments, objective structured clinical assessment (OSCA)

This stream aims to introduce students to the oral cavity. It also provides an introduction to the areas which support the practice of an oral health practitioner. Problem-based learning allows students to use a systematic approach to investigating various oral conditions which will affect their prospective client group. In addition to this, students are introduced to the behavioural sciences relevant to their role in the dental team. Topics include: dental terminology, morphology and development, dental diseases (caries & gingivitis) preventive dentistry, lifespan developmental, behavioural science (management of fear & behaviour change) and nutrition.

## ORALHLTH 1202AHO/BHO Clinical Practice IOH

- 8 units full year
- 12 hours per week including class meetings/ clinical/practical sessions
- Eligibility: BOH students only
- Corequisite: DENT 1201AHO/BHO Dental and Health Science IOH, DENT 1203AHO/BHO Human Biology IOH, DENT 1204AHO/BHO General Studies IOH
- Assessment: tests, practical assessment, assignments, journals, viva voces, written exams

This stream aims to provide students with an opportunity to integrate theoretical and practical skills. Students will be given an opportunity to gain

operative experience at the chairside, technical and office management levels. Topics include infection control, occupational health and safety, dental records, pre-clinical studies, applied dental clinical practice and radiography.

# ORALHLTH 1203AHO/BHO

### **Human Biology IOH**

- 6 units full year
- 8 hours per week including class meetings/ laboratory sessions/research-based practical sessions/tutorials
- · Eligibility: BOH students only
- Corequisite: DENT 1201AHO/BHO Dental and Health Science IOH, DENT 1202AHO/BHO Clinical Practice IOH, DENT 1204AHO/BHO General Studies IOH
- Assessment: assignments, tutorial & laboratory exercises, tests, viva voces, written exams

This stream aims to provide the student with the biological grounding upon which the practice of dentistry rests. It is an introduction to the anatomy and physiology of the human body and in particular the teeth and oro-facial regions. Topics include: basic biochemistry, general anatomy and physiology, general histology, oral histology and embryology, anatomy and physiology of the head and neck, microbiology and immunology.

# ORALHLTH 1204AHO/BHO

### General Studies IOH

- 4 units full year
- 3.5 hours per week
- · Eligibility: BOH students only
- Corequisite: DENT 1201AHO/BHO Dental and Health Science IOH, DENT 1202AHO/BHO Clinical Practice IOH, DENT 1203AHO/BHO Human Biology IOH
- Assessment: competency-based assessment, tests, written exams, portfolio

This stream aims to provide the student with a range of generic skills to support their role as oral health practitioner. Topics include information technology, orientation to learning and workplace communication. Information technology will provide the student with a basic understanding of computing fundamentals. Orientation to learning will introduce the student to concepts and skills which will underpin study and lifelong learning in professional practice. Communication will develop strategies to effectively work as a member of the dental team, develop knowledge skills and attitudes in teaching methodologies and behaviour change theory for a variety of patient settings.

Topics include orientation to learning, client interaction, team building, communication, academic writing, health education, information technology, teaching theory.

### Level II

### **ORALHLTH 2200HO**

**Second Annual Oral Health Examination** 

### **ORALHLTH 2201AHO/BHO**

#### **Dental & Health Science IIOH**

- 4 units full year
- 7.5 hours per week including class meetings/learning laboratories/tutorials
- · Eligibility: BOH students only
- Prerequisite: DENT 1201A/BHO Dental and Health Science IOH and DENT 1200HO First Annual Oral Health Exam
- Corequisite: DENT 2202AHO/BHO Clinical Practice IIOH, DENT 2203AHO/BHO Human Biology IIOH, DENT 2204AHO/BHO General Studies110H
- Assessment: tests, assignments, viva voces, seminars, written exams

This stream aims to build upon the knowledge gained in first year, as well as introduce new areas of contemporary dental practice. It consolidates the role of the oral health practitioner in community dental health issues and develops the knowledge of cariology, prevention and health promotion. Topics include: cariology, fluoride, community health and health promotion.

# ORALHLTH 2202AHO/BHO

#### **Clinical Practice IIOH**

- 12 units full year
- 18 hours per week including laboratory/clinical sessions
- · Eligibility: BOH students only
- Prerequisite: DENT 1202A/BHO Clinical Practice IOH, DENT 1200HO First Annual Oral Health Exam

- Corequisite: DENT 2201AHO/BHO Dental and Health Science IIOH, DENT 2203AHO/BHO Human Biology IIOH, DENT 2204AHO/BHO General Studies110H
- Assessment: observation, journals, viva voces, practical exams, written exams

This stream aims to build upon Clinical Practice I with regard to the consolidation of preventive, periodontal and restorative clinical skills, through manikin exercises and provision of treatment for selected patients. Strong emphasis is placed on the ability to consistently apply quality assurance principles and processes in oral health practice.

Topics include clinical dental hygiene practice, operative dentistry (theory & practical), pedodontics, clinical dental therapy practice and periodontics.

# ORALHLTH 2203AHO/BHO

#### Human Biology IIOH

- 4 units full year
- 3 hours per week class meetings/researchbased practical sessions/tutorials
- Eligibility: BOH students only
- Prerequisite: DENT 1203A/BOH Human Biology IOH, DENT 1200HO First Annual Oral Health Exam
- Corequisite: DENT 2201AHO/BHO Dental and Health Science IIOH, DENT 2202AHO/BHO Clinical Practice IIOH, DENT 2204AHO/BHO General Studies110H
- Assessment: practical tests, viva voces & written exams

This stream aims to prepare the student to understand the medical aspects of clinical dentistry, pharmacology, local anaesthetics and the role of the oral health practitioner in the management of medical and dental emergencies in dental practice. Topics include applied oral microbiology, medicine and pharmacology, pathology, applied oral pathology.

### **ORALHLTH 2204HO**

# **General Studies IIOH**

- 4 units semester 1
- 3 hours per week
- Eligibility: BOH students only
- Prerequisite: DENT 1200HO First Annual Oral Health Exam

- Corequisite: DENT 2201AHO/BHO Dental and Health Science IIOH, DENT 2202AHO/BHO Clinical Practice IIOH, DENT 2203AHO/BHO Human Biology110H
- Assessment: assignments, tests, written exams, journal reviews

This stream aims to equip the student with the skills to analyse and review journal articles. Furthermore, students will have the opportunity to gain skills in the process of collecting, collating and analysing data. Topics include evidence-based dentistry, biostatistics, epidemiology and social context of dentistry.

# ORALHLTH 2205AHO/BHO

#### **Dental Hygiene Clinical Practice**

- 12 units full year
- 19 hours per week including laboratory/clinical sessions
- Eligibility: Qualified Dental Therapists only
- Corequisite: ORALHLTH 2203AHO/BHO Human Biology IIOH
- Restriction: course advise must be received from Dental School prior to enrolment
- Assessment: Observation, journals, viva voces, practical exams, written exams

This stream introduces students to clinical practice of a Dental Hygienist and provides a foundation for patient management and oral health practice as a career. Students will work through a range of clinical and laboratory based exercises centred on the provision of patient care, clinical skills and knowledge. Students work in a collaborative environment and learning will be supported by independent study and discussion of findings in class. Strong emphasis is placed on the ability to consistently apply quality assurance principles and processes in oral health practice. Topics include infection control, occupational health and safety, dental records, preventive dentistry and the management of periodontal disease, development of manual dexterity skills and applied dental hygiene practice.

# **ORALHLTH 3200HO**

# **Third Annual Oral Health Examination**

# ORALHLTH 3201AHO/BHO

# Dental & Health Science IIIOH

- 8 units full year
- 3.5 hours per week including class meetings/ research-based practical sessions/tutorials
- Eligibility: BOH students only
- Prerequisite: DENT 2201A/BHO Dental and Health Science IIOH, DENT 2200HO Second Annual Oral Health Exam
- Corequisite: DENT3202AHO/BHO Clinical Practice IIIOH, DENT3204AHO/BHO Oral Health Elective IIIOH
- Assessment: assignments, tutorial & seminar presentations, OSCA, presentation patients and viva voces

This stream aims to further develop and consolidate the student's paedodontic clinical role. In addition the topics of gerodontology and dental public health will also give the student the opportunity to broaden their dental focus.

Topics include gerodontology, dental public health, panoramic radiography, early childhood caries, orthodontics and clinical dentistry for dental therapy practice.

# ORALHLTH 3202AHO/BHO

# **Clinical Practice IIIOH**

- 12 units full year
- 16 hours per week including clinical sessions
- Eligibility: available to BOH students only
- Prerequisite: ENT 2202A/BHO Clinical Practice IIOH, DENT 2200HO Second Annual Oral Health Exam
- Corequisite: DENT 3201AHO/BHO Dental and Health Science IIIOH, DENT3204AHO/BHO Oral Health Elective IIIOH
- Assessment: observation, journals, viva voces, practical tests

This stream aims to further develop the student's preventive, periodontal and operative role as an oral health practitioner. Topics include dental therapy practice and dental hygiene practice.

# ORALHLTH 3204AHO/BHO Oral Health Elective IIIOH

- 4 units full year
- 7 hours per week in semester 2
- Eligibility: BOH students only
- Prerequisite: DENT 2200HO Second Annual Oral Health Exam
- Corequisite: DENT 3201AHO/BHO Dental and Health Science IIIOH, DENT3202AHO/BHO Clinical Practice IIIOH
- Assessment: Written reports and presentations

This stream aims to provide the student with the necessary research skills to undertake a major study and the opportunity to focus on a major research assignment to enhance their role as an oral health practitioner. Topics include research methodology and a major assignment.

# PATHOLOGY

# Level II

# PATHOL 2000 Biology of Disease II

- 4 units semester 2
- 3 lectures/large group tutorials per week
- Eligibility: B.Hlth.Sc. & B.Psych (Hons) students
- Prerequisite: ANAT SC 1102, ANAT SC 1103 Human Biology IA/ IB
- Assessment: written exam, assignments

The course provides a general introduction to pathology, i.e. the scientific study of disease. Topics covered include the classification, causes and mechanisms of basic tissue processes which underlie disease (e.g. inflammation, ischaemia, neoplasia) as well as discussion of the pathology of some common diseases (e.g. diabetes mellitus, ischaemic heart disease, and some cancers).

# PATHOL 3003

# **General Pathology IIIHS**

- 6 units semester 1
- 3 lectures, 2 hour practical per week, 1 hour tutorial per fortnight
- Eligibility: B.Hlth.Sc, B.Sc, & B.Psych (Hons) students
- Prerequisite: B.Hlth.Sc. students pass grade in ANAT SC 1102, ANAT SC 1103, pass grade in PATHOL 2000 ; Other students - pass grade in one or more of: PHYSIOL 2003 or equiv., ANAT SC 2104 or equiv (may be waived in special circumstances by course coordinator)
- Assessment:written theory exam, practical exam, assignments

The aim of this course is to provide students with an overview of the causes and consequences of human disease. General topics covered include the nature and causes of cell injury and death: adaptive cellular changes; healing and repair, thrombosis, embolism and infarction and neoplasia. More detailed attention is given to cardiovascular diseases - including ischaemic heart disease, hypertension, stroke, deep venous thrombosis and pulmonary embolism, lung diseases, such as lung cancer, asthma and emphysema and diseases associated with smoking. alcohol and diabetes. The tutorials and practical classes provide an opportunity for students to examine macroscopic and microscopic specimens illustrating the pathology covered in lectures. CPC sessions will allow students to use their theoretical knowledge to discuss simple clinical cases and explore how cellular and tissue changes correlate with the symptoms of disease. A background knowledge of basic anatomy, histology and physiology is expected.

# PATHOL 3004

### **Pathology of Organ Systems**

- 6 units semester 2
- 2 lectures, 2 hour practical per week, 1 hour tutorial per fortnight, 3 x 1 hour clinico-pathological correlation (CPC) sessions
- Eligibility: B.Hlth.Sc. & B.Psych (Hons) students
- Prerequisite: Div 1 pass (P1) in PATHOL 3003 General Pathology IIIHS

• Assessment: written theory exam, practical exam, assignments

This course is a progression of General Pathology IIIHS and covers a wide range of diseases in many organ systems including the gastrointestinal tract; liver; central nervous system and kidneys. The tutorials and practical classes will again provide an opportunity for students to examine macroscopic and microscopic specimens illustrating the pathology covered in lectures. CPC sessions will involve more complex cases as students develop greater knowledge of the range of diseases and their manifestations.

# PATHOL 3100

#### **Topics in Forensic Sciences**

- 3 units semester 2
- 2 lectures per week
- Eligibility: B. Hlth. Sc. students only
- Prerequisite: Pass grade in PATHOL 3003 General Pathology IIIHS
- Assessment: written theory exam 60%,assignments 40%

The aim of this course is to provide students with an overview of a variety of topics within the area of forensic sciences including pathology, toxicology, anthropology and odontology. It is not intended to provided students with a detailed knowledge of any of these areas, but rather provide insight into how they may be used to investigate crime. Topics to be covered include the changes in the body with death and decomposition; the pathology of wounds; burns; disaster victim identification; sudden death in children and adults; medical misadventure and drug related deaths. A background knowledge of basic anatomy and physiology is expected.

# PATHOL 3200

### **Neurological Diseases**

- 3 units semester 2
- 2 Lectures, 2 hour practical, 1 hour tutorial per fortnight
- Eligibility: B. Hlth. Sc., B. Sc. & B. Psych (Hons) students
- Prerequisite: B.Hlth. Sc. students Div 1 pass in PATHOL 2000; Other Students - pass in one or more of PHYSIOL 2004., ANAT SC2104 or equiv (or approval of course coordinator)

• Assessment: written theory exam 40%, practical exam 20%; assignments 40%

The aim of this course is to provide students with an understanding of a range of diseases and conditions affecting the central and peripheral nervous systems. General topics covered include the causes and consequences of raised intracranial pressure, headache, infections, tumours and dementia, as well as more specific disorders such as epilepsy, multiple sclerosis and motor neurone disease. Traumatic brain and spinal cord injury, stroke and peripheral muscle disorders will also be discussed. The practical classes provide an opportunity for students to examine macroscopic and microscopic specimens illustrating the pathology covered in lectures.

# Honours

# PATHOL 4000

### **Honours Pathology**

- 24 units full year
- Eligibility: B.Med.Sc. & B.Hlth.Sc. students, or permission of Head of Discipline
- · Assessment: details provided at start of year

Students requiring further information are advised to consult the Head of Discipline.

# PHARMACOLOGY

### Level II

### **PHARM 2002**

#### **Drugs, Chemicals and Health**

- 4 units semester 1
- 2 lectures per week, 1 tutorial, 1 workshop per fortnight
- Eligibility: B.Hlth.Sci, B.Psych.(Hons.) students
- Prerequisite: ANAT SC 1102A Human Biology 1 or GENETICS 1000A/B Molecular & Cell Biology 1 or ENV BIOL 1000A/B Biology 1 (or equiv)
- Assessment: exam on lecture material, assessment test, assignments

The course introduces students to basic pharmacological concepts and principles needed to understand the effects of drugs in humans. Students will gain an appreciation for how drugs interact with cellular target molecules, as well as for the cellular and physiological responses resulting from such interactions. These concepts will be illustrated by examining major drug classes and their use in the treatment of major human diseases, including drugs that influence the central nervous system.

# **PHARM 2003**

#### **Drugs, Chemicals and the Environment**

- 4 units semester 2
- 2 lectures per week, 1 tutorial per fortnight, 1 workshop per month
- Eligibility: B.Hlth.Sc, B.Psych.(Hons.) students
- Prerequisite: PHARM 2002 Pharmacology II
- Assessment: exam on lecture material, assessment test and assignments

The course will provide an appreciation for the potential negative health effects accompanying human exposure to foreign and naturally occurring chemicals. Specific classes of toxic substances and the mechanisms underlying their adverse effects will be surveyed. Students will also develop an understanding of the methods used by toxicologists to ensure chemicals that enter the human environment are safe.

# Level III

# PHARM 3010 Pharmacology A III

- 6 units semester 1
- Weekly lectures, tutorials, practical sessions
- Eligibility: B.Hlth.Sc, B.Psych(Hons), B.Sc, B.Sc. (Biomed.Sc.), B.Sc.(Biotech.) B.Sc & BE students
- Quota will apply
- Prerequisite: Any one of the following: BIOCHEM 2000A/B or BIOCHEM 2001A/B, CHEM 2000A/B or CHEM 2001A/B, PHYSIOL 2003 & 2004 or PHYSIOL 2001A/B, PHARM 2002, PHARM 2003, PATHOL 2000
- Restriction: Not available to students who have passed any of: PHARM 3004 Concepts in Pharmacology A III, PHARM 3005 Research Methods in Pharmacology A III, PHARM 3006 Fundamentals of Drug Discovery
- Assessment: exam on lecture material, practical reports, assessment test

The course will provide students with an understanding of how new drugs are discovered and developed. Students will also gain an understanding of drug-receptor interactions and the problems encountered during the identification and design of new chemicals with promising pharmacological actions. The practical component of this course will provide laboratory and experimental proficiency for students, ensuring they gain an appreciation for studying drug actions at different levels of biological organisation, ranging from simple in vitro systems (e.g. organ baths) to whole animals.

# **PHARM 3011**

#### **Pharmacology B III**

- 6 units semester 2
- Weekly lectures, tutorials, practical sessions
- Eligibility: B.Health.Sc, B.Psych(Hons), B.Sc, B.Sc.(Biomed.Sc.), B.Sc.(Biotech.) students only
- · Quota will apply
- Prerequisite: PHARM 3010 Pharmacology A III
- Restriction: Not available to students who have passed any of the following Pharmacology courses: PHARM 3007 Concepts in Pharmacology B III, PHARM 3008 Research Methods in Pharmacology B III, PHARM 3009 Fundamentals of Drug Development III
- Assessment: exam on lecture material, practical & research reports, assessment test

Particular emphasis is given to the key factors that influence and govern the effects of drugs within the body, ranging from molecular determinants to physiological factors that control disposition of drugs within the body. In addition, students will cover topics in toxicology and selected systems pharmacology. The laboratory component of the course will provide proficiency in the design and execution of research projects using modern experimental methodologies. Students will explore a range of contemporary pharmacological problems while working on 10 week projects that span such areas as pharmacogenetics, pharmacokinetics, drug abuse, neuropharmacology and molecular toxicology.

# Honours

# **PHARM 4000**

#### **Honours Pharmacology**

- 24 units full year
- Prerequisite: satisfactory performance in level III courses offered by Discipline of Pharmacology or acceptable alternative (subject to approval of Head of Discipline)
- · Assessment: to be advised at start of year

Intending candidates should consult the Honours Coordinator, Discipline of Pharmacology during the final year of their program.

Candidates are required to give their full attendance to a special program of study and experimental work in the pharmacology laboratory, and to participate in a research project under the direction of a member of the academic staff. The results of the research project are to be embodied in a thesis in a form specified by the Discipline. Seminar presentations and a written assignment will also be required.

# PHILOSOPHY

# Level I

# PHIL 1101

### **Argument and Critical Thinking**

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assumed Knowledge: ESL students are advised to consult Course Coordinator to discuss enrolment in the course
- Assessment: 500 word essay, 1000 word essay, 2 hour open book exam

Argument is an activity we all engage in, with varying results, in all walks of life. It is what we use to guide and justify our actions. Over two millennia there have developed a series of theoretical classifications and techniques for the identification of arguments and their typical strong points and common errors, and for communicating these findings to others. These are useful things for anyone to know. This course develops these methods and applies them to real-life arguments, both written and spoken. It is thus an introduction to communication and applied logic. The course uses ordinary language examples and has no symbols. The course is broadly cultural, in discussing actual arguments and issues from the Ancient Greeks to current debates. A feature is several lectures on the theory of legal argument, in the belief that the basic distinctions of legal argument are useful to everyone. The course concludes with several lectures on the 'sciencepseudoscience' debate, where these methods are applied to discussion of examples such as UFOs, parapsychology, Bigfoot, the pyramids, the Bermuda Triangle and alien abductions.

### PHIL 1102

#### Mind, Knowledge and God

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1400-1800 word essay 50%, exam 50%

Of all the objects in the universe, the one you are most intimately acquainted with is your own mind. It is this object that enables you to sense and think about the world in which you are embedded. And yet, of all the kinds of objects in the universe, the mind is one we know least about. Why is this? What is it about the mind that has made it so resistant to scientific explanation? This course begins with this fundamental problem, and through an examination of rationality, meaning, consciousness and the self, attempts to develop an understanding of the relationship between mind and the material world. With this as a foundation, the course confronts the problem of knowledge: Can we be said to know, with any degree of certainty, anything about the world? The course then examines the nature of scientific knowledge, with a particular emphasis on the relationship between theory and observation. The course concludes with an examination of one of the oldest questions of all: Does God exist?

# PHIL 1103

#### Morality, Society and the Individual

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1400-1800 word essay 50%, exam 50%

Our strongest opinions are opinions about right and wrong. How can such opinions be supported. and which are the best ones to have? The aim of this course is to help you to think about these questions in a clear and systematic way. The core topics of the course are the foundations of morality and the connections between morality and justice. We consider questions such as the origin of individual rights, how to deal with conflicts between different rights and how to cope with cases where respecting the rights of individuals will reduce the overall welfare of a society. Can we ever properly override the rights of individuals to promote overall welfare? Answering these questions will help us to address recent controversies about freedom of speech. censorship and laws which apparently treat citizens unequally.

# **PHIL 1110**

#### Logic I: Beginning Logic

- · 3 units semester 2
- 3 contact hours per week

Available for Non-Award Study

Assessment: 2 in-class tests, exam (all open book)

We all engage in logical reasoning as part of everyday decision making. The systematic study of logic was invented over two thousand years ago by the great Greek philosopher Aristotle. In the last hundred years logic has undergone a revolution with the development of symbolic techniques. Logic I is an introduction to the methods of symbolic logic. The course is suitable for students in all Faculties. No background in mathematics is assumed, and all techniques are taught from the ground up, using both traditional and web-based methods. While there are no prerequisites for Logic I, students will find Argument and Critical Thinking is a useful preliminary.

### Level II

### **PHIL 2007**

### Foundations of Modern Philosophy

- 4 units semester 1
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (including 3 units Philosophy)
- Restriction: Modern Classical Philosophers
- Assessment: essays totalling 4800 6000 words

All traditions in western philosophy are shaped by a series of challenges which occupied philosophers from about the seventeenth century. Philosophers in this modern period tried to come to grips with the consequences of an emerging scientific approach for our understanding of the world and our place in it. Ethics, political philosophy, the theory of knowledge, philosophy of language, philosophy of religion, metaphysics and the philosophy of mind would never be the same again. In this course we look at the work of philosophers such as Rene Descartes. John Locke. David Hume, G.W. Leibniz and Immanuel Kant on these themes, with particular emphasis on tracing connections between their arguments and those of present day philosophers. It turns out that many of our present day conundrums over, for example, the nature of political obligation, the role of experience in gaining knowledge of the world, the nature of the mind and our knowledge of ourselves, were anticipated and discussed by these thinkers.

# **PHIL 2011**

### **Moral Problems**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units in any Level I courses
- Restriction: Bioethics II/III
- · Assessment: essays totalling 4800 6000 words

We are surrounded by ethical debates on issues of intense controversy. Under what circumstances should abortion or euthanasia be permitted? What ethical principles should govern extension of reproductive medical technology? What should we think about the morality of sex, war, drugs, and the relations between rich and poor? This course uses the techniques of moral philosophy to examine and defend answers to these questions, looking at the underlying questions of principle and moral theory on which those answers depend.

### PHIL 2015

### Issues in the Philosophy of Language

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (including 3 units Philosophy)
- Restriction: Reality, Truth and Meaning

• Assessment: 2 x 2000 word essays, take home exam, tutorial participation

This course will examine the interrelated issues of truth, reference and meaning from a primarily analytical perspective. Our concern is with how language relates to thought and to the external world. We will focus on names, descriptions, and natural kind terms. Key concepts will include truthconditions, realism and naturalism. We will also spend some time looking at theories of metaphor.

# PHIL 2016

#### **Mental Representation, Consciousness and Self**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Humanities/Social Sciences (including 3 units Philosophy), or approval by Head of Discipline
- Assessment: essays totalling 4800 6000 words

In spite of the huge advances made in other areas of natural science, much about the human mind remains mysterious. In particular, there are three outstanding problems concerning the mind and its relationship to the world: How does the mind construct mental representations, and in doing so impose meaning on a material universe? What is the nature of consciousness and how can it be explained naturalistically? What is the nature of self? This course will examine each of these questions, and survey the most promising answers developed by contemporary philosophers of mind.

### PHIL 2020

### How Should I Live: Contemporary Ethical Theories

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Humanities/Social Sciences (including 3 units of Philosophy)
- Assessment: essays totalling 4800 6000 words

For each of us, the question of how we should live is inescapable. How should we answer this question, and how should we justify our answer? This course investigates the range of answers offered by contemporary ethical philosophers. A variety of normative ethical theories - theories telling us how to live - will be examined, including forms of consequentialism, contractualism, contemporary Kantian and Aristotelian views, virtue theories, existentialism, and a feminist 'ethics of care'. We shall also be looking at the views of ethical 'anti-theorists', who hold that giving a proper justification for the way we live should not amount to producing a theory at all. If not, what is the alternative? What are the possibilities and limits of practical ethical thought and argument?

# PHIL 2021

# Justice & Power: Contemporary Political Philosophy

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (including 3 units of Philosophy)
- Assessment: essays totalling 4800 6000 words

What makes a state just? The distribution of resources and opportunities within it? The way the state exercises power over individual groups who make up the society? The level of the average or overall welfare of the citizens? Legal equality? The ability of individuals to determine their own life course? Perhaps justice is not a political issue at all, but something which should be left to individuals to pursue privately within a very 'minimal' state? Different conceptions of justice have very different implications for the way people live and the way we evaluate government policies. In the last few decades philosophers have started to reexamine these issues in a very fundamental way, returning to some of the founding themes of modern political philosophy such as exploitation, inequality and entitlement. We will examine the arguments and their consequences for a diverse range of issues from constitutionally guaranteed human rights to economic exploitation and social injustice, both within and between nations.

# PHIL 2023

### **Professional Ethics**

- 4 units semester 2
- 3 contact hours per week
- · Prerequisite: 6 units in any Level I courses
- Assessment: essays totalling 4800 6000 words

It is essential for professionals in any field to have an understanding of the ethical problems and principles in their field. But anyone, no matter what their job, must deal with many other professions as well. Hence part of professional ethics is the understanding of the ethics of other professions: how they interact and what can be expected from them as correct ethical behaviour. In turn, any professional will benefit from a critical scrutiny of their own ethics by those from other professions. The general principles of professional ethics will be examined in this course, as well as the distinctive problems of the different fields. The course is taught in six modules of four lectures and two tutorials each, covering the ethics of several major professions: Business Ethics, Media Ethics, Police Ethics, Medical Ethics, Legal Ethics, and Research Ethics. Topics covered will also include: why be moral, the nature of a profession. why have a code of professional ethics. confidentiality, whistleblowing, the responsibility of business to the environment, uses and abuses of human research, and animal ethics in research.

# PHIL 2024

#### **Beauty: Pleasures and Principles**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (including 3 units Philosophy)
- Assessment: essays totalling 4800 6000 words

We will consider the history of beauty theory through two traditions: the Pythagorean tradition, and the Pleasure-Principle tradition. These will lead to an investigation of the prevalent metaphysical and religious commitments of their respective ages: ancient, medieval, and twentieth-century. Examples of the two traditions found in the 20th century will be considered in more detail: Mary Mothersill (Pythagorean, e.g. cognitive science), and Guy Sircello (Pleasure-Principle, e.g., fashion, feminism, psychology). The course will also discuss applications to contemporary film theory.

# PHIL 2026

### Epistemology

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (including 3 units of Philosophy)
- Assessment: essays totalling 4800 6000 words 90%, class participation 10%

Epistemology is the theory of knowledge, the study of the nature, sources and limitations of knowledge. In studying the nature of knowledge, we will discuss the conditions that a belief must meet to qualify as knowledge. Thus, we will explore what it takes for a certain belief to be justified and the connections between being justified in believing something, being right in believing it and knowing it. In studying the sources of knowledge, we will address the extent to which perception, memory, testimony and reasoning give us knowledge. Finally, while we study the limitations of knowledge, we will consider the challenge known as skepticism. This is the challenge to show that, strictly speaking, we know anything at all. Most of the readings we will use are from contemporary philosophers though, in some cases, we will refer to early modern philosophers such as Descartes or Hume.

# PHIL 2110

#### Logic II: Intermediate Logic

- 4 units semester 2
- 4 contact hours per week
- Prerequisite: Logic I or Discrete Mathematics or Mathematics I or Computer Science I (or equivs) or permission of Head of Discipline
- Restriction: Logic IIIA, Logic III: Advanced Logic
- Assessment: 2 take-home tests, 2 hour exam (open book), written exercise (take-home) assessment weighted to favour component in which the student does best

Logic is a discipline standing between mathematics and philosophy, underpinning computer science and with applications in computer languages such as Prolog. Logic II treats the techniques of modern symbolic logic in greater depth than Logic I, and considers issues in philosophy of logic. Content: semantics of truthfunctions, proof theory and semantics of classical propositional logic and predicate logic, manyvalued logics, modal logic and possible worlds, philosophy of logics, paradoxes.

# Level III

#### **PHIL 3007**

### Foundations of Modern Philosophy

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences (including 4 units Philosophy)
- Restriction: Modern Classical Philosophers
- Assessment: essays totalling 7500 9000 words

All traditions in western philosophy are shaped by a series of challenges which occupied philosophers from about the seventeenth century. Philosophers in this modern period tried to come to grips with the consequences of an emerging scientific approach for our understanding of the world and our place in it. Ethics, political philosophy, the theory of knowledge, philosophy of language, philosophy of religion, metaphysics and the philosophy of mind would never be the same again. In this course we look at the work of philosophers such as Rene Descartes, John Locke, David Hume, G.W. Leibniz and Immanuel Kant on these themes, with particular emphasis on tracing connections between their arguments and those of present day philosophers. It turns out that many of our present day conundrums over, say, the nature of political obligation, the role of experience in gaining knowledge of the world, the nature of the mind and our knowledge of ourselves, were anticipated and discussed by these thinkers.

### **PHIL 3011**

#### **Moral Problems**

- 6 units semester 2
- 3 contact hours per week
- · Prerequisite: 8 units Level II courses
- Restriction: Bioethics II/III
- Assessment: essays totalling 7500 9000 words

We are surrounded by ethical debates on issues of intense controversy. Under what circumstances should abortion or euthanasia be permitted? What ethical principles should govern extension of reproductive medical technology? What should we think about the morality of sex, war, drugs, and the relations between rich and poor? This course uses the techniques of moral philosophy to examine and defend answers to these questions, looking at the underlying questions of principle and moral theory on which those answers depend.

### **PHIL 3015**

#### **Issues in the Philosophy of Language**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (including 4 units Philosophy)
- Restriction: Reality, Truth and Meaning
- Assessment: 2 x 3000 word essays, take home exam, tutorial participation

This course will examine the interrelated issues of truth, reference and meaning from a primarily analytical perspective. Our concern is with how language relates to thought and to the external world. We will focus on names, descriptions, and natural kind terms. Key concepts will include truthconditions, realism and naturalism. We will also spend some time looking at theories of metaphor.

# **PHIL 3016**

### **Mental Representation, Consciousness and Self**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences (incl. 4 units Philosophy) or alternative approved by Head of Discipline
- Assessment: essays totalling 7500 9000 words

In spite of the huge advances made in other areas of natural science, much about the human mind remains mysterious. In particular, there are three outstanding problems concerning the mind and its relationship to the world: How does the mind construct mental representations, and in doing so impose meaning on a material universe? What is the nature of consciousness and how can it be explained naturalistically? What is the nature of self? This course will examine each of these questions, and survey the most promising answers developed by contemporary philosophers of mind.

### **PHIL 3020**

### How Should I Live: Contemporary Ethical Theories

- 6 units semester 1
- 3 contact hours per week
- Assessment: essays totalling 7500 9000 words

For each of us, the question how we should live is inescapable. How should we answer this question, and how should we justify our answer? This course investigates the range of answers offered by contemporary ethical philosophers. A variety of normative ethical theories - theories telling us how to live - will be examined, including forms of consequentialism, contractualism, contemporary Kantian and Aristotelian views, virtue theories, existentialism, and a feminist 'ethics of care'. We shall also be looking at the views of ethical 'antitheorists', who hold that giving a proper justification for the way we live should not amount to producing a theory at all. If not, what is the alternative? What are the possibilities and limits of practical ethical thought and argument?

# PHIL 3021

# Justice & Power: Contemporary Political Philosophy

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences (including 4 units of Philosophy)
- Assessment: essays totalling 7500 9000 words

What makes a state just? The distribution of resources and opportunities within it? The way the state exercises power over individual groups who make up the society? The level of the average or overall welfare of the citizens? Legal equality? The ability of individuals to determine their own life course? Perhaps justice is not a political issue at all, but something which should be left to individuals to pursue privately within a very 'minimal' state? Different conceptions of justice have very different implications for the way people live and the way we evaluate government policies. In the last few decades philosophers have started to reexamine these issues in a very fundamental way, returning to some of the founding themes of modern political philosophy such as exploitation, inequality and entitlement. We will examine the arguments and their consequences for a diverse range of issues from constitutionally guaranteed human rights to economic exploitation and social injustice, both within and between nations.

# PHIL 3023

### **Professional Ethics**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II in any faculty
- Assessment: essays totalling 7500 9000 words

It is essential for professionals in any field to have an understanding of the ethical problems and principles in their field. But anyone, no matter what their job, must deal with many other professions as well. Hence part of professional ethics is the understanding of the ethics of other professions: how they interact and what can be expected from them as correct ethical behaviour. In turn, any professional will benefit from a critical scrutiny of their own ethics by those from other professions. The general principles of professional ethics will be examined, as well as the distinctive problems of the different fields. The course is taught in six modules of four lectures and two tutorials each, covering the ethics of several major professions: Business Ethics, Media Ethics, Police Ethics, Medical Ethics, Legal Ethics, and Research Ethics. Topics covered will also include: why be moral, the nature of a profession, why have a code of professional ethics, confidentiality, whistleblowing, the responsibility of business to the environment, uses and abuses of human research, and animal ethics in research.

### PHIL 3024

### **Beauty: Pleasures and Principles**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II in any Faculty (including 4 units Philosophy)
- Assessment: essays totalling 7500 9000 words

We will consider the history of beauty theory through two traditions: the Pythagorean tradition, and the Pleasure-Principle tradition. These will lead to an investigation of the prevalent metaphysical and religious commitments of their respective ages: ancient, medieval, and twentieth-century. Examples of the two traditions found in the twentieth century will be considered in more detail: Mary Mothersill (Pythagorean, e.g., cognitive science), and Guy Sircello (Pleasure-Principle, e.g., fashion, feminism, psychology). The course will also discuss applications to contemporary film theory.

# PHIL 3026

#### Epistemology

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences (including 4 units of Philosophy)
- Assessment: essays totalling 7500 9000 words 90%, class participation 10%

Epistemology is the theory of knowledge, the study of the nature, sources and limitations of knowledge. In studying the nature of knowledge, we will discuss the conditions that a belief must meet to qualify as knowledge. Thus, we will explore what it takes for a certain belief to be justified and the connections between being justified in believing something, being right in believing it and knowing it. In studying the sources of knowledge, we will address the extent to which perception, memory, testimony and reasoning give us knowledge. Finally, while we study the limitations of knowledge, we will consider the challenge known as skepticism. This is the challenge to show that, strictly speaking, we know anything at all. Most of the readings we will use are from contemporary philosophers though, in some cases, we will refer to early modern philosophers such as Descartes or Hume.

### Honours

### **PHIL 4401**

#### **Honours Philosophy**

- 24 units full year
- Prerequisite: UG degree, credit average in courses contributing to a major in Philosophy or equiv. approved by Head of Discipline
- Assessment: 3 x 5000-6000 word essays, 15000-18000 word thesis

Prospective Honours students are advised that at least one Honours option must be in a metaphysics/epistemology area, and at least one in a moral/social area; so that students should have included at least 4 units from each area in second or third year courses as preparation. This should be discussed with the Honours Coordinator in third year. Honours Philosophy is organised jointly with the Philosophy Department at Flinders University and some courses will be offered by that Department.

The Honours program comprises of three semester-length courses and a thesis. Prospective Honours students should consult with the Honours Coordinator before the end of January.

The Philosophy Discipline also offers specialist Honours programs in Logic and Cognitive Science, but with different entry requirements. For further information consult the Honours Coordinator.

# Level I

# PHYSICS 1002

# Astronomy I

- 3 units semester 1
- 3 lectures, 1 tutorial per week; practical work: evening session on campus for observation of moon, 3 evening sessions of astronomical computing exercises
- Available for Non-Award Study
- Assessment: exam, practical work, essay

This course aims to present a survey of astronomical science, including highlights of modern exploration and the open questions in astronomy. Topics include the formation and characteristics of the Solar System, including the planets and minor members of the system; Telescopes; the Sun; the birth, life and death of stars; galaxies and dark matter; active galaxies and quasars; Big Bang cosmology. There are no formal prerequisites for the course, though mathematical literacy at year 10 level is assumed.

# PHYSICS 1003

# **Physics IHE**

- 3 units semester 2
- 3 lectures, 1 tutorial per week; 5 x 3 hour pracs
- Eligibility: B.E. students only
- Prerequisite: C&ENVENG 1001 Statics, MATHS 1011/1013 Mathematics IA/IMA (on application to Head of Physics)
- Corequisite: MATHS 1012 Mathematics IB or MATHS 1011 Mathematics IA (on application to Head of Physics)
- Restriction: PHYSICS 1000A/B Physics I, PHYSICS 1100 Physics IA, PHYSICS 1200 Physics IB
- Assessment: written exam, tutorial work, practical work

Rigid body mechanics: centre of mass, rotational motion, torque, angular momentum, equilibrium, oscillations. Waves and Optics: transverse and longitudinal waves, superposition, interference, standing waves, Fourier decomposition, Fermat's principle, geometric optics, physical optics, interference, Michelson interferometers, thin film interference, diffraction, resolution of telescopes. Relativity and Quantum Physics: kinematics, time dilation, length contraction, Lorentz transformations, transformation of velocities, relativistic momentum and energy, X-rays as waves and photons, photoelectric and Compton effects, pair production, de Broglie waves, uncertainty principle, the quantum mechanical wave function.

# PHYSICS 1005

# Physics, Ideas and Society I

- 3 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assessment: essays, tutorial work

This course is non-mathematical in character and no previous knowledge of physics is assumed. It is taught in the style of the humanities and social sciences. Physics, Ideas and Society I is designed to provide an understanding of some of the principal currents of thought in physics and of the scientific background to some of the philosophical, political and social issues that confront society.

Topics to be selected from the following - physics and its laws; the fundamental constituents of matter; people, energy and the earth; space, time and relativity; the universe.

# PHYSICS 1007

# Space Science and Astrophysics I

- 3 units semester 1
- 3 lectures, 1 tutorial per week; 3 hours experimental/observational work per fortnight
- Eligibility: B.Sc.(Space Science & Astrophysics) students only
- Restriction: PHYSICS 1002 Astronomy I
- Assessment: exam, practical work, essay

This course aims to present a survey of astronomical science, including highlights of modern exploration and the open questions in astronomy. Topics include the formation and characteristics of the Solar System, including the planets and minor members of the system; Telescopes; the Sun; the birth, life and death of stars; galaxies and dark matter; active galaxies and quasars; Big Bang cosmology.

### **Physics Principles & Applications I**

- 3 units semester 1
- 3 lectures, 1 tutorial per week, 5 x 3 hour practical sessions
- Eligibility: Students without SACE Stage 2 Physics or with a Subject Achievement score of less than 13 or equiv.
- Available for Non-Award Study
- Restriction: PHYSICS 1100 Physics IA, PHYSICS 1101 Physics for the Life and Earth Sciences IA
- Assessment: written exam, tutorial work, practical work

This course provides an introduction to some of the principles of physics and their applications in agricultural and biological sciences. It is intended for students who have not studied SACE Stage 2 Physics, and who require familiarity with these principles and applications in their other studies. The course introduces concepts of force, energy, thermal physics, fluids and DC electricity. Students who pass this course and have completed SACE Stage 2 Mathematical Studies (or equiv.) may enrol in the semester 2 course PHYSICS 1102 Physics for the Life and Earth Sciences IB.

# PHYSICS 1100

### **Physics IA**

- 3 units semester 1
- 3 lectures, 1 tutorial per week; 5 x 3 hour pracs
- · Available for Non-Award Study
- Prerequisite: SACE Stage 2 Physics, Math. Studies, Specialist Maths - in exceptional circumstances, high achieving students without Specialist Maths may be granted exemption on application to Head of Physics
- Corequisite: MATHS 1011 Mathematics IA. Students may be permitted to enrol in Physics IA concurrently with MATHS 1013 Mathematics IMA on application to Head of Physics
- Restriction: PHYSICS 1101 Physics for the Life and Earth Sciences IA, PHYSICS 1000A/B Physics I, PHYSICS 1008 Physics Principles & Application I
- Assessment: written exam, tutorial work, practical work

This calculus-based course is the foundation for a major in physics, and also provides a quantitative understanding of physics concepts applicable in biological and geological sciences.

Measurement and uncertainties. Particle mechanics: Newton's law of motion, gravitation, work, energy, conservative forces, momentum, collisions. Thermal physics: heat, temperature, internal energy, kinetic theory of gases, thermodynamic processes. Electricity and magnetism: charge and current, electric field, Ohm's Law, DC circuits, Coulomb and Gauss' laws, electrostatics, capacitance, magnetic field, Ampere and Faraday's laws, inductance, LC circuits.

# PHYSICS 1101

### **Physics for the Life and Earth Sciences IA**

- 3 units semester 1
- 3 lectures, 1 tutorial per week; approx. 4 x 3 hour practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Physics Subject Achievement score of at least 13 (or equiv), Mathematical Studies - other students may apply to Head of Physics for exemption
- Restriction: PHYSICS 1000A/B Physics I, PHYSICS 1100 Physics IA, PHYSICS 1001A/B Physics for the Life and Earth Sciences I, PHYSICS 1008 Physics Principles and Applications I
- Assessment: written exam, tutorial work, practical work

This course provides an introduction to physics at university level for students who wish to major in biological or earth sciences (Physics IA/B and Mathematics IA/B are recommended for students interested in Biophysics or Geophysics ). It includes significant material not in SACE Stage 2 Physics or PHYSICS 1100 Physics IA and PHYSICS 1200 Physics IB. The emphasis is on physics concepts and their application to relevant problems in the earth and biological sciences rather than on the more theoretical or mathematical development of the concepts. It includes a study of forces and equilibrium, mechanical stress, energy, fluids, heat and DC electricity. Applications to biology and physiology will be emphasised.

# **Physics IB**

- 3 units semester 2
- 3 lectures, 1 tutorial per week; 5 x 3 hour pracs
- Available for Non-Award Study
- Corequisite: MATHS 1012 Mathematics IB students may be permitted to enrol in Physics IB concurrently with MATHS 1011 Mathematics IA on application to Head of Discipline
- Assumed Knowledge: MATHS 1011 Mathematics IA or MATHS 1013 Mathematics IMA and PHYSICS 1100 Physics IA
- Restriction: PHYSICS 1001 A/B Physics for the Life & Earth Sciences I, PHYSICS 1000A/B Physics I, PHYSICS 1201 Physics for the Life & Earth Sciences IB, PHYSICS 1003 Physics IHE
- Assessment: written exam, tutorial work, practical work

This calculus-based course completes the Level I sequence for a major in physics, and also provides a quantitative understanding of physics concepts applicable in biological and geological sciences.

Rigid body mechanics: centre of mass, rotational motion, torque, angular momentum, equilibrium, oscillations Waves and Optics: transverse and longitudinal waves, superposition, interference, standing waves, Fourier decomposition, Fermat's principle, geometric optics, physical optics, interference, Michelson interferometers, thin film interference, diffraction, resolution of telescopes. Relativity and Quantum Physics: kinematics, time dilation, length contraction, Lorentz transformations, transformation of velocities, relativistic momentum and energy, X-rays as waves and photons, photoelectric and Compton effects, pair production, de Broglie waves, uncertainty principle, the quantum mechanical wave function.

# PHYSICS 1201

# **Physics for the Life and Earth Sciences IB**

- 3 units semester 2
- 3 lectures, 1 tutorial per week; 5 x 3 hour pracs
- Available for Non-Award Study
- Prerequisite: Either SACE Stage 2 Physics Subject Achievement score of at least 13 (or equiv) & Math.Studies or PHYSICS 1008 Physics Principles & Applications I - other students may apply to Head of Physics for exemption

- Corequisite: MATHS 1012 Mathematics IB students may be permitted to enrol in Physics IB concurrently with MATHS 1011 Mathematics IA on application to Head of Physics
- Assumed Knowledge: PHYSICS 1101 Physics for the Life and Earth Sciences IA or PHYSICS 1008 Physics Principles and Applications I
- Restriction: PHYSICS 1200B Physics IB, PHYSICS 1001A/B Physics for the Life and Earth Sciences I, PHYSICS 1000 A/B Physics I
- Assessment: written exam, tutorial work, practical work

This course provides an introduction to sensing and imaging as applied to biological systems and earth science. It is intended to provide a background in physics at university level for students who wish to major in biological sciences (Physics I and Mathematics I are recommended for students interested in Biophysics or Geophysics). The emphasis is on physics concepts and their application to relevant problems rather than on the more theoretical or mathematical development of concepts. It includes a study of oscillations, waves and sound, geometric and physics optics, electricity and magnetism, X-rays and radioactivity.

# Level II

# PHYSICS 2001 Classical Mechanics II

- 2 units semester 1
- 2 lectures a week, 1 tutorial a fortnight
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 Physics IA & PHYSICS 1200 Physics IB, either MATHS 1012 Mathematics IB (Pass Div 1) or MATHS 2004 Mathematics IIM (Pass Div 1) - other students may apply to Head of Physics for exemption
- Corequisite: APP MTH 2000 Differential Equations and Fourier Series; APP MTH 2002 Vector Analysis and Complex Analysis II
- Assessment: written exam, tests, assignments

Newton's laws. Conservation laws, central forces, non-inertial reference frames.. Many particle systems, rigid bodies, moment of inertia tensor, angular momentum, Euler's equations.

# **Classical Fields and Mathematical Methods II**

- 2 units semester 2
- 2 lectures a week, 1 tutorial a fortnight
- Available for Non-Award Study
- Prerequisite: Either Pass Div 1 in MATHS 1012 Mathematics IB or MATHS 2004 Mathematics IIM, APP MTH 2000 Differential Equations & Fourier Series; APP MTH 2002 Vector Analysis & Complex Analysis - other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 1100 Physics IA and PHYSICS 1200 Physics IB
- Restriction: PHYSICS 2000A/B Physics II (2002/3)
- · Assessment: class exercises, exam, tests

Scalar and vector field concepts, derivatives of fields, line, surface and volume integrals, curvilinear coordinates, Gauss' and Stokes' theorems. Gauss' law, index notation, rotations, tensors, Poisson's equations, electrostatics and method of images, boundary value problems.

# PHYSICS 2004

### Introductory Quantum Mechanics and Applications II

- 2 units semester 1
- 24 lectures, 7 tutorials
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 Physics IA and PHYSICS 1200 Physics IB, either MATHS 1012 Mathematics IB (Pass Div I) or MATH 2004 Maths IIM (Pass Div I) - other students may apply to Head of Physics for exemption
- Corequisite: APP MTH 2000 Differential Equations and Fourier Series; APP MTH 2002 Vector Analysis and Complex Analysis
- Restriction: PHYSICS 2000A/B Physics II, PHYSICS 2100 Physics IIA
- Assessment: written exam, tests

Wave mechanics with examples from atomic, subatomic and solid state physics. Photons, Compton scattering, de Broglie hypotheses, Heisenberg Uncertainty Principle, probability distributions, probability density, plane waves, expectation values, operators, commutators, Schroedinger equation, energy quantisation, particle in one- and three- dimensional box, eigenstates and degeneracy, parity, compatible observables, polarised light, measurement, probability flux, onedimensional bound states and scattering, barrier penetration.

# PHYSICS 2008

#### Physics, Ideas and Society II

- 4 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Prerequisite: 6 units Level I
- Restriction: PHYSICS 1005 Physics, Ideas and Society I
- Assessment: essays, tutorial presentations, tutorial participation

This course is non-mathematical in character and no previous knowledge of physics is assumed. It is intended primarily for students of the humanities and social sciences and is taught in the style of those disciplines. Physics, Ideas and Society II is designed to provide an understanding of some of the principal currents of thought in physics and of the scientific background to some of the philosophical, political and social issues that confront society. Topics to be selected from the following - physics and its laws; the fundamental constituents of matter, people, energy and the earth; space, time and relativity; the universe.

# PHYSICS 2009

### Photonics II

- 2 units semester 2
- 1 lecture, 3 hour practical per week, 1 tutorial per fortnight
- Prerequisite: PHYSICS 1100 Physics IA & PHYSICS 1200 Physics IB; PHYSICS 2100 Physics IIA; either MATHS 1012 Mathematics IB(Pass Div 1) or MATHS 2004 Mathematics IIM (Pass Div 1) - other students may apply to Head of Discipline for exemption
- Corequisite: PHYSICS 2200 Physics IIB
- Assessment: exam, laboratory work, formal laboratory report

This course will introduce students to the fundamental physics of modern optical and photonic technology. Optical fibres and waveguides. Fundamental properties of light. Electron energy bands in semiconductors and the implications of direct and indirect bandgaps. Light emitting and laser diodes and LEDs. Excitons. Quantum confinement including quantum dots, wires and wells. Characteristics of Bragg gratings. Practical work in polarisation of light, laser diodes, modes of lasers and interferometers, optical fibres.

# PHYSICS 2010

### Space Science and Astrophysics II

- 4 units semester 2
- 3 lectures per week, 1 tutorial per fortnight, 20 hours experimental work
- Eligibility: B.Sc. (Space Sc. & Astrophysics), B.E.(Aerospace Eng.) students only
- Prerequisite: PHYSICS 1003 Physics IHE & C&ENVENG 1001 Statics, or PHYSICS 1100 & 1200 Physics IA/B; either MATHS 1012 Maths IB or MATHS 2004 Maths IIM
- Assumed Knowledge: PHYSICS 1002 Astronomy I or PHYSICS 1007 Space Science & Astrophysics I
- · Assessment: exam, assignments, practical work

Protostars and star formation; stellar interiors and stellar evolution; planetary systems; planetary atmospheres; introduction to the heliosphere; introduction to the terrestrial ionosphere and magnetosphere, and the local space environment; comets and meteors.

### PHYSICS 2100

### **Physics IIA**

- 4 units semester 1
- 3 lectures, 1 tutorial, 4 hours practical per week
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 Physics IA and PHYSICS 1200 Physics IB, either MATHS 1012 Mathematics IB (Pass Div I) or MATH 2004 Maths IIM (Pass Div I) - other students may apply to Head of Physics for exemption
- Corequisite: APP MTH 2000 Differential Equations and Fourier Series; APP MTH 2002 Vector Analysis and Complex Analysis
- Restriction: PHYSICS 2004 Introductory Quantum Mechanics and Applications I, PHYSICS 2000A/B Physics II
- · Assessment: written exam, tests, practical work

Quantum Mechanics - content as for PHYSICS 2004 Introductory Quantum Mechanics with Applications II. Optics - geometrical and physical optics, ray tracing, aberrations, polarisation, Fraunhofer diffraction. Practical work instrumentation, general physics, modern physics.

# PHYSICS 2200 Physics IIB

- 4 units semester 2
- 3 lectures, 1 tutorial, 4 hours practical per week
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 Physics IA & PHYSICS 1200 Physics IB;APP MATH 2002
   Vector Analysis and Complex Analysis & APP MATHS 2000 Diff Equations & Fourier Series other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 2100 Physics IIA, PHYSICS 2001 Classical Mechanics II
- Restriction: PHYSICS 2000A/B Physics II, PHYSICS 2211 Electromagnetism II
- Assessment: written exam, tests, practical work

Thermodynamics: equilibrium, 1st and 2nd laws, entropy, cyclic thermodynamic processes, applications. Introduction to Statistical physics. Electromagnetism: Circuits, Electrostatics, Magnetic Field of Steady Currents, Magnetic Properties of Matter, Time-Varying Magnetic Fields, Electromagnetic Induction, Maxwell's Equations and Electromagnetic Waves. Practical work: electromagnetism and projects.

# PHYSICS 2201

### Astrophysics II

- 2 units semester 2
- 3 lectures per week; 1 tutorial per fortnight for eight weeks
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 & 1200 Physics IA/IB or PHYSICS 1003 Physics IHE & C&ENVENG 1001 Statics & ELEC ENG 1005 Electrical Systems AM; either Pass Div I in MATHS 1012 Maths IB or MATHS 2004 Maths IIM
- Assumed Knowledge: PHYSICS 1002 Astronomy I or PHYSICS 1007 Space Science & Astrophysics I
- Restriction: PHYSICS 2010 Space Science & Astrophysics II
- Assessment: exams, assignments

Protostars and star formation; stellar interiors and atmospheres; stellar evolution; white dwarfs and neutron stars; introduction to the heliosphere.

#### **Electromagnetism II**

- 2 units semester 2
- 24 lectures, 7 tutorials
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 Physics IA & PHYSICS 1200 Physics IB; APP MTH 2002
   Vector Analysis & Complex Analysis & APP MATH 2000 Diff Equations & Fourier Series other students may apply to Head of Physics for exemption
- Restriction: PHYSICS 2000A/B Physics II except 2002 and 2003, PHYSICS 2200 Physics IIB
- Assessment: written exam, tests

Circuits, Electrostatics, Magnetic Field of Steady Currents, Magnetic Properties of Matter, Time-Varying Magnetic Fields, Electromagnetic Induction, Maxwell's Equations and Electromagnetic Waves.

# Level III

# PHYSICS 3000

# **Computational Physics III**

- 2 units semester 1
- 2 lectures, 1 hour tutorial per week
- Available for Non-Award Study
- Prerequisite: PHYSICS 2100 Physics IIA or PHYSICS 2004 Intro Quantum Mechanics & Applications II, APP MATHS 2000 Differential Equations & Fourier Series and APP MATH 2002 Vector Analysis & Complex Analysis - other students may apply to Head of Physics for exemption
- Assumed Knowledge: APP MTH 1000 Scientific Computing or COMP SCI 1008 Computer Science IA or equivalent
- Assessment: assignments, exam

This is a hands-on course which provides an introduction to computational methods in solving problems in physics using a suitable software package. It teaches programming procedures, basic numerical methods and their implementation, together with methods of linear algebra, both approximately and exactly (i.e. symbolically). These computational methods are applied to problems in physics, including the modelling of classical physical systems and to quantum mechanics, as well as to data analysis such as linear and nonlinear fits to data sets. Applications of high performance computing are included where possible, such as an introduction to parallel computing and also to visualization techniques.

# PHYSICS 3001

### **Electromagnetism and Optics III**

- 3 units semester 1
- 3 lectures, approx. 1 tutorial per week
- Available for Non-Award Study
- Prerequisite: PHYSICS 2100 Physics IIA and PHYSICS 2200 Physics IIB; APP MATHS 2000 Differential Equations & Fourier Series and APP MATH 2002 Vector Analysis & Complex Analysis

   other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 2002 Classical Fields & Mathematical Methods II
- Restriction: PHYSICS 3018 Electromagnetism III, PHYSICS 3019 Physical Optics III
- Assessment: exam, continuous assessment of tutorial work

Electrostatics and potential, magnetostatics and vector potential, Maxwell's equation, electromagnetic boundary conditions, electromagnetic wave equation, waveguides, energy in electromagnetism, Poynting's theorem.

Interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces, multi-layer dielectric coatings, polarisation and birefringence. Solutions of wave equation, numerical beam propagation, Fresnel-Kirchhoff integral, Fresnel diffraction, Fraunhofer diffraction, Fourier optics, Array theorem, Abbe's theory of imaging, apodization, amplitude and phase spatial filtering.

# PHYSICS 3002

### **Experimental Physics III**

- 3 units semester 2
- 8 hours practical work per week
- Prerequisite: PHYSICS 2100 Physics IIA & PHYSICS 2200 Physics IIB - other students may apply to the Head of Physics for exemption
- Assessment: laboratory work, formal report on selected experiment, open & closed book tests

Laboratory experiments in selected areas including atomic and nuclear physics, optics and

electromagnetism, plus a practical analogue electronics course.

# PHYSICS 3004

#### Quantum Mechanics IIIA

- 3 units semester 1
- 3 lectures, approx. 1 tutorial per week
- Available for Non-Award Study
- Prerequisite: PHYSICS 2100 Phys IIA or PHYSICS 2004 Intro Quant Mech & Apps II; PHYSICS 2002 Class Fields & Math Meth II, APP MATHS 2000 Diff Equats & Fourier Series and APP MATH 2002 Vect Analysis & Complex Analysis - other students apply to Physics Head for exemption
- · Assessment: exam, class exercises, tests

This course develops concepts in quantum mechanics such that the microscopic properties of matter can be understood from a fundamental point of view. Topics include: review of the Schrodinger equation, operators, eigenfunctions, compatible observables; Fourier methods and momentum space; Ehrenfest's theorem; onedimensional scattering and bound states, unitary S-matrix; Periodic systems, energy bands; harmonic oscillator in one and three dimensions; Dirac bra-ket notation, Uncertainty Principle; orbital angular momentum and spin, hydrogen atom, identical particles, atoms; perturbation theory.

### PHYSICS 3006

#### **Advanced Dynamics and Relativity**

- 3 units semester 2
- 3 lectures, approx.1 tutorial per week
- Available for Non-Award Study
- Prerequisite: PHYSICS 2002 Classical Fields & Math Methods II or PHYSICS 2000A/B in 2002 or 2003; PHYSICS 2001 Classical Mechs II, APP MTH 2000, APP MTH 2002 - other students may apply to the Head of Physics for exemption
- · Assessment: class exercises, exam

Mechanics: Lagrangian mechanics, variational techniques, conservation laws, Noether's theorem, small oscillations, Hamiltonian mechanics, Poisson brackets. Relativity: space-time vectors and tensors, relativistic mechanics, electrodynamics; field-strength tensor, Lienard-Wiechert potentials.

# PHYSICS 3009 Statistical Mechanics III

- 2 units semester 1
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: PHYSICS 1100 Physics IA & PHYSICS 1200 Physics IB, APP MTH 2000 Differential Equations and Fourier Series and APP MTH 2002 Vector Analysis and Complex Analysis - other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 2100 Physics IIA
   & PHYSICS 2200 Physics IIB
- Assessment: exam, assignments

This course introduces concepts essential for the understanding of both classical and quantum statistical mechanics. Topics covered include the classical laws of thermodynamics and their application, postulates of statistical mechanics, statistical interpretation of thermodynamics, microcanonical, canonical and grand canonical ensembles. The methods of statistical mechanics are then used to develop the statistics for Bose-Einstein, Fermi-Dirac and photon gases. Selected topics from low temperature physics and electrical and thermal properties of matter are discussed.

### PHYSICS 3013

#### Astrophysics III

- 2 units semester 1
- 2 lectures per week, approx. 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: PHYSICS 2100 Physics IIA & PHYSICS 2200 Physics IIB - other students may apply to Head of Physics for exemption
- Assessment: written exam, tutorials, marked assignments

A survey of the universe at all scales and wave lengths/energies. Stellar astrophysics and studies of the interstellar medium and magnetic fields. Binary systems, x-ray binaries, active galactic nuclei. Gamma-ray astrophysics; radio and x-ray astronomy. Introductory cosmology.

# Atmospheric & Environmental Physics III

- 2 units semester 2
- 2 lectures per week, approx. 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: PHYSICS 2100 Physics IIA & PHYSICS 2200 Physics IIB - other students may apply to Head of Physics for exemption
- Assessment: written exam, marked assignments

The course is an introduction to the physics of planetary atmospheres, with a focus on the earth's atmosphere including environmental and climate issues. Topics will include radiative transfer in the sun-earth system, thermodynamics of the atmosphere, cloud physics, atmospheric motions and circulation, the role of aerosols and minor constituents, such as water vapour, carbon dioxide and ozone, in determining climate, and the impact on the environment of anthropogenic actions.

# PHYSICS 3016

### **Education in Physics with Industrial Cooperation A**

- 0 units semester 2
- 4-5 months full-time work on a project in industry sem 2, Yr 3
- Prerequisite: PHYSICS 2100 Physics IIA (Credit or above), PHYSICS 2200 Physics IIB (Credit or above), 12 units Level III courses

A program whereby students enrolled in third year B.Sc, B.Sc.(Optics & Photonics) or (Space Science & Astrophysics) who have achieved an average credit level in Levels I & II and at least credit in PHYSICS 2100 & 2200 Physics IIA/B, can apply to enrol in a cooperative program with industry.

The student receives financial support provided by the industry. The EPIC A and EPIC B projects must be different, and are jointly agreed by the Course Coordinator and the industrial partner. A written report must be prepared on each project and approved by both the industrial partner and the Course Coordinator. The performance of each student will be monitored by the Course Coordinator. Unsatisfactory work reports or course grades may result in the student being required to leave the EPIC program.

# PHYSICS 3017

### Education in Physics with Industrial Cooperation B

- 0 units semester 1
- 4-5 months full-time work on a project in industry sem 1, Yr 4
- Prerequisite: PHYSICS 2100 Physics IIA (Credit or above), PHYSICS 2200 Physics IIB (Credit or above), 12 units Level III courses

A program whereby students enrolled in third year B.Sc, B.Sc. (Optics & Photonics) or (Space Science & Astrophysics) who have achieved an average credit level in Levels I & II and at least credit in PHYSICS 2100 & 2200 Physics IIA/B, can apply to enrol in a cooperative program with industry.

The student receives financial support provided by the industry. The EPIC A and EPIC B projects must be different, and are jointly agreed by the course coordinator and the industrial partner. A written report must be prepared on each project and approved by both the industrial partner and the course coordinator. The performance of each student will be monitored by the Course coordinator. Unsatisfactory work reports or course grades may result in the student being required to leave the EPIC program.

### PHYSICS 3018

### **Electromagnetism III**

- 2 units semester 1
- 24 lectures, 4 tutorials
- Prerequisite: PHYSICS 2100 /2200 Physics IIA/IIB; APP MATHS 2000 Differential Equations & Fourier Series and APP MATH 2002 Vector Analysis & Complex Analysis - other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 2002 Classical Fields & Mathematical Methods II
- Restriction: PHYSICS 3001 Electromagnetism and Optics III, PHYSICS 3019 Physical Optics III
- Assessment: exam, continuous assessment of tutorial work

Electrostatics and potential, magnetostatics and vector potential, Maxwell's equation, electromagnetic boundary conditions, electromagnetic wave equation, waveguides, energy in electromagnetism, Poynting's theorem.

Interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces.

# **Physical Optics III**

- 2 units semester 1
- 24 lectures, 4 tutorials
- Eligibility: B.E.(Electrical & Electronic)/B.Sc(Physics) students only
- Prerequisite: PHYSICS 2100 Physics IIA and PHYSICS 2200 Physics IIB, APP MATHS 2000 Differential Equations & Fourier Series and APP MATH 2002 Vector Analysis & Complex Analysis

   other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 3018 Electromagnetism III or equivalent
- Restriction: PHYSICS 3001 Electromagnetism & Optics III, PHYSICS 3018 Electromagnetism III
- Assessment: exam, continuous assessment of tutorial work

Maxwell's equations, EM waves in free space, plane waves; Maxwell's equations in matter; waveguides, dispersion, interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces, multi-layer dielectric coatings, polarization and birefringence.

Solutions of wave equation, numerical beam propagation, Fresnel-Kirchhoff integral, Fresnel diffraction, Fraunhofer diffraction, Fourier optics, Array theorem, Abbe's theory of imaging, apodization, amplitude and phase spatial filtering.

# PHYSICS 3020

### **Photonics III**

- 2 units semester 2
- 2 lectures per week, approx. 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: PHYSICS 2100 Physics IIA & PHYSICS 2200 Physics IIB; PHYSICS 2009 Photonics II - other students may apply to the Head of Physics for exemption
- Assumed Knowledge: PHYSICS 3018 Electromagetism III
- Assessment: exam, continuous assessment of tutorial work

Interaction of light with matter, time dependent perturbation theory, stimulated and spontaneous emission and absorption, stability of resonators, mode matching, advanced laser resonators, macroscopic description of the gain medium, rate equations, gain saturation and broadening, hole burning, MOPA's, CW lasers, frequency stabilisation, pulsed lasers, gain switching, Qswitching, injection-seeding, mode-locked lasers. Review of common lasers, optical fibres, microstructured optical fibres, fibre Bragg gratings, fibre sensors, optical materials, photonic crystals.

# PHYSICS 3022

#### Quantum Mechanics IIIB

- 2 units semester 2
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: PHYSICS 3004 Quantum Mechanics IIIA, PHYSICS 2002 Classical Fields & Mathematical Methods II, APP MTH 2000 and APP MTH 2002 - other students may apply to Head of Physics for exemption
- Assumed Knowledge: PHYSICS 2004 Introductory Quantum Mechanics and Applications II, or PHYSICS 2100 Physics IIA
- Restriction: PHYSICS 3005 Advanced Quantum Mechanics
- Assessment: exam, tutorial work, tests

This course extends the formalisation and applicability of quantum mechanics to include time dependent phenomena and various approximation methods. Radiation, external fields. Dirac's formulation of quantum mechanics, measurement, Bell's inequality. Symmetry and conservation laws, time-reversal, rotations and angular momentum, L-S and j-j coupling in atoms and nuclei. Scattering, partial waves, phase shift analysis, S-matrix.

### PHYSICS 3230

### Photonics IIIP

- 3 units semester 2
- 2 lectures, 3 hour practical per week, approx. 1 tutorial per fortnight,
- Eligibility: BSc (Optics & Photonics)
- Prerequisite: PHYSICS 2100 Physics IIA & PHYSICS 2200 Physics IIB; PHYSICS 2009 Photonics II - other students may apply to the Head of Physics for exemption
- Assumed Knowledge: PHYSICS 3018
   Electromagetism III

- Restriction: PHYSICS 3020 Photonics III
- Assessment: exam, marked assignments, laboratory work, formal report

Interaction of light with matter, time dependent perturbation theory, stimulated and spontaneous emission and absorption, stability of resonators, mode matching, advanced laser resonators, macroscopic description of the gain medium, rate equations, gain saturation and broadening, hole burning, MOPA's, CW lasers, frequency stabilisation, pulsed lasers, gain switching, Qswitching, injection-seeding, mode-locked lasers. Review of common lasers, optical fibres, microstructured optical fibres, fibre Bragg gratings, fibre sensors, optical materials, photonic crystals. Practical work in laser modulation, laser stabilisation, optical fibres, characteristics of semi conductors.

# Honours

# PHYSICS 4000

### **Honours Physics**

- 24 units full year
- Prerequisite: major in physics or theoretical physics, preferred background is double major in physics approval of Head of Physics required
- Assessment: project, report

Potential participants are advised to see Head of Physics as soon as possible, preferably before enrolling for Level III courses. In exceptional circumstances it is possible to take honours over two years - see B.Sc. Academic Program Rule 5.7.4

It is possible to take Honours in either experimental or theoretical physics. The Honours program may include lecture programs on astrophysics, atmospheric physics, atomic and molecular physics, cosmology, differential geometry and general relativity, electrodynamics, experimental methods, gauge field theories, lasers and nonlinear optics, many-body theory, nuclear radiation physics, nuclear theory and particle physics, relativistic quantum mechanics, quantum field theory, statistical mechanics/many-body theory.

Each student also undertakes a substantial experimental or theoretical research project on which a report is prepared. Full details may be obtained by application to the Head of Physics.

# PHYSICS 4001

### **Honours Mathematical Physics**

- 24 units full year
- Prerequisite: PHYSICS 3004 Quantum Mechanics IIIA, PHYSICS 3006 Advanced Dynamics & Relativity, PHYSICS 3009 Statistical Mechanics III, PHYSICS 3022 Quantum Mechanics IIIB, & other Level III Science or Math. Sc courses
- Assessment: exams, project

Students considering this course should see the Head of Physics as soon as possible, preferably before enrolling in third year.

The lecture program is determined from year to year. Students will be required to make a selection from courses offered by the Discipline of Physics and Pure and Applied Mathematics. Honours topics from other departments in the School of Mathematical and Computer Sciences, and from the Schools of Information Science & Technology at Flinders University of South Australia may be considered appropriate. Lectures may include the following courses: general theory of relativity, relativistic quantum mechanics, quantum field theory, many-body theory, statistical mechanics, theoretical nuclear and particle physics.

Each student will be assigned a supervisor who will advise on the choice of lecture program and give guidance in the writing of a project on some topic in mathematical physics, to be approved in advance by the Head of the Discipline of Physics.

# PHYSIOLOGY

# Level II

# PHYSIOL 2003

# Human Physiology IIA: Heart, Lungs and Circulation

- 4 units semester 1
- 3 lectures, 1 tutorial, 4 hours practical per week
- Available for Non-Award Study
- Prerequisite: pass in at least 6 units of Level I Chemistry or Biology
- Assumed Knowledge: Level I Chemistry, Biology, Physics

- Restriction: PHYSIOL 2101 Human Physiology IIA (Biomed) or previously offered courses with significant overlap
- Assessment: written exams, practical assessments and tutorial performance

This foundation course in mammalian physiology considers the function and regulation of the cardiovascular and respiratory systems and how these systems adapt to changes including exercise, severe blood loss, and stress, All components of the course focus on developing in the students the skills and knowledge required from a graduate scientist. For the practical program, students, working in groups, participate in a semester-length research project which includes the generation of the hypothesis, preparation of a background literature review, the collection and analysis of the necessary data, and presentation of the findings in a report written in the format of an article for a scientific journal. During the tutorial sessions, students will discuss situations, generally derived from recent research papers, which provide the opportunity for them to integrate the information that they have obtained through the lecture and practical sessions and to develop skill in interpreting research literature.

### PHYSIOL 2004

### Human Physiology IIB: Homeostasis & Nervous System

- 4 units semester 2
- 3 lectures, 1 tutorial, 4 hours practical per week
- Available for Non-Award Study
- Prerequisite: Pass in at least 6 units of Level 1 Chemistry or Biology
- Assumed Knowledge: PHYSIOL 2003 Human Physiology IIA; Level I Chemistry, Biology, Physics
- Restriction: PHYSIOL 2201 Human Physiology IIB (Biomedical Science) or previously offered courses with significant overlap
- Assessment: written exams, practical assessments and tutorial performance

This course extends the knowledge and skills developed in Human Physiology IIA. The role of the kidney in maintaining fluid and ion levels in the body, which is responsible for the regulation of blood pressure, for avoiding dehydration, for maintaining bone, and many other essential aspects of physiology, and the role of the gastrointestinal tract in providing nutrition to the body are considered. The two control systems in the body, the hormones and the brain, are major topics for this semester. For the practical program, students, working in groups, participate in a semester-length research project which includes the generation of the hypothesis, preparation of a background literature review, the collection and analysis of the necessary data, and presentation of the findings in the form of a scientific conference poster prepared with desk top publishing software. During the tutorial sessions, students will discuss situations, generally derived from recent research papers, which provide the opportunity for them to integrate the information that they have obtained through the lecture and practical sessions and to develop skill in interpreting research literature.

# PHYSIOL 2101

#### Human Physiology IIA (Biomedical Science)

- 4 units semester 1
- 3 lectures, 1 tutorial, 4 hours practical per week
- Eligibility: BSc (Biomedical Science) students
- Prerequisite: 6 units of Level 1 Chemistry, BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells, and BIOLOGY 1201 Biology I: Human Perspectives
- Assumed Knowledge: Level 1 Physics, Chemistry and Biology
- Restriction: PHYSIOL 2003 Human Physiology IIA or previous courses with significant overlap
- Assessment: end of semester written exam, practical assessments, tutorial performance

Physiology is the study of the function of the human body. The components of this course are designed to develop the skills and attributes of a research scientist in the biomedical sciences. The major lecture topics covered in this course are cellular physiology, the autonomic nervous system, and the cardiovascular and respiratory systems. There is a particular focus on considering how the cardiovascular and respiratory systems adapt to normal and abnormal change including exercise, severe blood loss, and stress. In the practical program, students undertake a humanbased research project that includes the generation of a hypothesis, a review of the relevant research literature, the collection and analysis of the data necessary to test the hypothesis. The project is supported by workshops that lead to a deeper understanding of

experimental techniques and data processing. Tutorials will take the form of journal clubs, where students discuss in a structured fashion published research articles, which are selected to reinforce the physiology covered in lectures as well as developing the students' critical skills.

### PHYSIOL 2201

#### Human Physiology IIB (Biomedical Science)

- 4 units semester 2
- 3 lectures, 1 tutorial, 4 hours practical per week
- Eligibility: BSc (Biomedical Science) students
- Prerequisite: 6 units Level 1 Chemistry and BIOLOGY 1101/1102 Biology I: Molecules, Genes and Cells and BIOLOGY 1201 Biology I: Human Perspectives
- Assumed Knowledge: PHYSIOL 2101 Human Physiology IIA (Biomed); Level 1 Biology, Chemistry and Physics
- Restriction: PHYSIOL 2003 Human Physiology IIB: Homeostasis & the Nervous System or previous courses with significant overlap
- Assessment: end of semester written exam, practical assessments, tutorial performance

Physiology is the study of the function of the human body. The components of this course are designed to develop the skills and attributes of a research scientist in the biomedical sciences. The major lecture topics covered in this course are the renal gastrointestinal, hormone and central nervous systems. The two control systems in the body, the hormones and the brain, are major topics. In the practical program, students undertake a semester length research project that introduces them to one of the active research areas in Physiology. Students complete the human-based research project commenced in first semester and present the results in the format of a research journal article and a conference poster. The project is supported by workshops that lead to a deeper understanding of experimental techniques and data processing. Tutorials will take the form of journal clubs, where students discuss in a structured fashion published research articles, which are selected to reinforce the physiology covered in lectures as well as developing the students' critical skills.

# Level III

#### PHYSIOL 3000

#### **Advanced Systems Physiology**

- 6 units semester 2
- 3 lectures, 2 x 4 hour practicals per week
- Available for Non-Award Study
- Prerequisite: 8 units of Level 2 Physiology
- Restriction: PHYSIOL 3102 Human Physiology IIIB (Biomed) or equiv.
- Assessment: 3 written exams, research project components include laboratory performance, background literature survey, research proposal & critique of published scientific manuscript

Advanced Systems Physiology consists of lecture and practical streams. This course is designed to challenge and to stimulate your interest in areas of molecular, cellular and systems physiology in which there have been recent rapid and important advances. The research-focused lecture stream offers a series of interrelated modules covering the following main topics: cardiovascular health and disease, of energy balance intra and intercellular signalling pathways and integrative physiology. An added dimension to many topics is the physiological basis of the development of common diseases and changes that occur with aging. The research practical stream, Physiology in Action, involves a research project supported by a series of workshops and tutorials which are designed to develop your research skill base, including analysis and interpretation of results and to improve skills related to communicating results. Students will be given the opportunity to read widely in chosen areas of the course and to review some research areas. Small-group discussion of specific research papers and research topics will be an important part of Physiology in Action.

# PHYSIOL 3001

#### **Neurobiology III**

- 6 units semester 1
- 3 hours lectures, 4 hours practical, 4 hours workshop per week
- Available for Non-Award Study
- Prerequisite: 8 units level 2 Physiology
- Restriction: PHYSIOL 3102 Human Physiology A
   (Biomed) or equivalent
- Assessment: exams, essays

This course consists of 2 parallel streams, namely: Advanced Neurobiology and Physiology in Action. The Advanced Neurobiology stream of this course broadly encompasses the study of central nervous system function with emphasis on sensation and the neural control of human movement. Issues that will be covered in depth include special senses and advanced neuromuscular physiology with emphasis on the peripheral and central control of movement, biological rhythms and sleep. The research practical stream aims to provide students with an introduction to 'hands on' research and the research projects are supervised by trained researchers and supported by a series of workshops and tutorials. Students work in small groups and have access to equipment appropriate for investigations into a current research question in a professional research environment. The workshops and tutorials including topics related to developing a research project and composing a formal proposal.

### PHYSIOL 3102

#### Human Physiology IIIA (Biomedical Science)

- 6 units semester 1
- 3 lectures, 4 hour practical, 4 hour tutorial per week
- Eligibility: BSc (Biomedical Science) students
- Prerequisite: 8 units Level 2 Human Physiology
- Restriction: PHYSIOL 3001 Neurobiology III or equivalent
- Assessment: written exams for lecture streams; research project includes written assignments, evaluation of laboratory performance; for tutorial, individual assessment of participation & understanding

This course is designed to challenge students with advanced subject material in physiology and experience in cutting edge research. The former is achieved in a research-focused lecture stream, which is identical to that of Neurobiology III. The latter is derived in the Biomedical Research Unit, which consists of a practical project based in a working research laboratory and a research-based tutorial component. In the tutorials students consider complex scientific issues, generate hypotheses, identify and prioritise related learning issues, gather relevant material and apply the new knowledge back to the problem.

# PHYSIOL 3202

#### Human Physiology IIIB (Biomedical Science)

- 6 units semester 2
- 3 lectures, 4 hour practical, 4 hour tutorial per week
- Eligibility: BSc (Biomedical Science) students
- Prerequisite: 8 units of Level 2 Physiology
- Restriction: PHYSIOL 3000 Advanced Systems Physiology or equiv.
- Assessment: written exams for lecture streams; research project includes written assignment, evaluation of laboratory performance; for PBL, individual assessment of participation & understanding

This course is designed to challenge students with advanced subject material in physiology and experience in cutting edge research. The former is achieved in a research-focused lecture stream, which is identical to that of Advanced Systems Physiology. The latter is derived in the Biomedical Research Unit, which consists of a practical project based in a working research laboratory and a research-based tutorial component. In the tutorials students consider complex scientific issues, generate hypotheses, identify and prioritise related learning issues, gather relevant material and apply the new knowledge back to the problem.

#### Honours

# PHYSIOL 4000 Honours Physiology

- · 24 units full year
- Eligibility: approved honours students only
- Prerequisite: pass at standard satisfactory to Head of Discipline in appropriate Level III courses offered by Physiology, or acceptable alternative
- Assessment: presentation of 2 research seminars; laboratory performance; critique of scientific manuscript, written literature review, thesis & oral defence of thesis

Candidates are required to demonstrate an original and critical approach in the assimilation of current knowledge in an area of physiological research and engage in experimental work in this research field for a full academic year in the Discipline of Physiology or in an affiliated area under the general direction of the Head of the Discipline of Physiology. A handbook describing the range of research projects to be offered during the Honours year is available from The School of Molecular and Biomedical Science from October of the preceding year. Each project will be supervised by one or more members of the academic or affiliate staff who will provide the student with a series of key references for each particular research project. Students will also be expected to attend a series of Research Skills and Professional Development workshops held throughout the year.

# PLANT SCIENCE

### Level I

# PLANT SC 1001RW Chemistry and Introductory Biochemistry A

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: SACE Stage I Chemistry
- Assessment: exam, practicals

A study of the chemistry and biochemistry relevant to agricultural production and environmental management including: chemical calculations, pH and buffers; oxidation and reduction reactions; electrochemical series and metal activity; battery operation; corrosion; introduction to the chemistry of fertilisers and pesticides; atmospheric and ozone chemistry; chemical composition and chemical properties of plant and animal products - sugars, fats and proteins; chemistry of hydrocarbon fuels.

# Level II

# PLANT SC 2003RW

### **Microbiology and Invertebrate Biology**

- 4 units semester 2
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1102/1102 Biology 1: Molecules, Genes and Cells; APP ECOL 1004RW Cell Biology & Genetics; APP ECOL 1003RW Biology of Plants and Animals

• Assessment: written exam, practical exercises, project work, tutorials

An introduction to the biology of microorganisms and invertebrates of importance in agriculture, wine and natural ecosystems. Topics to be considered include: microbial growth, energy sources and nutritional categories; form and function of major groups of microorganisms; classification and identification: beneficial and deleterious activities of microorganisms; features of saprophytic, pathogenic, symbiotic and commensal lifestyles; determinants of pathogenicity and resistance; interactions of microorganisms and environment; case studies of natural and managed microbial ecosystems; basic concepts of invertebrate taxonomy, physiology and function; external and internal anatomy; reproduction, life cycles, feeding relationships; practical skills for manipulating microorganisms and invertebrates and studying their activities.

# PLANT SC 2004WT

#### **General Microbiology**

- 2 units semester 1
- Average 7 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1101 or BIOLOGY 1102 Biology I: Molecules, Genes and Cells; APP ECOL 1004RW Cell Biology & Genetics; APP ECOL 1003RW Biology of Plants and Animals
- Assessment: written exam, practical exercises, tutorials

An introduction to the biology of microorganisms of importance in agriculture, wine and natural ecosystems. Topics to be considered include: microbial growth, energy sources and nutritional categories; form and function of major groups of microorganisms; classification and identification; beneficial and deleterious microorganisms; features of saprophytic, pathogenic, symbiotic and commensal lifestyles; determinants of pathogenicity and resistance; interactions of microorganisms and environment; case studies of natural and managed microbial ecosystems; practical skills for manipulating microorganisms and studying their activities.

# PLANT SC 3002WT

### **Biotechnology in the Food and Wine Industries**

- 2 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: BIOCHEM 2106WT Biochemistry IIA (Agriculture) or equivalent
- Assessment: practical reports, presentation, written exam

Application of biotechnology in the food and wine industry: use of recombinant DNA methods in manipulation of bacteria and yeast cultures; transgenic plants with improved traits and products with better quality, enzyme engineering for efficient food processing and production, nonalcoholic and alcoholic fermentations, food additives. Ethical issues and limitations of the gene manipulation technology will also be discussed.

# PLANT SC 3004WT

### **Mineral Nutrition of Plants**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Prerequisite: PLANT SC 2001WT Agricultural Botany, ENV BIOL 2006 Botany II or VITICUL 2002WT Viticultural Science or APP ECOL 1003RW Biology of Plants & Animals or BIOLOGY Biology of Plants & Animals; or equiv.
- Assessment: exam, practical reports, reviews, essays

An advanced course which takes its brief from the acute deficiency in minerals of most South Australian soils, and the pre-eminent role of nutrition in successful agricultural production in this State. Topics are discussed in a context of both agricultural and horticultural industries, and include factors affecting nutrient acquisition by roots, diagnosis and correction of macro and micronutrient problems, fertiliser strategies, nutritional effects on produce quality, including nutritional quality, nutrition and disease resistance and genetic control of adaptation to nutrient limitations in soils.

# PLANT SC 3009WT Plant Molecular Biology

- 6 units semester 2
- 3 lectures, tutorial, 4 hours practicals per week, 4 hours non-contact project time
- Assumed Knowledge: BIOCHEM 2106 Biochemistry II (Biotechnology) A, ANIML SC 2029WT Genes and Inheritance or BIOCHEM 2000A/B Biochemistry II or equiv at credit level
- Assessment: practicals, tutorial projects, research planning & review, final exam

This course provides a current review of our knowledge in plant development, environmental responses and plant-microbe interactions. There is an emphasis on the molecular mechanisms directing plant gene expression under diverse environmental and developmental stimuli. This knowledge is central to our ability to modify plant responses and properties for commercial gains in biotechnology and agriculture. Areas covered in the course include: plant genes and genomes: mechanisms that control plant gene expression; molecular-genetic analysis of important characteristics; signal transduction; molecular biology of plant development, reproduction, and responses to disease and other environmental factors. In the laboratory classes, students will perform some of the techniques currently used to generate plant molecular biology information and undertake a research project related to current research in plant molecular biology and biotechnology.

# PLANT SC 3022WT

### **Research Project Plant and Pest Science**

- 3 units summer semester or semester 1 or 2
- Prerequisite: relevant level II course offered by Plant & Pest Science
- Assessment: to be advised

The course comprises a small research project to be undertaken during the fourth year of the program under the supervision of a staff member in the Discipline of Plant and Food Science. Students wishing to undertake a research project should consult the Head of Discipline before beginning of the fourth year. Courses presented as prerequisites should be relevant to the area of the research project.

# PLANT SC 3030AEX

# **Integrated Weed Management Part 1**

- 1.5 units semester 1
- 2 day residency in mid-semester break modules at students' pace
- Assumed Knowledge: completion of Level II
   Plant Biology course
- Assessment: assignments during the year
- Students must enrol in APP ECOL 3022BEX Integrated Weed Management Part 2

The impact of weeds on agricultural and natural ecosystems. Important characteristics of weed biology. Ecology of weeds. Methods of sampling and monitoring weed infestations. Biological, cultural and chemical methods for weed management. Integrating management techniques for weeds in a range of ecosystems, including: cropping enterprises, perennial pastures, national parks and recreation areas and horticultural systems.

# PLANT SC 3030BEX

# **Integrated Weed Management Part 2**

- 3 units full year
- Modules at students' pace
- Prerequisite: PLANT SC 3030AEX Integrated Weed Management Part 1
- Assessment: As for PLANT SC 3030AEX -Integrated Weed Management Part 1

The impact of weeds on agricultural and natural ecosystems. Important characteristics of weed biology. Ecology of weeds. Methods of sampling and monitoring weed infestations. Biological, cultural and chemical methods for weed management. Integrating management techniques for weeds in a range of ecosystems, including: cropping enterprises, perennial pastures, national parks and recreation areas and horticultural systems.

# PLANT SC 3130WT

### **Plant Pathology**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: PLANT SC 2004WT General Microbiology, OENOLOGY 2025WT Micro for Viticulture & Oenology, PLANT SC

2003RW Micro and Invertebrate Biology, MICRO 2004 Microbiology II, ENV BIOL 2006 Botany II

- Restriction: APP ECOL 3011WT Pathogen-Plant Interactions, APP ECOL 3005WT Plant Disease and the Environment
- Assessment: written exam, practical exercises, critical review, mini-internship

A senior level course designed to provide sufficient background in plant pathology for graduates to take employment in plant disease control or to progress into postgraduate study in plant pathology or related disciplines. The course will consider the recognition of biotic plant diseases and how they are defined; evaluate economic factors: describe loss assessment: and describe the use of disease forecasting for decision making in management. The components of plant disease systems will be considered separately (pathogen, host and environment). Specifically, the course will examine the biology, taxonomy and disease cycle of plant pathogens; host resistance strategies; the physiology of the diseased plant; both inherent and introduced genetic factors; environmental factors; and the role of vectors in the spread of disease. This information will be integrated to illustrate the complex interactions required for the onset and progress of disease epidemics. Descriptors of epidemics and the strategy of using epidemiology as a basis for the management of disease by manipulating the components of epidemics will lead into an evaluation of the methods available for control of plant diseases. Case studies will be used where appropriate. Practical skills in working with fungi, bacteria, nematodes and viruses will be acquired both in the field and the laboratory. Experience in evaluation of research and report writing will be an outcome of the course.

# PLANT SC 3131WT

### **Integrated Pest Management A**

- 3 units semester 1
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assessment: exam, practical exercises, assignments

This course provides an introduction to the theory and practice of pest management. Topics considered are: the development, regulation and use of pesticides; strategies and tactics for managing pests (biological, cultural, genetic and chemical control); integrated pest management; economics of pest management; the diagnosis of disease; strategies and tactics for managing disease outbreaks; integrated weed management.

# PLANT SC 3200WT

# Plant Breeding

- 3 units semester 2
- 6 hours a week
- Assumed Knowledge: ANIML SC 2029WT Genes and Inher; OR APP ECOL 1004RW Cell Biol and Gen; OR GENETICS 2100 Genetics IIA, Foundations of Genetics or an equivalent course
- Restriction: PLANT SC 3007WT Introductory Plant Breeding; PLANT SC 3018WT Advanced Plant Breeding
- Assessment: final exam, practical reports, essay

Generic manipulation in plants has underpinned improvements in productivity and has enhanced sustainability of farming systems worldwide. As well, plant generic diversity is fundamental to understand adaptation in natural systems. This course introduces the fundamental concepts of plant breeding and plant adaptation that are applicable to agricultural and natural systems. The topics covered include: genetic diversity in relation to adaptation, productivity, pest and disease resistance and end-use quality; strategies for setting breeding objectives and maximising selection and improvement of key traits; breeding methodologies for self or cross pollinated plants.

# PLANT SC 3230WT

# **Communication in the Agri-Food Industry**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: Level I/II of B.Ag.Sc, B.Sc.(Ag.Sc) or B.F.S&T.
- Assessment: written & oral presentations, poster preparation, class participation

The course provides an opportunity for students to integrate and extend their knowledge of the workplace, to incorporate scientific information effectively into practice and policy, and to develop communication skills allowing participants to enter and to play a role in local, national and international Agri-food developments. It aims to provide instruction in information transfer techniques and principles involved in oral, written, and electronic communication of scientific knowledge; to give an opportunity to develop ability in public speaking, by interacting in a group and presenting views in public debate: to develop skills in researching, critically assessing, preparing and presenting information on selected topics relevant to the Agri-food industry; to introduce students to the use of electronic communication technologies: to expand understanding of problems and constraints to be faced in future employment; to identify career opportunities open to graduates, and to assist students in applying for positions and presentations to potential employers: to provide an insight into the approaches of decision makers in a variety of areas through appropriate guest lectures; to acknowledge the maturity of and to enhance the self-confidence of graduates.

# PLANT SC 3231WT

# Insect Ecology

- 3 units not offered in 2007
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Assumed Knowledge: ANIML SC 2005WT Agricultural Zoology II or APP ECOL 3018WT Agricultural Zoology (Invertebrates) or ENV BIOL 2900B Zoology II (Part 2) or PLANT SC 2003RW Microbiology and Invertebrate Biology
- · Assessment: reports, assignments, exam

This course considers the ecology of insects from both theoretical and practical perspectives, with special emphasis placed on the central role of evolution in shaping interactions between insects and their environment. Topics include insect plant interactions, insects and climate, behavioural ecology, insect population dynamics and natural enemies. Opportunities to apply an understanding of ecology to the management of insect pests are explored, including biological control of insects using natural enemies.

# PLANT SC 4003WT

# Honours Plant Science (BAgSc)

- 12 units full year
- Prerequisite: Credit or higher in at least 2 Level III courses approved by Head of Discipline
- Corequisite: 2 additional Level III courses offered and approved by Discipline relevant to proposed research project (at discretion of Head, a relevant course taught by another discipline may be accepted)
- Assessment: Average of four Level III courses, research project - research proposal, seminar, thesis and viva voce

Candidates will be required to undertake a research project under the supervision of one or more members of academic staff and present seminars and a thesis on their research work. Intending candidates should consult the Head of the Discipline of Plant and Food Science and potential supervisors during the third year and be prepared to begin studies in the discipline at the beginning of February or July.

# PLANT SC 4012WT

### **Honours Plant and Pest Science**

- 24 units full year
- Prerequisite: Credit or higher in at least 2 appropriate Level III courses offered by a Science Discipline
- Assessment: research proposal, seminar, thesis, viva voce - minor component, e.g. 10-20% may comprise coursework, essays or other assignments not part of research project as deemed appropriate to each student's program

This course is available under the provisions of Specific Academic Program Rule 5.7.2.

Candidates will be required to undertake a research project under the supervision of one or more members of academic staff and present seminars and a thesis on the research work undertaken. A candidate may also be required to attend lectures and pass exams in related courses.

Intending candidates should consult the Head of the Discipline of Plant and Food Science and potential supervisors during the final year of the degree and be prepared to begin studies in the discipline at the beginning of February or July (for mid-year intake).

# PLANT SC 4014WT

### **Honours Plant Science (BAg)**

- 24 units full year
- Prerequisite: Credit or higher in at least 2 Level III courses approved by the Head of Discipline
- Assessment: research proposal, seminar, thesis, viva voce - minor component, e.g. 10-20% may comprise coursework, essays or other assignments not part of research project as deemed appropriate to each student's program

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline of Plant and Food Science as well as coursework, essays or other assignments deemed appropriate to each student's Honours program. A candidate may also be required to attend lectures and pass exams in related courses.

Intending candidates should consult the Head of the Discipline and potential supervisors during the final year of the degree and be prepared to begin studies at the beginning of February.

# POLITICS

# Level I

# POLI 1101 Introduction to Australian Politics

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: tutorial participation 10%, 1000-1500 word short essay 30%, 2500-3000 word essay/optional 3 hour exam 60%

Politics affect you everyday, the conditions you live and work under, your identity, your security, the values and fears you possess, and ultimately your expectations as a citizen and your place in the world. This course will provide an introduction to the Australian political system in its social, cultural and economic context. Students will also be introduced to relevant theoretical debates in a range of areas. Topics covered include: national identity, political culture, governmentality, political parties, pressure groups, environmental issues, the media, class, gender, race, ethnicity, technology, the impact of economic globalisation, political institutions, democracy, elections, and Australia's position in the world. The course will address the major forces that are influencing and shaping the Australian political environment.

# POLI 1102

### Introduction to International Politics

- 3 units semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 2500-3000 word major essay 50%, 1000-1500 minor essay 30%, tutorial presentations, discussion 20%

This course provides a comprehensive introduction to International Politics and International Relations - its history, its key concepts and theoretical frameworks, its architectures of power and struggle, and its main actors and institutions. The course introduces concepts of statecraft, strategy and diplomacy, traces the evolution of international politics through colonialism, the two World Wars and the Cold War, and introduces the international political economy. It analyses the role of the United Nations and discusses important and contested ideas such as human rights, alobalisation, security and sovereignty.

# **POLI 1104**

### **Introduction to Comparative Politics**

- 3 units semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: essay citation exercise 0%, tutorial presentation 5%, 1500 word tutorial essay 30%, take-home exam (10 pages max) 40%, tutorial contribution 25%

The news each day raises questions about what is happening in different countries around the world. Why did Britain support - and France and Germany oppose - the war in Iraq? Why does religion play such a strong role in United States politics? Will growing affluence lead to increasing democracy in China? etc. At a deeper level, answering these questions often requires us to have an understanding of the history, political institutions and political developments in these countries and to compare them with events and experiences elsewhere.

All such questions, and many, many more are the intellectual terrain of Comparative Politics. In

addition to illuminating emerging events in other countries, Comparative Politics is an essential tool in policy analysis, allowing us to assess questions such as "Does gun control 'work' "?

In this course, we will look at the political systems of a wide range of nations: Britain, France, Germany, Japan, the USA, India, Brazil, Russia and Eastern Europe, Pakistan, Indonesia, Iran and China. In addition to exploring the core questions of Comparative Politics about political systems, we will also look at a number of non-traditional ways to compare nations, such as comparing what they chose to remember - and forget - about their pasts.

# POLI 1105

#### **Thinking About Politics**

- 3 units semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assessment: minor 1500 word essay 25%, major 2500 word essay 65%, tutorial participation 10%

Politics is not simply a method of exercising power and distributing wealth. From ancient times, politics has been a tradition of inquiry about personal relationships, moral values, cultural forms and the purposes of communal life. Political thinking questions the conditions of social existence and the aims of social action. This engagement is often more arduous, more challenging and ultimately more dangerous than the life of a professional politician.

Political thinking is a medium of thought and communication. It is distinct, but not isolated, from the everyday politics of parties, parliaments and media headlines. Political thinkers have created the very words and categories we use to evaluate, direct and censure political action. This course will introduce the role of political theory in shaping fundamental ideas of Western political, moral and legal institutions: the purpose of politics: ends or means?; the 'nature' of man and woman; equality and freedom; rights and law: nature or convention?; political 'systems': democracy, liberalism, socialism and nationalism; alienation and the utopian imagination; history as progress or decline.

# POLI 2002

#### **Comparative Politics**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 1500-2000 word essay 30%, 2500-3000 word essay 50%, tutorials 20%

The decade of the 1980s was the last dominated by larger-than-life political leaders such as Thatcher, Reagan and Gorbachev, while the 1990s and beyond have revealed a persistent disquiet about the lack of guality, ethics and 'vision' in the running of countries and, with the growth of huge global manufacturing/financial operations, businesses too. This course employs a broad, inter-disciplinary approach, exploring the main dimensions of leadership in politics and international business/finance. Starting with classical political approaches, the course then moves on to the economic and historical factors normally associated with the rise of great leaders. In doing so, it acquaints students with a wide range of thinking and debate about the subject. Are great leaders shaped by culture, or does culture shape leadership? Were Stalin and Mao born with the necessary characteristics of supreme leadership? Did U.S. Presidents Kennedy and Clinton have natural appeal, or were they the products of 'spin-doctoring'? Did Malaysia's Mahathir emerge through carefully plotted political strategies, historical circumstance or force of personality? Is George Soros a leader in big business, or in the international political realm too? To what extent have populist leaders such as Gandhi and Mandela based their leadership on charismatic appeal?

### POLI 2012

#### **Global Politics and the Dilemmas of Citizenship**

- 4 units semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: Citizenship in an International Context
- Assessment: 1500 word paper 30%, 3500 word essay 60%, participation 10%

Meanings of citizenship have become highly contested in contemporary political regimes, due partly to the pressures of social movements, partly to internationalisation in its many forms. This course will examine debates such as those dealing with the nature of citizenship, refugee policies, human rights, access to resources, relationship to the land, sexuality, gender and development to allow students to reflect upon the issues at stake. A framing question for the course is - what does it mean to be a citizen in a global world?

# POLI 2014

#### Politics of the Media: Film

- 4 units semester 2
- 2 hour lecture per week, 2 hour seminar per fortnight
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: Participation and workbook 20%, short 1500 word paper 35%, major 3000 word essay 50%

This course explores how power is represented in particular types/genres of popular film. The course will look at approaches to Media and Film study and then examine political 'myths' or assumptions and associated identities, as well as aspects of film policy. Political myths/ identities will be discussed though topics like 'the good society and proper authority', 'the leader/hero', 'the citizen/self', 'social protest and the activist', 'Institutions of Work and Family: fathers, new men and working women', 'all you need is love: Romance and proper partners', and 'Sex/Desire: good sex and transgression'. The aim is to undertake critical analysis of the limits and possibilities of social identities we have presented to us in the Media. What 'choices' are made available in popular film? What forms of conformity and rebellion are represented and legitimated, in mainstream contemporary films?

### POLI 2018

#### **Environmental Politics**

- 4 units semester 2
- · 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: ENVT 2004 Environmental Politics
- Assessment: 2 x3000 word papers 50% each, satisfactory completion of oral presentation in tutorial setting

Environmental or green politics has established itself as one of the most exciting sites of political contestation around the globe today. This course is divided into three parts.

Part One establishes the theoretical underpinnings, including addressing traditional political theory and the environment, from conservatism to liberalism and neo-liberalism on the right, to Marxist and anarchist responses on the left. More recent 'ecopolitical theories' and are then investigated. Part Two concentrates on environmental politics in Australia, reviewing specific developments over the past thirty years. During this time frame, environmental policymaking can be divided into three distinct periods: i) unrestrained use; ii) sustainable and multiple use; and iii) 'wise' and sequential use. For each period we investigate the dominant political ideology of the state towards the environment: analyse the use of particular policy-making models; and examine environmental responses and strategies. Part Three moves to the international and transnational realms. Case studies are taken from numerous countries and cultures where people are pursuing green political goals through a myriad of political processes. These range from the informal dynamics of networks. groups and social movements through to the more institutionalised responses of organisations, corporations, mass media, legal systems, political parties, governments and administrative systems.

# POLI 2061

#### Sex, Gender and Politics

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: participation 20%, 1500 word paper 30%, 3500 word essay 50%

This course is intended to provide a comprehensive, accessible and lively overview of key frameworks and debates in the expanding field of Sex/Gender. Gender and Sexuality are now accepted as crucial aspects of all areas of human life and also as critical to understanding forms of power in societies. Moreover, ideas drawn from the Sex/Gender field are frequently deemed to be at the 'cutting edge' of contemporary social and political thought. Indeed, it is very difficult to make sense of much current thinking in the Humanities and Social Sciences without some background in these ideas. And yet, despite the widespread usage of concepts from the field, it remains little understood and is often equated exclusively with feminism and women. By contrast, this course attends to the three main sub-fields of Sex/Gender - that is, Feminist, Masculinity and Sexuality studies. The aim is to provide a short, yet thorough guide to the whole field through an investigation of its major frameworks and debates.

# POLI 2071

#### **Issues In Australian Politics**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: tutorial paper 30%, essay 60%, class contribution/attendance 10%

This course covers key issues for the 21st century such as globalisation and the role of the nation state; the impact of international issues on Australian Politics e.g. the 'War on Terror' and Australian relations with the U.S. and Asia; cyberpolitics; the new information economy; genetic engineering; the politics of identity e.g. gender, race, ethnicity and the politics of sexuality; environmental politics; new forms of inequality and the politics of uncertainty. Particular emphasis is placed on analysing issues in the context of party political discourse and Australian political culture. The course draws on a wide range of analytical and theoretical frameworks from cybertheory to Foucaultian theories of governmentality.

# POLI 2074

#### **Politics, Ideology and Discourse**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: essay 60%, tutorial contribution 10%, tutorial paper 30%

Ideology and discourse play a crucial role in politics. They influence government/party policy, voting outcomes, whether we go to war, views of Australia's place in the world, media and popular culture, conceptions of our own identity and of the 'other'. In short, ideology and discourse influence how we interpret the world and have very practical effects. This course introduces you to various analyses of ideology and discourse e.g. from Marx, Foucault, Habermas, Lyotard, Said, feminism, queer theory, political economy, environmental theory, cybertheory, analyses of racism and popular culture. The course sees theory as an analytical tool that provides more sophisticated understandings of politics in the everyday world. Examples are constantly drawn from current issues in Australia, other countries and from the media and popular culture. Consequently, issues discussed in past years have included whether the analyses of Edward Said can help us to understand why the West risks losing the ideological war in Iraq; the impact of Baudrillard's theories on the Matrix films; Asian perceptions of Australia; queer analyses of gay and lesbian television content; environmentalist critiques of traditional political ideology and policy-making.

#### POLI 2079

### **Politics, Power and Popular Culture**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Assessment: 1500 word essay 30%, 3500 word essay 60%, tutorial participation 10%

This course will introduce students to the processes of globalisation and its relationship to local politics. It seeks to investigate the modes of political power and the manner by which these are represented within the media and popular culture (principally, film). The course will examine, from a uniquely political perspective, issues of gender, sexuality, race, class and ethnicity in several different genres - drawing examples from film and television.

### POLI 2081

### **Post-Cold War International Relations**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: International Politics
- Assessment: 1500-2000 word tutorial paper 30%, 2500-3000 word essay 50%, tutorial 20%

This course explores the nature of international politics since the end of the Cold War. Examined will be a variety of approaches, beginning with the place of Realism and its critics. Special consideration will be given to the evolving nature of power and challenges to that power in the international system. A number of issues will form the focus for study, amongst which will be: the increasing role of international bodies such as the WTO, the rise of US unilateralism and the reemergence of terrorism as a major preoccupation in world affairs.

#### POLI 2092

#### **Problems and Policy: Australia in the World**

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.
- Restriction: Problems, Policy and Australian Politics; Problems and Policy in Australia
- Assessment: 1500 word paper 30%, 3500 word essay 60%, tutorial participation 10%

Newspapers headline a range of social problems facing Australia - drug abuse, youth suicide, problem gambling, environmental degradation, rising crime rates, racism and health inequalities, among others. Policy makers are portrayed as engaged in attempts to address these problems. This course brings a fresh perspective to thinking about public policy and its relationship to social problems. It shifts the focus from the idea that policy makers offer 'solutions' to 'problems' to the ways in which policy problems are understood and constructed. In terms of methodology, students are introduced to recent innovations in policy analysis based upon developments in social theory, including social constructionism, discourse analysis and a genealogical approach to policy. The usefulness of these methodological tools is demonstrated through examination of controversial contemporary social issues, including those listed above. A particular emphasis is placed upon the ways in which international economic, political and social developments affect Australian public policy. The major assignment in the course (value 60%) involves students in applying the methodological tools introduced in the course to a specific policy issue. The research skills developed in this course mean it can be taken as an Applied Social Science elective.

#### POLI 2094

# Incredible India: Dynamics of a Rising World Power

- 4 units semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sc.

 Assessment: tutorial participation 25%, 1800 word essay 30%, 3000-3500 word essay 45%

The world's media has recently 'discovered' India, describing it as an emerging Asian Superpower and potential rival to China. At the same time, India's 'soft' (cultural) power is also emerging as a growing global influence. This course will examine India's emergence as potential superpower in the 21st century. After a brief survey of the geography, anthropology and history of south Asia, the course will trace major changes in India since 1947. The major focus in this part of the course will be on contemporary issues arising from rapid economic transformation. Topics will include the decline of the Congress Party and the emergence of the Hindu-nationalist BJP, the impact of economic reforms, social and environmental consequences of the Green Revolution in agriculture, the growing political power of India's Backward Castes and ex-Untouchables, the emergence of India's middle class, the changing role of women, and the growth and international influence of Indian films and music. The course will also compare developments in India with those occurring in its south Asian neighbours Pakistan, Bangladesh, Sri Lanka and Nepal. It will also look briefly at the south Asian diaspora. The course will also examine India's relations with its neighbours, focussing especially on relations with Pakistan and the global significance of both nations as nuclear weapons states.

# Level III

### POLI 3002

### **Comparative Politics**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2500-3000 word essay 30%, 3000-3500 word essay 50%, tutorials 20%

The decade of the 1980s was the last dominated by larger-than-life political leaders such as Thatcher, Reagan and Gorbachev, while the 1990s and beyond have revealed a persistent disquiet about the lack of quality, ethics and 'vision' in the running of countries and, with the growth of huge global manufacturing/financial operations, businesses too. This course employs a broad, inter-disciplinary approach, exploring the main dimensions of leadership in politics and international business/finance. Starting with classical political approaches, the course then moves on to the economic and historical factors normally associated with the rise of great leaders. In doing so, it acquaints students with a wide range of thinking and debate about the subject. Are great leaders shaped by culture, or does culture shape leadership? Were Stalin and Mao born with the necessary characteristics of supreme leadership? Did U.S. Presidents Kennedy and Clinton have natural appeal, or were they the products of 'spin-doctoring'? Did Malavsia's Mahathir emerge through carefully plotted political strategies, historical circumstance or force of personality? Is George Soros a leader in big business, or in the international political realm too? To what extent have populist leaders such as Gandhi and Mandela based their leadership on charismatic appeal?

# POLI 3005

#### **Understanding Modern Europe**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Contemporary Europe A
- Assessment: 1800-2200 word minor essay 25%, 3500-4500 word major essay 50%, short test 15%, tutorials 10%

This course examines the experience and character of modern Europe. Its principal focus is on western Europe and on the 25 nations that make up the recently enlarged European Union. It locates the key political and institutional systems that have shaped Europe in their historical context and explains the dominance of the west. Particular attention is paid to the emergence of the European Union and to explaining the social patterns of modern Europe. Topics covered include: national integrity, the nation state, the rise of nationalism and the development of modern political culture, political systems, systems of government, elections and party systems, social and economic structures, and the rise and implications of the enlargement of the European Union.

# POLI 3012

### **Global Politics and the Dilemmas of Citizenship**

- 6 units semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Citizenship in an International Context
- Assessment: 2500 word paper 30%, 5000 word essay 60%, tutorial participation 10%

Meanings of citizenship have become highly contested in contemporary political regimes, due partly to the pressures of social movements, partly to internationalisation in its many forms. This course will examine debates such as those dealing with the nature of citizenship, refugee policies, human rights, access to resources, relationship to the land, sexuality, gender and development to allow students to reflect upon the issues at stake. A framing question for the course is - what does it mean to be a citizen in a global world?

### POLI 3014

# Politics of the Media: Film

- 6 units semester 2
- 2 hour lecture per week, 2 hour seminar per fortnight
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation and workbook 20%, 2500 word paper 35%, 4000 word essay 50%

This course explores how power is represented in particular types/genres of popular film.

The course will look at approaches to Media and Film study and then examine political 'myths' or assumptions and associated identities, as well as aspects of film policy. Political myths/ identities will be discussed though topics like 'the good society and proper authority', 'the leader/hero', 'the citizen/self', 'social protest and the activist', 'Institutions of Work and Family: fathers, new men and working women', 'all you need is love: Romance and proper partners', and 'Sex/Desire: good sex and transgression'. The aim is to undertake critical analysis of the limits and possibilities of social identities we have presented to us in the Media. What 'choices' are made available in popular film? What forms of conformity and rebellion are represented and legitimated, in mainstream contemporary films?

### POLI 3018

#### **Environmental Politics**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: ENVT 3004 Environmental Politics
- Assessment: 2 x 4500 word papers 50% each, satisfactory completion of oral presentation in tutorial setting

Environmental or green politics has established itself as one of the most exciting sites of political contestation around the globe today. This subject is divided into three parts.

Part One establishes the theoretical underpinnings, including addressing traditional political theory and the environment, from conservatism to liberalism and neo-liberalism on the right, to Marxist and anarchist responses on the left. More recent 'ecopolitical theories' and are then investigated. Part Two concentrates on environmental politics in Australia, reviewing specific developments over the past thirty years. During this time frame, environmental policymaking can be divided into three distinct periods: i) unrestrained use; ii) sustainable and multiple use; and iii) 'wise' and sequential use. For each period we investigate the dominant political ideology of the state towards the environment; analyse the use of particular policy-making models; and examine environmental responses and strategies. Part Three moves to the international and transnational realms. Case studies are taken from numerous countries and cultures where people are pursuing green political goals through a myriad of political processes. These range from the informal dynamics of networks, groups and social movements through to the more institutionalised responses of organisations, corporations, mass media, legal systems, political parties, governments and administrative systems.

### POLI 3061

#### Sex, Gender and Politics

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: participation 20%, 2500 word paper 30%, 5000 word essay 50%

This course is intended to provide a comprehensive, accessible and lively overview of key frameworks and debates in the expanding field of Sex/Gender. Gender and Sexuality are now accepted as crucial aspects of all areas of human life and also as critical to understanding forms of power in societies. Moreover, ideas drawn from the Sex/Gender Field are frequently deemed to be at the 'cutting edge' of contemporary social and political thought. Indeed, it is very difficult to make sense of much current thinking in the Humanities and Social Sciences without some background in these ideas. And yet, despite the widespread usage of concepts from the field, it remains little understood and is often equated exclusively with feminism and women. By contrast, this course attends to the three main sub-fields of Sex/Gender - that is, Feminist, Masculinity and Sexuality studies. The aim is to provide a short, vet thorough guide to the whole field through an investigation of its major frameworks and debates.

### POLI 3071

#### **Issues in Australian Politics**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial paper 30%, essay 60%, class contribution/attendance 10%

This course covers key issues for the 21st century such as globalisation and the role of the nation state, the impact of international issues on Australian Politics e.g. the 'War on Terror' and Australian relations with the U.S. and Asia; cyberpolitics, the new information economy; genetic engineering; the politics of identity e.g. gender, race, ethnicity and sexuality; environmental politics, new forms of inequality and the politics of uncertainty. Particular emphasis is placed on analysing issues in the context of party political discourse and Australian political culture. The course draws on a wide range of analytical and theoretical frameworks from cybertheory to Foucaultian theories of governmentality.

### POLI 3074

#### **Politics, Ideology and Discourse**

- 6 units semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: 8 units Level II Humanities/Social Sc.

• Assessment: tutorial contribution 10%, tutorial paper 30%, essay 60%

Ideology and discourse play a crucial role in politics. They influence government/party policy, voting outcomes, whether we go to war, views of Australia's place in the world, media and popular culture, conceptions of our own identity and of the "other". In short, ideology and discourse influence how we interpret the world and have very practical effects. This course introduces you to various analyses of ideology and discourse e.g. from Marx, Foucault, Habermas, Lyotard, Said, feminism, queer theory, political economy, environmental theory, cybertheory, analyses of racism and popular culture. The course sees theory as an analytical tool that provides more sophisticated understandings of politics in the everyday world. Examples are constantly drawn from current issues in Australia, other countries and from the media and popular culture. Consequently, issues discussed in past years have included whether the analyses of Edward Said can help us to understand why the West risks losing the ideological war in Iraq; the impact of Baudrillard's theories on the Matrix films; Asian perceptions of Australia; queer analyses of gay and lesbian television content; environmentalist critiques of traditional political ideology and policy-making.

### POLI 3079

#### **Politics, Power and Popular Culture**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: 2500 word essay 30%, 5000 word essay 60%, tutorial participation 10%

This course will introduce students to the processes of globalisation and its relationship to local politics. It seeks to investigate the modes of political power and the manner by which these are represented within the media and popular culture (principally, film). The course will examine, from a uniquely political perspective, issues of gender, sexuality, race, class and ethnicity in several different genres - drawing examples from film and television.

# POLI 3081

### **Post-Cold War International Relations**

- 6 units semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: International Politics
- Assessment: 2500-3000 word tutorial paper 30%, 4000-5000 word essay 50%, tutorial participation 20%

This course explores the nature of international politics since the end of the Cold War. Examined will be a variety of approaches, beginning with the place of Realism and its critics. Special consideration will be given to the evolving nature of power and challenges to that power in the international system. A number of issues will form the focus for study, amongst which will be the increasing role of international bodies such as the WTO, the rise of US unilateralism and the re-emergence of terrorism as a major preoccupation in world affairs.

# POLI 3082

### South Australian Parliamentary Internship - Law

- 4 units semester 2
- 40 hours
- Eligibility: Bachelor of Laws students only
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1004 Law of Contract, LAW 1002 Law of Torts
- Assessment: 7000 word major research paper

As a central part of this course students will have the opportunity to spend a semester as 'interns' working with a Member of the State Parliament while completing an agreed research task. Final placement will depend upon availability and the application of an internal quota. In order to complete the process of placement allocation, students should finalise their enrolment by the completion of the normal enrolment period.

# POLI 3083

### South Australian Parliamentary Internship

- 6 units semester 2
- 3 contact hours per week
- Quota will apply
- Prerequisite: 8 units Level II Humanities/Social Sc.

• Assessment: 2000 word essay 20%, 5000-7000 word major research paper 80%

As a central part of this course students will have the opportunity to spend a semester as 'interns' working with a Member of the State Parliament while completing an agreed research task. Final placement will depend upon availability and the application of an internal quota. In order to complete the process of placement allocation, students should finalise their enrolment by the completion of the normal enrolment period.

# POLI 3092

#### **Problems and Policy: Australia in the World**

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Restriction: Problems, Policy and Australian Politics, Problems and Policy in Australia
- Assessment: 2500 word paper 30%, 5000 word essay 60%, tutorial participation 10%

Newspapers headline a range of social problems facing Australia - drug abuse, youth suicide, problem gambling, environmental degradation, rising crime rates, racism and health inequalities, among others. Policy makers are portrayed as engaged in attempts to address these problems. This course brings a fresh perspective to thinking about public policy and its relationship to social problems. It shifts the focus from the idea that policy makers offer 'solutions' to 'problems' to the ways in which policy problems are understood and constructed. In terms of methodology, students are introduced to recent innovations in policy analysis based upon developments in social theory, including social constructionism, discourse analysis and a genealogical approach to policy. The usefulness of these methodological tools is demonstrated through examination of controversial contemporary social issues, including those listed above. A particular emphasis is placed upon the ways in which international economic, political and social developments affect Australian public policy. The major assignment in the course (value 60%) involves students in applying the methodological tools introduced in the course to a specific policy issue. The research skills developed in this course mean it can be taken as an Applied Social Science elective.

## POLI 3094

# Incredible India: Dynamics of a Rising World Power

- 6 units semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sc.
- Assessment: tutorial participation 25%, 2500 word essay 30%, 4500-5000 word essay 45%

The world's media has recently 'discovered' India, describing it as an emerging Asian Superpower and potential rival to China. At the same time, India's 'soft' (cultural) power is also emerging as a growing global influence. This course will examine India's emergence as potential superpower in the 21st century. After a brief survey of the geography, anthropology and history of south Asia, the course will trace major changes in India since 1947. The major focus in this part of the course will be on contemporary issues arising from rapid economic transformation. Topics will include the decline of the Congress Party and the emergence of the Hindu-nationalist BJP, the impact of economic reforms, social and environmental consequences of the Green Revolution in agriculture, the growing political power of India's Backward Castes and ex-Untouchables, the emergence of India's middle class, the changing role of women, and the growth and international influence of Indian films and music. The course will also compare developments in India with those occurring in its south Asian neighbours Pakistan, Bangladesh, Sri Lanka and Nepal. It will also look briefly at the south Asian diaspora. The course will also examine India's relations with its neighbours, focussing especially on relations with Pakistan and the global significance of both nations as nuclear weapons states.

# Honours

### **POLI 4401**

### **Honours Politics**

- 24 units full year
- Prerequisite: UG degree, credit average in courses contributing to major in Politics or equivalent, approved by Honours Coordinator
- Assessment: coursework (2 seminars) each 5000 - 6000 words 25% each, 15000 - 18000 word thesis 50%

Students wishing to take Honours Politics should consult the Honours Coordinator prior to

commencing Level II to ensure appropriate course choices are made in preparation for Honours.

There is a preliminary Honours meeting in November of each year where the Honours Handbook and applications will be available. Any questions regarding Honours are answered at this meeting. Please check Politics noticeboard for the date of this meeting, which will also be announced in lectures.

In some circumstances Honours Politics can be studied part-time over two years, or combined with Honours in another discipline.

# PSYCHIATRY

# Level I

# **PSYCHIAT 1001**

### Person, Culture and Medicine I

- 3 units semester 1
- Eligibility: MBBS, B.Hlth.Sc, B.Psych.(Hons) students
- Restriction: Person, Culture and Medicine IA/1B
- Assessment: essay, participation, formative assessment provided to students for summative tasks

PCM is an interdisciplinary course that combines theoretical perspectives from psychology, physical anthropology and cultural anthropology, and applies these to the complex human processes of eating, intimate relationships, pain and death and dying. The course requires attendance at threehour seminar/tutorial blocks.

# Level II

# **PSYCHIAT 2002**

### Emotion Culture & Medicine II

- 4 units semester 2
- Eligibility: MBBS, B.Hlth.Sc, B.Psych.(Hons) students only
- Assumed Knowledge: PCM I may be advantageous
- Restriction: Emotion, Culture & Medicine IIA/ IIB
- Assessment: essay, participation, formative assessment provided to students for summative tasks

ECM II is an interdisciplinary course that combines theoretical perspectives from psychology, neurobiology and cultural anthropology and applies these to the complex human emotional states, including happiness, sadness, anger and fear. The course requires attendance at three-hour seminar/tutorial blocks.

# Honours

### **PSYCHIAT 4000**

### **Honours Psychiatry**

• 24 units - full year

Students requiring further information concerning syllabuses and work required for the Honours Degree of Bachelor of Medical Science are advised to consult the Head of the appropriate department as early as possible.

# PSYCHOLOGY

## Level I

# **PSYCHOL 1000**

### **Psychology IA**

- 3 units semester 1
- 3 lectures per week, 1 hour tutorial/practical most weeks
- Check with School for Non-Award Study
- Restriction: 5104 Psychology I; PSYCHOL 1000A/B Psychology I
- Assessment: assignments, practical exercise 45%, research participation 5%, written exam 50%

This course, together with PSYCHOL 1001 Psychology IB, provides an introduction to the basic concepts and core topics within contemporary psychology. The two courses may be taken singly or in combination. Core topics covered over the year will include the development of the individual over the lifespan; the study of the person in a social context; differences between people with respect to their intelligence and personality; issues related to individual adjustment and maladjustment; the biological bases of behaviour; the interpretation by the brain of sensory signals from the external environment; the mechanisms underlying learning; the encoding, storage and retrieval of information; and the nature of motivation and emotion. The courses will also provide an introduction to the methodological approaches employed by psychologists to study these topics. Major findings to emerge from psychological research will be presented, and the practical significance of such work will be discussed. Practical work will address the conventions of psychological reportwriting and the ethical principles underlying psychological research and practice.

# **PSYCHOL 1001**

### **Psychology IB**

- 2 units semester 2
- 3 lectures per week, 1 hour tutorial/practical most weeks
- Check with School for Non-Award Study
- Restriction: 5104 Psychology I; PSYCHOL 1000A/B Psychology I
- Assessment: assignment & practical exercise 45%, research participation 5%, written exam 50%

This course, together with PSYCHOL 1000 Psychology IA, provides an introduction to the basic concepts and core topics within contemporary psychology. The two courses may be taken singly or in combination. Core topics covered over the year will include the development of the individual over the lifespan; the study of the person in a social context; differences between people with respect to their intelligence and personality; issues related to individual adjustment and maladjustment; the biological bases of behaviour; the interpretation by the brain of sensory signals from the external environment; the mechanisms underlying learning; the encoding, storage and retrieval of information; and the nature of motivation and emotion. The courses will also provide an introduction to the methodological approaches employed by psychologists to study these topics. Major findings to emerge from psychological research will be presented, and the practical significance of such work will be discussed. Practical work will address the conventions of psychological reportwriting and the ethical principles underlying psychological research and practice.

# **PSYCHOL 2001**

# **Psychological Research Methodology II**

- 4 units semester 1
- · 2 lectures per week, practical workshops
- · Check with School for Non-Award Study
- Prerequisite: PSYCHOL 1000 Psychology IA and PSYCHOL 1001 Psychology IB, or equiv.
- Assessment: 2 practical exercises 50%, exam 50%

The course presents an introduction to current approaches to enquiry in psychology. It considers the relative merits and shortcomings of these approaches and attempts to locate them within a broad framework of epistemological understanding. Consideration will be given to methods ranging from the interpretive to the experimental, and to appropriate procedures for analysing and drawing conclusions from the data such methods produce. The use of computerbased methods and packages for the treatment of both textual and numerical data will be emphasised. Students should be aware that a knowledge of the material presented in this course will be assumed in all Level 3 Psychology courses.

# **PSYCHOL 2002**

### **Psychology IIA**

- 4 units semester 1
- · 3 lectures per week, tutorials most weeks
- · Check with School for Non-Award Study
- Prerequisite: PSYCHOL 1000 Psychology IA and PSYCHOL 1001 Psychology IB or equivalent
- Restriction: 5846 Psychology II, PSYCHOL 2000A/B Psychology II
- Assessment: assignments 50%, exam 50%

Together with PSYCHOL 2003 Psychology IIB, this course seeks to build upon the diverse and complementary approaches towards an understanding of human and animal behaviour that were introduced in Psychology IA and Psychology IB. Psychology IIA and Psychology IIB may be taken singly or in combination. Lectures and practicals over the year will focus on the biological bases of behaviour; the way in which behaviour changes with age; the interpretation of behaviour in terms of its cognitive and emotional underpinnings; the nature of individual differences; language and human development; the nature of stress and its management; and the effect of a range of socio-cultural factors. The theoretical and applied significance of this research will be presented.

## **PSYCHOL 2003**

### **Psychology IIB**

- 4 units semester 2
- 3 lectures per week, tutorials most weeks
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 1000 Psychology IA and PSYCHOL 1001 Psychology IB, or equiv.
- Restriction: 5846 Psychology II, PSYCHOL 2000A/B Psychology II
- Assessment: assignments 50%, exam 50%

Together with PSYCHOL 2002 Psychology IIA, this course seeks to build upon the diverse and complementary approaches towards an understanding of human and animal behaviour that were introduced in Psychology IA and Psychology IB. Psychology IIA and Psychology IIB may be taken singly or in combination. Lectures and practicals over the year will focus on the biological bases of behaviour; the way in which behaviour changes with age; the interpretation of behaviour in terms of its cognitive and emotional underpinnings; the nature of individual differences; language and human development; the nature of stress and its management; and the effect of a range of sociocultural factors. The theoretical and applied significance of this research will be presented.

# Level III

### **PSYCHOL 3000**

### Psychological Research Methodology III

- 4 units semester 1
- 2 lectures/week, practical work in computing & statistics, 6 tutorials/semester
- Check with School for Non-Award Study
- Prerequisite: 3149 Psychology II; or 4416 Psychological Research Methodology II; or PSYCHOL 2001 Psychological Research Methodology II
- Assessment: Practical exercises 50%, written exam 50%

The course will introduce a range of statistical techniques that are more complex than those taught at Level II. These may include correlation and partial correlation, exploratory factor analysis, multiple regression, multifactor analysis of variance, analysis of covariance, and Bavesian approaches to statistical inference. Students will gain further experience with the use of statistical software (specifically SPSS) on the University's computers, and will carry out a practical exercise in this area. A wide range of issues relating to research design will be covered in lectures and tutorials, including: ethical considerations; the various concepts of reliability and validity; the logic of inference from data obtained in different ways: and the use of quasi-experimentation and unobtrusive measures. Consideration will also be given to the inferences that have been made by researchers using particular research designs in specific areas of psychological interest. A second practical exercise will be based on one of those topics.

### **PSYCHOL 3003**

### **Developmental Psychology III**

- 2 units semester 2
- 1 lecture per week, 3 tutorials per semester, practical work
- · Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, PSYCHOL 2001 Psychological Research Methodology II; or equivs.
- Assessment: practical exercise report 50%, written exam 50%

This course extends the account of human development presented in the earlier courses in Psychology. Recent theory and research extending Piaget's classic work on cognitive development in children will be examined, specifically: (1) agerelated changes in central processing, in particular, working memory capacity and speed of information processing; (2) the development with age of specific strategies for the encoding and retrieval of information; and (3) the emergence of intuitive 'theories' within knowledge domains like number, physics, biology, and psychology. How children function and develop in their social world will be considered by: (1) examining the significance of family and peer relationships; (2) exploring the developments of children's friendships and play; and (3) investigating the emergence of prosocial and antisocial behaviours.

### **PSYCHOL 3005**

#### **Perception and Cognition III**

- 2 units semester 2
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB; PSYCHOL 2001 Psychological Research Methodology II; or equiv.
- Assessment: practical exercise report 50%, written exam 50%

This course looks at recent theoretical approaches to the study of human perceptual and cognitive processes and at some of the major mechanisms, models and metaphors that have been proposed to describe and explain them. Lectures will deal with such topics as attention; the perception of surface, shape and structure; the perception of objects; language; memory; categorisation; the acquisition and retrieval of knowledge; and reasoning and problem-solving.

## **PSYCHOL 3006**

#### **Psychology, Physiology and Behaviour III**

- 2 units semester 2
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Assessment: practical exercise report 50%, written exam 50%

The course introduces students to topics from psychophysiology. A component of the course will focus on applied psychophysiology and biofeedback, which encompasses the evaluation, and complementary treatment of medical conditions using behavioural protocols. Participants will be introduced to physiological measures of respiration, heart rate, muscle function, electrodermal activity and skin temperature, and biofeedback assisted selfregulation. The remainder of the course will focus on lifestyle diseases, general well-being and health.

### **PSYCHOL 3009**

# Metapsychology: Psychology, Science, Society III

- 2 units semester 2
- 1 lecture per week, 3 tutorials per semester, practical work
- · Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Assessment: practical exercise report 50%, written exam 50%

This course looks at Psychology as a complex human enterprise that is concerned with the production, dissemination, and application of psychological knowledge claims. The broad aim of the course is to show how our understanding of psychology can be aided by recent developments in related disciplines such as philosophy of science, sociology, and discourse studies. In particular, the course focuses on Psychology's relationship to science, and to scientific knowledge claims in areas such as medicine, psychiatry, and the law. The course encourages a critical approach, and considers the impact on psychology of influential post-structuralist and postmodern thinkers. It is concerned with psychology's attempts to define itself as science, its relationship to other scientific disciplines, and the ways in which psychology functions in our society - what psychologists do, who employs them, and how psychological theories are used within a variety of social institutions such as government, education, health, the media and the legal system.

# **PSYCHOL 3010**

# Social Psychology III

- 2 units semester 2
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Assessment: practical exercise report 50%, written exam 50%

An expanding body of research in contemporary social psychology has been the study of social cognition. This tradition concerns itself with the way in which individuals and groups attend to. process, interpret, mentally represent and understand social information. Concepts central to social cognition research include attributions. schemas, scripts, categories and prototypes. These central concepts will be developed and expanded by the consideration of affective, social, cultural and symbolic influences. Less mainstream approaches to the study of social life such as social identity theory, social representations, and discursive psychology will be compared and contrasted to the social cognition tradition. The aim of this course is to examine critically the extent to which these different theoretical approaches can be usefully integrated. A practical exercise illustrating central theoretical concepts will be conducted.

# PSYCHOL 3013

#### Learning and Behaviour III

- 2 units semester 1
- 1 lecture per week, 3 tutorials per semester, practical work
- · Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Assessment: practical exercise report 50%, written exam 50%

This course builds upon the material presented in earlier courses, and should be of considerable value to those considering further applied or experimental work involving either people or animals. Following a brief review of classic learning theories and key learning concepts and principles, the lectures will examine modern theoretical and experimental developments in classical and operant conditioning, as documented in the work of Rescorla, Seligman, Mackintosh, Premack, Timberlake and others, Included in this section will be discussions of contingency learning and gambling, learned helplessness, avoidance learning, punishment and social learning. The implications of these findings for education, health, addiction research and the aetiology of clinical disorders will be illustrated.

# **PSYCHOL 3014**

## Individual Differences III

- 2 units semester 1
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Restriction: 7196 Intelligence III
- Assessment: practical exercise report 50%, written exam 50%

This course reviews recent differential psychological theories about individual differences in cognitive abilities and personality. The explanatory success of the information processing paradigm is evaluated. The cognitive abilities component includes consideration of the consequences of intellectual disabilities, brain damage and age-related cognitive change during old age. The personality component addresses psychometric theory and its application to personality assessment.

# **PSYCHOL 3015**

### **Human Relations III**

- 2 units semester 2
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs
- Restriction: 7324 Studies in Personality III
- Assessment: practical exercise report 50%, written exam 50%

This course concerns the socio-cultural construction of the person and relationships. Topics may include: the person, discourse and society; culture and human relations; the discursive construction of personality; self and experience; and interactional concepts of personality and relationships, including the interactional self, self and other, and constructing otherness. Social governance and social institutions will also be examined, and the roles of work, the family and the social order. Other topics may be knowledge and behaviour; regimes of truth; the subject and subjection; and the media, popular culture and experience. The use of discourse analysis in studies of the person and relationships will be discussed, as well as narrative, discursive and critical psychology, and social constructionist and poststructuralist perspectives.

# PSYCHOL 3016

### Language Processes III

- 2 units semester 1
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Assessment: practical exercise report 50%, written exam 50%

In this course, we will examine the process by which people and machines comprehend, produce and acquire language. In particular, we will explore speech perception and production, lexical access, sentence processing, text and discourse processing, first and second language acquisition and the neural basis of language. The course is designed to be applicable both to students interested in psycholinguistics and students interested in computational linguistics with practical work tailored to background.

# PSYCHOL 3017

# **Health Psychology III**

- 2 units semester 1
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2001 Psychological Research Methodology II, PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, or equivs.
- Assessment: practical exercise report 50%, written exam 50%

In this course we will consider the psychological aspects of health, illness, and the delivery of health care. There will be a focus on the health problems that cause the most loss and disability in our society, we will consider behavioural risk factors, the psychology of health promotion, changes in health care needs with age, the roles of professional and informal health-care providers, the relevant theories about behavioural change, and research designs for evaluating interventions. The course will illustrate psychology's current and potential contributions to health and will be of interest to students with a range of learning and career goals.

# **PSYCHOL 3018**

### **Cognition III**

- 2 units semester 2
- 1 lecture per week, 4 tutorials per semester, practical work
- · Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, PSYCHOL 2001 Psychological Research Methodology II
- Restriction: PSYCHOL 3005 Perception & Cognition III (taught in 2006 only)
- Assessment: practical report 2000 words 50%, written 90 min exam 50%

Cognition III examines how people think, learn and reason. The focus is multidisciplinary, drawing on research in psychology, neuroscience, statistics, philosophy and linguistics and designed to be of interest to students in any of the cognitive sciences. The course covers a range of topics, including how humans build and use concepts, make decisions when faced with uncertainty, and how we reason and solve everyday problems. The majority of the material will deal with these questions using psychological theories, but will also look at how cognitive tasks might be incorporated into a machine learning system, and how these tasks are performed by the human brain.

# **PSYCHOL 3019**

# Perception III

- 2 units semester 1
- 1 lecture per week, 3 tutorials per semester, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB, PSYCHOL 2001 Psychological Research Methodology II
- Restriction: PSYCHOL 3005 Perception & Cognition III (taught in 2006 only)

• Assessment: practical report 50%, written 1.5 hour exam 50%

Perception III examines how the brain processes sensory information to create the individual's perception of the environment. It considers the ways in which information is recovered, and how the brain processes this information to allow individuals to perform daily activities. There will be a focus on the visual system, from the simple detection of light to the representation of faces, and on the manner in which information is used to make decisions about movement. Key experimental findings from the literature are discussed, as well as models and methodologies used to address questions in these areas. The course draws on literature that covers psychology, neuropsychology, behaviour neuroscience and computational modelling.

# Honours

# PSYCHOL 4000

# Honours Psychology

- 24 units full year
- Prerequisite: see School for entry requirements
- Assessment: exams in four elective topics 40%, exam in one compulsory topic 10%, empirical research thesis 50%

Intending applicants should obtain the Honours Introductory Booklet from the School or consult the School's website on how to apply for admission to Honours Psychology. Note that a Quota will apply to the number of students who can be accepted into this program.

Honours Psychology is a full year's program of lectures and discussions on advanced topics. It also involves a dissertation embodying the results of a research investigation carried out under supervision of a member of the staff of the School or other person nominated by the School for the purpose.

# PUBLIC HEALTH

# Level I

# PUB HLTH 1001

# **Public Health IA**

- 3 units semester 1
- 4 hours per week
- Available for Non-Award Study
- Assessment: exam, assignments, tutorial & practical participation

How and why have the main causes of illness and death in Australia changed over time? How do we define and measure health and illness? How does where you live, the job you do or your level of income affect your health? How does public health affect the way we think about health and disease? Is health a private or a public responsibility? Why is public health controversial?

Public Health IA seeks answers to such questions by drawing on a number of disciplines, including history, politics, ethics, sociology, epidemiology and biostatistics. It takes a population view of health and invites students to develop a critical view about what constitutes a public health issue and about the responses offered to these issues.

# PUB HLTH 1002

# **Public Health IB**

- 3 units semester 2
- 4 hours per week
- Available for Non-Award Study
- Assumed Knowledge: concepts of health & disease, principles of public health, health status of Australians, descriptive epidemiology & basic biostatistics, public health applied to infectious & chronic disease, role of government in public health in Australia
- Assessment: exam, assignments, including media journal, tutorial & practical participation

What strategies for reducing smoking and encouraging exercise are likely to be successful? How important are controls over food safety, water quality and waste disposal? How do ecological issues impact on public health? What political issues are involved in allocating resources for health or maintaining a healthy environment? How is population control a public health issue? What is Australia's approach to the health impact of an ageing population? What are the health needs of indigenous Australians? How does the organisation of health care affect our health?

With the underlying theme of health promotion, Public Health IB seeks answers to such questions by drawing on a number of disciplines, including environmental science, health economics, organisation of health care systems, sociology, social psychology; epidemiology; history, politics and ethics. It takes a population view of health and invites students to develop a critical view about what constitutes a public health issue and about the responses offered to these issues.

# Level II

# PUB HLTH 2000 Public Health Inquiry II

- 4 units semester 2
- 4 hours lectures/tutorials/practicals per week
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 1001 Public Health IA, PUB HLTH 1002 Public Health IB
- Assessment: written assignment, presentation, essay

Public Health Inquiry II builds upon concepts introduced in Public Health I to provide a detailed background to the major streams of inquiry in public health, in particular, epidemiology and social and political analysis.

The aim of the course is to demonstrate the way insights gained from these streams inform public health practice and policy, and the interwoven nature of practice and theory. The course encourages a critical approach and students will develop skills in the interpretation and synthesis of published public health research. On completion of Public Health Inquiry II, students will be familiar with the most commonly used methods of inquiry in public health and have an understanding of some key theoretical perspectives on the means by which health and illness are produced and managed in the context of a society.

## PUB HLTH 2001

### **Public Health Sciences II**

- 4 units semester 1
- 4 hours lectures/tutorials/practicals per week
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 1001 Public Health 1A and PUB HLTH 1002 Public Health 1B
- Assessment: exam, assignments, tutorial practical & site visit participation

Public Health Sciences is an introduction to a range of the sciences underpinning public health. It provides a link between the overall concepts of public health introduced in Public Health 1A and 1B and the more advanced treatment of theories and practice covered in Public Health Inquiry II and Level III public health courses.

We take the perspective of the future practitioner in public health and equip students with basic knowledge and practical skills in the disciplines of epidemiology and biostatistics, the epidemiology if infectious disease, and environmental and occupational health science.

At the end of this course the student will be able to apply epidemiological and statistical reasoning to public health problems, understand the nature of epidemic infectious diseases and the public health response to them, and appreciate the bases and extent of environmental and occupational threats to public health.

# Level III

### PUB HLTH 3004

### International Health III

- 6 units semester 1
- 1 week intensive April mid-semester break, lectures, tutorials and practical Sessions
- Eligibility: BHSc, MBBS or BDevSt students or permission of Head of School of Public Health
- · Check with School for Non-Award Study
- Prerequisite: previous or concurrent study of public health, clinical medicine or social and economic development
- Assessment: attendance required at all sessions. Tutorial and practical assignments, 3,000 word essay and end of semester exam

The aim of this course is to introduce students to the basic principles of international health, in order to give them a better understanding of the wider context of health systems in developing countries. This will prepare the students for working with communities and organisations that are responsible for funding and/or providing health care and health promotion in developing countries, for instance as preparation for undertaking a clinical or public health elective. An overview of health systems and public policy issues in lowand middle-income countries will cover basic concepts such as health transition during development, globalization and health, financing and organisation, as well as the role of the private sector, NGOs and international organisations, and inequities in health financing and delivery. This macro-level approach will be complemented by a community perspective focussing on the delivery of health care, public health and health promotion in disadvantaged communities including planning, implementation, monitoring and evaluation. The role of communities, clients, community based organisations, public and private sector providers, and funding agencies will be highlighted. Factors facilitating access, quality, cost and fairness of services and programs will be discussed. Both streams of the course will include practical case studies organised around problem solving in small teams.

# PUB HLTH 3101HO

### **Aboriginal Health Policy IIIHS**

- 6 units semester 1
- Eligibility: MBBS, B.Hlth.Sc, B.Psych. (Hons) students only
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II or GEN PRAC Indigenous Health IIHS
- · Assessment: to be advised

This course offers students the opportunity to analyse current public policy affecting the health of Aboriginal Australians. It uses historical and political analysis, and comparative studies of other indigenous populations, to provide a context for reflection on current Aboriginal health status and health needs. The course provides opportunities for students to explore a wide range of Aboriginal health programs and issues, through an intensive and multi-disciplinary teaching program and individual research.

## PUB HLTH 3104H0

## **Epidemiology of Infectious Diseases IIIHS**

- 6 units semester 2
- 3 hours lectures/tutorials/pracs/seminars per week
- Eligibility: B.Hlth.Sc, B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II & PUB HLTH 3109HO Introduction to Epidemiology and Biostatistics
- Assessment: presentation, production of an informative class handout

The aim of this elective course is to provide a grounding in communicable disease epidemiology of use to students of public health. It assumes no prior specialist knowledge and is to be completed in one semester.

An ecosystem approach will be taken. Thus a concentration on sick humans and aspects of their disease is inappropriate. The students will be urged to view infectious disease as a visible manifestation of an ecological problem and to dissect out the agent, host and environmental factors that lead to such phenomena. Such an approach in turn is the basis for the design of feasible public health interventions

# PUB HLTH 3106

### **Health Promotion IIIHS**

- 6 units semester 1
- 4 hours lectures/tutorials/practicals per week
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II
- Assessment: to be advised

By focusing on the processes that help communities and individuals maintain and improve wellbeing, this course helps students understand the holistic nature of health promotion, of which disease prevention is but one of several components. The course consists of three sections. The first defines the concept, framework and scope of health promotion. The second discusses theories underpinning the practice of health promotion in the areas of community development, behaviour change, healthy public policy, environmental improvement, and reorientation of health care services. The third illustrates the application of health promotion strategies to specific groups, and points to the relevance of site-specific interventions.

# PUB HLTH 3108HO

### **Environmental and Occupational Health IIIHS**

- 6 units semester 1
- 3 hours lectures/tutorials/pracs/seminars per week
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II
- Assessment: to be advised

This course will introduce the stalwarts of environmental health, namely water quality and water pollution, food quality and air quality. There will also be some consideration of an important contemporary concern in environmental health: the pressures of rising population numbers and the ecological consequences of trying to ensure adequate food supplies. The course will also include an introduction to occupational health: how workplace hazards can affect health, and legislative and other strategies for the control of the hazards. There will be some consideration of how the changes in human ecology influence the emergence of new infectious diseases and the reemergence of old diseases. Local environmental health issues will be considered as examples of global environmental health problems.

### PUB HLTH 3109

### **Epidemiology & Biostatistics IIIHS**

- 6 units semester 2
- 4 hours lectures/tutorials/pracs/seminars per week
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II and PUB HLTH 1003 Public Health Sciences II
- · Assessment: assignments and exam

This course deals with epidemiological and statistical concepts and terminology, basic analytic techniques and research designs. It does not aim to train specialist epidemiologists or biostatisticians; instead the purpose is to build on material from Level II to give students a working knowledge of these disciplines. Some basic numeracy skills will be required.

By the end of the course students should grasp basic concepts in epidemiology and statistics; have an understanding of quantitative research strategies; begin to critically assess literature in the public health domain which employs epidemiological and statistical methods; understand the role of epidemiology in surveillance of the health status of populations; and appreciate the use of statistics in making decisions in the face of uncertainty.

## PUB HLTH 3112H0

### **Public Health Law IIIHS**

- 6 units semester 2
- 2 hours lectures/tutorials/pracs/seminars per week
- Eligibility: double major B.H.Sc /LLB students or graduates only
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II

A series of classes cover the major elements of public health law, the general theories about law and its development in contexts that are important for public health. There will be a detailed analysis of the law relating to the main public health areas, including disease control, environmental health, occupational health, epidemiology, public health litigation and legislation, drug and alcohol controls and health promotion.

# PUB HLTH 3114HO

### **Public Health Policy IIIHS**

- 6 units not offered in 2007
- 2 hours lectures/tutorials/workshops/seminars per week
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II

This course aims to help students analyse the health system with skills formed by the traditions of sociology, politics and economics. It aims to develop a critical, historically informed attitude toward the acquisition of knowledge and the evaluation of evidence about health institutions and their roles. Attention is also to the broad social and political context in which health policy is formed and implemented, and to the value assumptions implicit in policy. This analytical approach is applied in case studies of current issues in public health policy.

# PUB HLTH 3116H0

### **Health Program Evaluation IIIHS**

- 6 units not offered in 2007
- Prerequisite: PUB HLTH 2000 PUblic Health Inquiry II
- Assessment: To be advised

This course will consider relevant questions to ask of the performance of a health program, and methods by which these questions may be investigated. The differing standpoints of the consumer, the health service provider and the policy maker will be identified. Methods covered will include needs assessment, process evaluation and outcome evaluation. Both quantitative and qualitative approaches will be considered. There will be a practical exercise in which participants will design an evaluation of a health program with which they are familiar.

# PUB HLTH 3117HO Rural Public Health IIIHS

- 6 units semester 2
- 1 week intensive course in Whyalla
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II
- Assessment: tutorial assignments, workshop participation

This course is taught by a multi-disciplinary team undertaking research on rural and remote health. It builds on the knowledge and skills gained in previous public health courses to: examine patterns of morbidity and mortality in rural and remote areas; Explore and analyse the determinants of health and illness in such settings; Understand issues related to service provision and utilisation in rural and remote locations; Analyse how regional health and other service providers apply State and Federal health policy in local settings. Specific topics include: undertaking needs assessment, understanding the strengths and weaknesses of geographical classification systems, examining the use of the concept of 'community' in understanding rural health, primary health care in non-metropolitan settings and issues in providing appropriate, accessible services.

The placement gives students the opportunity to meet health and human service providers in a variety of professional working environments in rural and remote areas. Students will have the opportunity to pursue topics of particular interest to them by undertaking assignments on topics of their choice.

## PUB HLTH 3118HO

### **Epidemiology Research Methods IIIHS**

- 6 units semester 2
- Eligibility: permission of Head of Discipline only

This course concentrates on conceptual and practical issues encountered by students in the design and implementation of epidemiological research. (Students will be required to develop and present a research protocol for class discussion and critique a fellow student's protocol). Theoretical material as it relates to carrying out such research will include the definition and control of bias and confounding in observational studies. Interaction, modern interpretations, of case control studies, metaanalysis, clinical epidemiology, descriptive epidemiology, modern epidemiology theory and screening. Common pitfalls in epidemiological and statistical reasoning are examined, and attention is paid to research design, proposal writing, data presentation, and critical reading of the research literature. Students are introduced to electronic information resources in epidemiology (listservs, world wide web sites) and are required to complete an assignment suing these resources. The course is designed to present students with an up-to-date view of epidemiological research methods.

### PUB HLTH 3119

### **Public Health Internship III**

- 6 units semester 2
- 3 hour seminar
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Quota will apply based on marks in PUB HLTH 1001 Public Health 1A, PUB HLTH 1002 Public Health 1B, PUB HLTH 2000 Public Health Inquiry II and PUB HLTH 2001 Public Health Sciences II

- Prerequisite: PUB HLTH 2000 Public Health Inquiry II and PUB HLTH 2001 Public Health Sciences II, at least six units Level III Public Health courses
- Assessment: research, tutorial papers

This course provides students with the opportunity to combine workplace experience in Public Health settings with academic study. During the course students complete a substantial research task that involves the application of public health research skills and knowledge to a work environment.

Students are allocated placements from a range of offerings which include the State Office of the Australian Government Department of Health and Ageing, the South Australian Department of Health, Divisions of General Practice, and health promotion and other non-government organisations in the health sector. Final placement will depend upon availability and the application of an internal quota.

### PUB HLTH 3120H0

#### **Public Health Theory and Practice III**

- 6 units semester 1
- 5 hours per week lectures/tutorial/practical
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II
- Assessment: exam, assignments, tutorial, practical participation

This course builds on the content of Public Health Inquiry II and consists of two complementary strands that will help prepare students for a career in public health or related field. The Theory strand invites students to reflect more deeply on current assumptions and practices in public health. Students will explore the conceptual bases, scientific and social, of public health, consider fundamental questions about cause and effect, and enhance their skills in critiquing current approaches. The Practical strand will equip students with practical skills needed in the public health workplace. At the end of this course a student will possess enhanced skills in interpretation of qualitative and quantitative data and reports, have further developed their writing and presentation skills, and examined the processes involved in public health advocacy.

# PUB HLTH 3121HO

## **Qualitative Research in Practice IIIHS**

- 6 units semester 2
- Eligibility: B.Hlth.Sc, & B.Psych.(Hons) students
- Available for Non-Award Study
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 1003 Public Health Sciences II
- Assessment: may include tutorial presentations, group projects, critical review of published research

Qualitative research is central to current public health practice. This applied course will provide students with an introduction to the theory and process of gualitative research methods. Students will develop the skills to recognise and reflect on the strengths and limitations of different research methodologies, understand the links between theory and practice, critically assess research, and address ethical and practical issues. The course takes a step-by-step approach to the design and implementation of qualitative research and includes: formulating a research question; writing research and ethics proposals; conducting interviews, participant observation, focus groups, textual and media analysis; managing data (computer assisted); analysing data; and writing and presenting findings.

### PUB HLTH 4000

### **Honours Public Health**

- 24 units full year
- Eligibility: B.Med.Sc. students, appropriately qualified B.Hlth.Sc. students, or permission of Head Department
- Assessment: course work, seminar attendance, honours thesis

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science or Bachelor of Health Sciences (Honours) in Public Health are advised to consult the Honours Coordinator as early as possible.

# SOCIAL SCIENCES

# Level II

# SOCI 2002

### **Social Science Techniques**

- 4 units semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: weekly preparation & participation, tutorials/workshops, exam

The objectives of this course are: to provide students with a perspective on the role of social sciences within contemporary society, especially in Australia: to assist them in the development of their own individual career paths and to enhance students' prospects of entering a satisfying and rewarding career in the social sciences upon completion of their degree. The main objective of this course is to teach students some basic skills in the collection, analysis, interpretation and presentation of social science information. Students are introduced to the use of EXCEL spreadsheets, NUD\*IST (for qualitative data analysis) and SPSS, a package for the analysis of survey and statistical data. The practical component of this course incorporates a series of computer workshops.

# SOIL AND WATER

# Level I

# SOIL&WAT 1000RW Soils and Land Management Systems I

- 3 units semester 2
- 2 lectures, 1 tutorial, 3 hours practical (or equiv) per week
- Assumed Knowledge: SACE Science courses
- Assessment: exam, tutorials, practical assignments

Agro-ecosystems face increasing pressure in Australia to become more productive, profitable and efficient, yet sustainable. The course describes how agricultural and ecological systems are linked to soils and Australian environment, and provides a basis from which sustainability issues can be addressed. Students will learn about the importance of soil physical, chemical and biological properties in the landscape in relation to management of soil fertility, water use efficiency, and land degradation. They will also learn about important ecological processes based in soils, as well as taking a whole-system approach to land management. Interpretation of soil maps will be considered in relation to land evaluation and suitability for different purposes and the concepts of indicators of sustainability will be introduced.

## Level II

### SOIL&WAT 2011

### **Spatial Information and Land Evaluation**

- 4 units semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: SOIL&WAT 2007RW Resource Mapping and Survey
- Assessment: theory & practical exams, assignments

Introduction to maps and map design; types of maps - topographic, thematic, cadastral, photomaps, orthophotos and orthophotomaps; scale; references; datum and projections; mapping and accuracy standards; aerial photography - characteristics, resolution, acquisition, stereoscopic interpretation for landform and land cover: introduction to surveying; equipment and theoretical basics; types of surveys; identifying locations and navigation in the field; Global Positioning Systems - principles, accuracy and use; introduction to Geographic Information Systems; sources, acquisition and use of environmental spatial data, overview of major Australian and South Australian mapping programs and spatial information in government agencies; introduction to airborne and satellite remote sensing data and applications; resource mapping and data capture.

### SOIL&WAT 2012WT

### **Soil and Water Resources**

- 4 units semester 1
- 3 lectures, 4 hours practical/tutorial per week
- Assumed Knowledge: SOIL&WAT 1000RW Soils and Land Management Systems I or GEOLOGY 1200 Earths Environment I or GEOLOGY 1001 Environmental Geoscience I
- Restriction: SOIL & WAT 2005WT Soil Resources

Soil and water are fundamental resources in the environment. This course aims to provide an understanding of important soil physical, chemical and biological properties and of water quality. Topics considered include: soil water retention, storage and movement, salinity, chemical fertility, the role of biology in soil processes, soil conservation and management, water quality factors and the impact of land management on these factors.

## Level III

### SOIL&WAT 3002WT

#### **Soil Management and Conservation**

- · 3 units semester 1
- 2 lectures, 4 hours practical work (or equiv.) per week
- Prerequisite: SOIL&WAT 2012WT Soil and Water Resources or SOIL&WAT 2005WT Soil Resources
- Assessment: exam, practical reports, other assignments

This course covers topics important to students of agriculture, horticulture, environmental science and natural resource management. Degradative processes which pose the greatest threats to the soil resources of Australia are examined and their avoidance, management and amelioration are discussed. These processes include: erosion of soil by water and wind, water repellence, irrigation and dryland salinity, induced soil acidity, soil structure decline and sodicity. Other issues addressed are soil conservation legislation and land capability. Practical work will consist of laboratory exercises, field excursions and other exercises related to the above topics.

### SOIL&WAT 3004WT

#### **Environmental Toxicology and Remediation**

- 3 units summer semester
- Prerequisite: Credit or higher in PLANT SC 1001RW or a Pass in CHEM 1000A/B or CHEM 1001A/B or equiv.
- Restriction: SOIL&WAT 3004WT Environmental Toxicology
- Assessment: theory, practicals/assignments

The goals of this course are to provide students with an understanding of the monitoring, fate and risk assessment of contaminants in environmental and biological systems. Classes of contaminants discussed include heavy metals, pesticides, and other water-, soil- and food-borne toxicants. The properties of contaminants which influence their environmental distribution and transformations and the characteristics of the environment which influence contaminant toxicity to organisms are discussed. Students are introduced to the principles of toxicology necessary for an understanding of the environmental consequences of contaminants.

### SOIL&WAT 3005WT

#### **Research Project: Soil and Land Systems**

- 3 units semester 1 or 2
- 10 hours practical work per week (or equiv.) on projects
- Prerequisite: at least 55% in each of 2 level III courses offered by Discipline or equiv acceptable to Head of Discipline
- Corequisite: 2 level III courses offered by Discipline other than those serving as prerequisites, or equiv acceptable to Head
- Assessment: oral exam, seminar, written project
   report

The course consists of a small research project of the student's choosing on a topic acceptable to the Discipline of Soil and Land Systems. It will be undertaken during the 3rd year of the program.

### SOIL&WAT 3007WT

#### **GIS for Environmental Management**

- 3 units summer semester
- 15 days during summer vacation
- Available for Non-Award Study
- Assumed Knowledge: basic computing skills in Windows
- Restriction: SOIL&WAT 3014WT GIS for Agricultural Sciences
- Assessment: practical exercises, case study, written exam

The course deals with concepts and theory of geographic information systems and their use for environmental mapping, spatial modelling and analysis. Topics covered include the relationship of GIS models to real world perception and map representation, vector and raster systems; spatial modelling; translation of problems into GIS procedures; attribute manipulation and recoding, operations including arithmetic and Boolean overlay, reclassification, proximity and neighbourhood analyses; input of data to GIS; database structures; interpolation of surfaces form point and vector data; applications and case studies. Practical work uses PC-based software to teach basic skills in GIS data entry, analysis and output, emphasising a problem-solving approach through environmental and agricultural GIS case studies.

#### SOIL&WAT 3008WT

### Remote Sensing for Environmental & Agricultural Sciences

- 3 units not offered in 2007
- Assumed Knowledge: basic computing skills in Windows
- Restriction: GEOLOGY 3010 Remote Sensing (S)
- · Assessment: practical exercises, written exam

The course deals with use of satellite and airborne imagery for environmental and agricultural applications such as land mapping, site evaluation and monitoring degradation and change. Topics include the interaction of electromagnetic radiation with the earth's surface, spectral characteristics of earth surface materials, the nature of imagery collected by a variety of current earth-observation sensors, the use of this imagery for detecting, mapping and monitoring environmental features, collection of field data to interpret imagery, integration of remote sensing and geographic information systems (GIS) for environmental monitoring and modelling, and specialised forms of imagery such as radar, thermal, airborne video and digital photography. Practicals use computerbased image analysis software to enhance and interpret digital images, produce thematic maps, analyse change over time and combine images and map data. Field-based practicals include the use of spectroradiometers for collecting reflectance data about land cover.

### SOIL&WAT 3012WT

#### **Soil Water Management**

- 3 units not offered in 2007
- 2 lectures, 4 hours practical work (or equiv) per week
- Prerequisite: SOIL&WAT 2012WT Soil and Water Resources or SOIL&WAT 2005WT Soil Resources
- Assessment: exam, tutorials, practical reports

This course covers the theory and practice of measuring and managing soil water using commercially available technology. Topics include soil water content and potential, water availability to plants, water movement in unsaturated and saturated soils, soil structure and salt-affected soils. Computers will be used to model infiltration, storage and movement of soil water, and to solve problems. Practical classes will demonstrate important techniques in soil survey for managing soil water in dryland and irrigated situations.

# SOIL&WAT 3014WT

### **GIS for Agricultural Sciences**

- 3 units semester 2
- Available for Non-Award Study
- Assumed Knowledge: basic computing skills in Windows environment
- Restriction: SOIL&WAT 3007WT GIS for Environmental Management, SOIL&WAT 7025WT GIS for Agricultural Sciences
- Assessment: case study, practical assessments, written exam

Geographic information systems have become an important tool far beyond the geographic disciplines. Applications in the agricultural sciences range from simple cartographic tools to precision fertiliser applications and growth models. This course gives an overview of the history and the rapid recent development of this technology and gives examples of commercially available state-of-the-art equipment. Hands on computer exercises involve data capture, processing and presentation of results. Special emphasis is placed on precision agriculture and the optimal and timely treatment of spatial variability in agricultural production systems. Students will learn what can be seen from space and airborne remote sensing and how this information can be combined with other sources of information in order to minimise effort and optimise production.

### SOIL&WAT 3016WT

### **Soil Ecology and Nutrient Cycling**

- 3 units semester 1
- 2 lectures, 4 hours practical work (or equiv)
   per week
- Prerequisite: SOIL&WAT 2005WT Soil Resources or SOIL&WAT 2012WT Soil and Water Resources

• Assessment: exam, practical reports, presentation of case studies

The course will provide students with a comprehensive view of ecological interactions in soils. It deals with the interactions between plants, soil and soil organisms, the roles played by soil organisms in decomposition of organic material, nutrient cycling (C, N, P) and stability of agricultural and natural ecosystems. Other topics include food webs, the importance of soil organisms for soil fertility, mycorrhizas and their effects on plant productivity and plant communities, bio-control and bioremediation, root growth and the biology of the rhizosphere.

## Honours

# SOIL&WAT 4000WT

# Honours Soil & Land Systems (B.NRM)

- 24 units full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: research proposal, final seminar, thesis, viva voce 80%, weighted average of nonresearch component 20%

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or July.

# SOIL&WAT 4001WT Honours Soil & Land Systems

- 24 units full year
- Prerequisite: Cr. or higher standard in at least 2 Level III courses approved by the Head of Discipline
- Assessment: research proposal, final seminar, research paper, viva voce 75%; weighted average of non-research component 25%

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining

committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or July.

### SOIL&WAT 4002WT

### Honours Soil & Land Systems (B.Ag.)

- 24 units full year
- Prerequisite: Cr. or higher standard in a least 2 Level III courses approved by Head of Discipline
- Assessment: research proposal, seminars, research paper, viva voce 75%, weighted average of non-research component 25%

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or July.

### SOIL&WAT 4003WT

### Honours Environmental Science (Soil & Land Systems)

- 12 units full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: research proposal, seminars, research paper, viva voce 60%, average of 4 specified Level III courses 40%

NOTE: Viticultural Science begins classes on the Monday of O-Week. Attendance at these classes is required to be able to complete the course.

Viticultural Science covers the entire life cycle of the cultivated grapevine with an emphasis on fruit production for wine making. The practical component of the course takes advantage of the vine growth phases that occur from flowering and fruit-set leading up to harvest. Topics covered include: The growth cycle of the grapevine and the biology that underpins the different phenological stages. Grapevine physiology as it is relevant to growth and vine form, flowering, water use, mineral nutrition, berry development and ripening. Grapevine anatomy of the vegetative and reproductive parts. Techniques to monitor berry maturity development, and yield potential. Taxonomy of grapevines, characteristics of fruiting varieties and variety identification. Tutorial and practical sessions will focus in more depth on the following topics: vine and bud anatomy, shoot and fruit based variety identification, yield estimation, canopy measurements, maturity sampling and mineral nutrition.

Approximately half the lectures will be provided from Botany II - these lectures will cover topics relating to the general principles of plant biology including structure and function, systematics, floral biology and the physiology of growth and development. The lectures are intended to complement the Viticulture based lecture material with topics of whole plant biology that are common amongst most plant systems.

### SOIL&WAT 4005WT

#### Honours Soil Science (B.Sc.)

- 24 units full year
- Prerequisite: credit or higher in a least 2 Level III courses approved by Head of Discipline
- Assessment: research proposal, seminars, research paper, viva voce 75%, weighted average of non-research component 25%

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline.

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or the end of July.

## SOIL&WAT 4007WT

### Honours Soil Science (B.Ag)

- 24 units full year
- Prerequisite: credit or higher in a least 2 Level III courses approved by Head of Discipline
- Assessment: research proposal, seminars, research paper, viva voce 75%, weighted average of non-research component 25%

Requirement: substantial research project of student's choosing (on topic acceptable to Discipline) under supervision of an examining committee (including academic staff members) approved by Head of Discipline, non-research component, including coursework, essays or other assignments relevant to student's Honours project and approved by Head of Discipline.

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during third year and be prepared to begin studies at the beginning of February or the end of July.

## SOIL&WAT 4009WT

### Honours Soil & Land Systems (B.Ag.Sc.)

- 12 units full year
- Prerequisite: credit or higher in at least 2 level III courses approved by Head of Discipline
- Assessment: research proposal, seminars, research paper, viva voce 60%, average of four level III courses referred to above 40%

Requirement: modest research project of student's choosing (on topic acceptable to Discipline) normally taken at same time as coursework (4 Level III courses relevant to student's Honours project and approved by Head of Discipline - 12 units)

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors during the third year and be prepared to begin studies at the beginning of February or July.

# SPANISH

# Level I

# SPAN 1001

## Spanish IA

- 3 units semester 1
- 5 contact hours per week
- Assessment: periodic tests of listening comprehension & writing skills, oral exam, written exam

This course uses the latest communicative approaches to language by stressing involvement in two sorts of activities: those relating directly to students, their interests and lives, and those relating to the worlds of Spain and Latin America. The primary goal is to teach students to interact in Spanish as naturally and as spontaneously as possible. First year students who have completed SACE Stage 2 Spanish or have an equivalent knowledge of the language should enrol in the advanced stream.

## SPAN 1002

### Spanish IB

- 3 units semester 2
- 5 contact hours per week
- Prerequisite: SPAN 1001 Spanish IA/Spanish I Part 1) or permission of Head of Discipline
- Assessment: periodic tests of listening comprehension & writing skills, oral exam, written exam

This course is for those who have completed Spanish I Part 1or have had an equivalent introduction to the language. It uses the latest communicative approaches to language by stressing involvement in two sorts of activities: those relating directly to students, their interests and lives, and those relating to the worlds of Spain and Latin America. The primary goal is to encourage students to feel free to interact in Spanish as naturally and as spontaneously as possible. First year students who have completed SACE Stage 2 Spanish or have an equivalent knowledge of the language and have passed SPAN 1001 should enrol in the advanced stream.

# **SPAN 2001**

# Spanish IIA

- 4 units semester 1
- 4 5 contact hours per week
- Prerequisite: SPAN 1002 Spanish I Part 2 or permission of Head of Discipline
- Assessment: periodic tests of aural comprehension & writing skills, oral exam, aural & written exam

This course consolidates and extends the language work done in level I and provides further practice through grammar and composition exercises. It also further develops the aural and oral communication skills of the student through continuous oral practice in the classroom and computer laboratory activities. The readings and cultural component will focus on contemporary issues pertaining to Hispanic countries. Second year advanced students should enrol in the advanced stream.

# **SPAN 2002**

## Spanish IIB

- 4 units semester 2
- 4 5 contact hours per week.
- Prerequisite: SPAN 2001 Spanish IIA/Spanish II Part 1) or permission of Head of Discipline
- Assessment: periodic tests of aural comprehension & writing skills, oral exam, aural & written exam

This course consolidates and extends the language work done in Spanish II Part 1 and provides further practice through grammar and composition exercises. It also further develops the aural and oral communication skills of the student through continuous oral practice in the classroom and computer laboratory activities. The readings and cultural component will continue to focus on contemporary issues in Hispanic countries. Second year advanced students should enrol in the advanced stream.

# Level III

# SPAN 3001

# Spanish IIIA

- 6 units semester 1
- 5 contact hours per week
- Prerequisite: SPAN 2002 Spanish II Part 2 or permission of Head of Discipline
- Assessment: language section & elective modules with a strong language component written activities, written & oral exams; cultural components - essays, class presentations

This course has two parts. A core component comprises classes in Spanish language, conversation and literature which builds on and consolidates the language learning of the Level I and II courses. This component is compulsory for all students majoring in Spanish. The second component comprises different units taken from modules offered by the Spanish department, including Spanish and Latin American Culture, Film, Hispanic Linguistics and Spanish Translation (not all modules are offered every year).

Third year advanced students should enrol in this course. A special timetable for these students can be obtained by contacting the Spanish section at Flinders University (8201 2124).

# SPAN 3002 Spanish IIIB

- 6 units semester 2
- 5 contact hours per week
- Prerequisite: SPAN 3001 Spanish IIIA/Spanish III Part 1) or permission of Head of Discipline
- Assessment: language section & elective modules with a strong language component written activities, written & oral exams; cultural components - essays, class presentations

This course comprises two parts. A core component comprises classes in Spanish Language, Conversation and Literature which builds on and consolidates the language learning of Spanish IIIA. This component is compulsory for all students majoring in Spanish. The second component comprises different units taken from modules offered by the Spanish department, including Spanish and Latin American Culture, Film, Hispanic Linguistics and Spanish Translation (not all modules will be offered every year). Third year advanced students should enrol in this course. A special timetable for these students can be obtained by contacting the Spanish section at Flinders University (8201 2124).

# STATISTICS

## Level I

## **STATS 1000**

### Statistical Practice I

- 3 units semester 1 or 2
- 3 lectures, 1 tutorial, 1 hour practical per week
- Available for Non-Award Study
- Assumed Knowledge: SACE stage 2 Mathematical Methods or equiv.
- Restriction: cannot be counted with STATS 1004 ECON 1008 or STATS 2004 or APP MTH 2009 or APP MTH 2010
- Assessment: 3 hour exam, assignments, midsemester test

This course is an introduction to the application of statistical methods to experimental and observational data. It is designed to provide students in all areas with a sound practical knowledge of frequently used statistical methods and quantitative thinking. Topics covered include the organisation, description and presentation of data; the design of experiments and surveys; random variables and probability distributions; binomial distributions: continuous distributions: the normal distribution: the use of inference to draw conclusions from data; tests of significance for means; confidence intervals; goodness of fit tests; the t and chi-square distributions; fitting straight lines to data; the method of least squares; regression and analysis of variance.

The lecture material will include case studies and examples chosen to illustrate the application of statistical methods in a broad range of applications. Students will be introduced to the statistical package SAS which will be used throughout the course.

### STATS 1002RW

#### **Data Management and Interpretation**

- 3 units semester 2
- 3 lectures, 3 computer lab sessions/tutorials per week
- Eligibility: not available to B.Ma.& Comp.Sc. or B.Comp.Sc. students
- · Available for Non-Award Study
- Assumed Knowledge: Stage 2 Mathematical Applications or Mathematical Methods or Mathematics I
- Assessment: exam 70%, assignments, major project 30%

This course is an introduction to the quantitative methods used in agriculture and nature resource management. Statistical topics include the organisation, description and presentation of data; the design of experiments; the use of inference to draw conclusions from data; tests of significance for mean and proportions; confidence intervals; goodness of fit tests; regression and analysis of variance. Biomathematical topics include the construction and use of mathematical models, and an introduction to calculus.

# **STATS 1004**

### **Statistical Practice I (Life Sciences)**

- 3 units semester 2
- 3 lectures, 1 tutorial, 1 hour practical per week
- Available for Non-Award Study
- Assumed Knowledge: SACE stage 2 Mathematical Methods or equivalent
- Restriction: cannot be counted with STATS 1000, ECON 1008 or STATS 2004 or APP MTH 2009 or APP MTH 2010
- Assessment: 3 hour exam, assignments, midsemester test

This course is an introduction to the theory and application of statistical methods to experimental and observational data. It is designed to provide students in the life sciences with a sound practical knowledge of commonly relevant statistical methods methods and quantitative thinking. Suitable for students who are likely to be users of statistical methods in the future, or who intend to pursue a degree in mathematical sciences. Topics covered include the organisation, description and presentation of data; the design of experiments and surveys; probability and relative frequency; random variables and probability distributions; binomial distributions; continuous distributions; the normal distribution; the use of inference to draw conclusions from data; tests of significance for means; confidence intervals; goodness of fit tests; the t and chi-square distributions; fitting straight lines to data; the method of least squares; regression and analysis of variance.

The lecture material will include case studies and examples chosen to illustrate the application of statistical methods in the context of the life sciences. Students will be introduced to the statistical package SAS which will be used throughout the course.

# Level II

### **STATS 2002**

### Introduction to Mathematical Statistics II

- 2 units semester 1
- 2 lectures per week, I tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass), or MATHS 2004 (Pass) or corequisite MATHS 2004 Mathematics IIM
- Assessment: 2 hour exam, assignments

This course provides the mathematical foundations of modern statistical inference and its applications. Topics include probability, sample spaces, events, equally likely outcomes; chance odds and odds ratios; relative frequency and Bayesian interpretations of probability; conditional probability and independence; sequences of events; Bayes' Rule and Bayes' Odds. Discrete random variables: expected values, expectations of functions of random variables; the Bernoulli and geometric distributions; the binomial and hypergeometric distributions; normal approximation to the binomial; the Poisson distribution; moment generating functions; Markov's Inequality and Tchebyshev's Inequality. Continuous random variables: the cumulative distribution and probability density functions: the uniform, normal and Cauchy distributions: the exponential distribution, hazard and survival functions: Poisson processes: Gamma and chi-square distributions. Bivariate and multivariate distributions for discrete and continuous random variables: marginal and conditional distributions: independence: covariance and correlation: moments for linear combinations of random variables: the multinomial distribution. Three different methods for finding the distribution of a function of random variables: distribution functions, transformations, and moment generating functions.

## **STATS 2003**

#### Statistical Practice II

- 2 units semester 1
- 2 lectures, 1 hour tutorial or practical per week
- Available for Non-Award Study
- Prerequisite: one of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: MATHS 1007A/B or MATHS 1000A/B or MATHS 1001
- Assessment: 2 hour exam, assignments, project work

This course is an extension of Statistical Practice I, providing a broader and deeper understanding of the application of statistical methods to data. Topics covered include randomisation, blocking and the design and analysis of experiments; analysis of variance; elementary factorial designs; linear and multiple regression, regression diagnostics, the analysis of residuals; the design and analysis of surveys, methods of sampling, the analysis of frequency data; power; elementary distribution-free methods such as the sign test and rank tests.

\* In exceptional circumstances, on approval of the Faculty and Course Coordinator, 9101 Business Data Analysis will be accepted

# **STATS 2004**

# Laplace Transforms & Probability & Statistical Methods

- 2 units semester 2
- 24 hours lectures, tutorials & practicals
- Eligibility: not available to B.Ma.& Comp.Sc. or B.Comp.Sc. students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass) or MATHS 2004 Mathematics IIM
- Restriction: may not be presented with APP MTH 2009, APP MTH 2010, STATS 2001
- Assessment: written and computing assignments 15%, final exam 85%

Laplace transforms of derivatives and integrals, applications to differential equations (approx. 8

lectures). Probability calculus. Statistical methods: estimation of means and variances; inferences on means; simple analysis of variance; simple linear regression; inferences on probabilities; contingency tables (approx. 16 lectures).

# **STATS 2011**

## **Statistical Modelling II**

- 2 units semester 2
- 2 lectures, 1 hour tutorial or practical per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 or MATHS 2004. One of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: STATS 2002 Introduction to Mathematical Statistics II
- Assessment: 2 hour exam, class exercises, practicals

Estimation. Properties of estimators:

unbiasedness, consistency, efficiency, sufficiency. Method of moments. Maximum likelihood: score, information, large sample properties. Minimum variance bound. Tests of hypotheses. Type I, II errors, significance level, power. Likelihood ratio, and other large-sample equivalents. Interval estimation. Confidence intervals. An introduction to linear models, and Analysis of Variance. An introduction to, and examples using R, will be included.

# Level III

# **STATS 3000**

### Industrial Statistics III

- 2 units semester 1
- 2 lectures per week, 1 tutorial, 1 hour practical every 3 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass), one of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assessment: 2 hour exam, class exercises, practicals, project work

The Deming philosophy of quality; design and use of control charts for attributes and variables; process capability; CUSUM charts; the 7 tools of Total Quality Control; industrial experiments, particularly fractional factorial and response surface designs; Taguchi methods; signal/noise ratios; components of variance; measurement error.

# **STATS 3001**

### Statistical Modelling III

- 3 units semester 1
- 5 lectures, 1 hour tutorial/practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass); One of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

This course aims to provide students with further fundamental work on modelling in statistics. The linear model. Least squares estimation: geometry of least squares, orthogonal projection, properties of estimators. Regression. Large sample approximation. Transformations, model selection, diagnostics, nonlinear regression. Introduction to generalised linear models; loglinear models.

# **STATS 3002**

### **Environmental Statistics III**

- 3 units not offered 2007
- 2 lectures per week, 1 tutorial, 1 hour practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass). One of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

The course provides a coverage of statistical methods as applied in the environmental sciences. The syllabus will include topics such as Sampling: sampling over time, sampling spatially, capturerecapture methods. Measurement issues:what to measure, how to measure, assessing reliability and accuracy of measurement techniques. Testing and estimation: assessing whether regulated environmental standards are met, the difference between importance and significance, power and sample size calculations. Model building and checking: building physical and empirical models. Simulation: simulation methods as a means of testing significance. The statistical package S-PLUS, which has an Environmental module, will be used.

# **STATS 3003**

## **Sampling Theory and Practice III**

- 3 units not offered in 2007
- 2 lectures, 1 tutorial, 1 hour practical per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass),STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any 2 Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

Introduction: experiments and surveys; steps in planning a survey. Statistical characterisations of finite populations; total, mean, variance, mean square. Randomisation approach to sampling and estimation; sampling distribution of estimator; expected values, variances; generalisation of probability sampling. Prediction approach; inadequacies of approach; decomposition of population total; concomitant variables. Models: regression through the origin; estimation by least squares; ratio estimator; variance formulas. Balance and robustness; best fit sample. Stratified sampling; estimation; allocation; construction of strata; stratification on size variables; poststratification. Two stage sampling; estimation; allocation. Cluster sampling.

# **STATS 3005**

### **Time Series III**

- 3 units semester 2
- 2 lectures,1 hour tutorial or practical, per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass), one of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any Level II Statistics course
- Assessment: 3 hour exam, assignments

This course provides an introduction to time series analysis and topics covered include descriptive methods of analysis: plots, smoothing, differencing, the autocorrelation function, the correlogram and the variogram; the periodogram; estimation and elimination of trend and seasonal components. Stationary processes, modelling and forecasting with autoregressive moving average (ARMA) models. Spectral analysis: the fast Fourier transform, periodogram averages and other smooth estimates of the spectrum: time-invariant linear filters. Nonstationary and seasonal time series models; ARIMA processes: identification, estimation and diagnostic checking: forecasting. including extrapolation of polynomial trends. exponential smoothing, and the Box-Jenkins approach.

# **STATS 3006**

### Mathematical Statistics III

- 3 units semester 1
- 5 lectures, 1 tutorial every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass). One of STATS 1000 (Pass), STATS 1004 [Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 Pass)
- Assumed Knowledge: STATS 2011 Statistical Modelling II
- Assessment: 3 hour exam, class exercises

This course aims to provide students with fundamental distribution theory together with the underlying basics in statistical inference. It forms the basis upon which the remaining courses are built. Calculus of distributions. Moments and cumulants. Moment generating functions. Multivariate distributions: Marginal and conditional distributions, Conditional expectation and variance operators, Change of variable, multivariate normal distribution, Exact distributions arising in Statistics. Convergence results: weak convergence, convergence in distribution, Central Limit Theorem. Statistical Inference. Likelihood, score and information. Estimation and properties of estimators: sufficiency, efficiency, consistency, maximum likelihood estimators, large sample properties. Tests of hypotheses: likelihood ratio, score and Wald tests, large sample properties.

## **STATS 3008**

### **Biostatistics III**

- 3 units semester 2
- 2 lectures, 1 hour tutorial or practical, per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass). One of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001(Pass)
- Assumed Knowledge: statistical background in any Level II Statistics course
- Assessment: 3 hour exam, assignment

This course provides students with fundamental knowledge of the design and analysis of clinical trials and epidemiological studies, and important methods for the analysis of biostatistical data. Topics covered include the role of randomisation and ethical considerations; Phase I to Phase IV trials; the Data and Safety Monitoring Board; methods of randomisation: unrestricted and restricted randomisation, random permuted blocks, biased coin designs, stratification, minimisation; trial size: fixed, sequential and group sequential trials; factorial trials, crossover trials and equivalence trials. Epidemiology: cohort, case-control and related epidemiological studies; models for disease association: relative risk, odds ratio, attributable risk. Diagnostic tests and screening; meta-analysis; survival analysis.

# **STATS 3010**

### **Experimental Design III**

- 3 units not offered in 2007
- 2 lectures per week, 1 tutorial,1 hour practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass). One of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any 2 Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

Principles of experimental design, including randomisation, replication and blocking. Factorial experiments, confounding and fractional replication. Split plot designs, other multi-stratum experiments and their analysis. Incomplete block designs, canonical efficiencies and analysis by generalised sweeps. There will be an emphasis on practical aspects of the course. R will be used throughout.

# **STATS 3011**

#### **Bioinformatics III**

- 3 units not offered in 2007
- 2 lectures, 1 hour tutorial or practical, per week
- · Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass); one of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any Level II Statistics course
- Assessment: 3 hour exam, assignments

This course provides students with knowledge and skills in statistical bioinformatics. Topics covered include basic notions and terminology from biology and genetics; gene expression analysis; two-colour microarrays: image processing, data pre-processing and normalisation; empirical and graphical methods for 'low-level' analysis of microarray data; density smoothing and lowess curves. Hypothesis testing: non-parametric and permutation tests; bootstrap estimation and testing; the multiple-testing problem: step-down methods, computer-intensive methods, false discovery rates; the Bayesian approach to hypothesis testing and estimation. Discriminant analysis and cluster analysis. Biological sequence analysis; Poisson processes and Markov chains; the analysis of one DNA sequence; the analysis of multiple DNA or protein sequences; random walks and sequential analysis theory leading to BLAST; Hidden Markov Models (HMM) and applications.

# **STATS 3012**

#### **Elements of Time Series III**

- 2 units semester 2
- 24 hours lectures, tutorials, practical
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass) or MATHS 2004 (Pass). One of STATS 1000 (Pass), STATS 1004 (Pass), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: Statistical background such as in any of the Level II Statistics courses

- Restriction: cannot be counted with STATS 3005 Time Series III
- Assessment: 2 hour exam and assignments

This course provides an introduction to time series analysis. Topics covered in this course include descriptive methods of analysis: plots, smoothing, differencing, the autocorrelation function, the correlogram and the variogram; the periodogram; estimation and elimination of trend and seasonal components. Stationary processes, modelling and forecasting with autoregressive moving average (ARMA) models. Additional topics will be selected from Spectral analysis: the fast Fourier transform, periodogram averages and other smooth estimates of the spectrum; time-invariant linear filters. Nonstationary and seasonal time series models; ARIMA processes: identification, estimation and diagnostic checking; forecasting, including extrapolation of polynomial trends, exponential smoothing, and the Box-Jenkins approach.

# Level IV

# **STATS 4001**

### **Reliability and Quality Control**

- 2 units semester 1
- · 28 hours lectures, tutorials or equivalent
- Eligibility: not available to B.Comp.Sci or B.Ma.&Comp.Sc. students
- Assumed Knowledge: STATS 2004 Laplace Transforms & Probability & Statistical Methods
- Assessment: assignments, exam

Reliability; definitions, types of failure, confidence levels, mtbf concepts, predication of reliability from life test data. Quality control and assurance: definition of quality, data presentation, quality control methods. Total quality management: measurement and audit methods. Quality improvement

# Honours

### **STATS 4000**

### **Honours Statistics**

- 24 units full year
- Prerequisite: major in Statistics at sufficiently high standard
- Assessment: 3 hour exam for each course at end of semester in which it is offered, Honours project, seminar

Students are required to consult the Head of Statistics preferably no later than the end of the year preceding their enrolment, to ensure they have the necessary proposed prerequisite knowledge at a satisfactory standard. All students are required to obtain the approval of the Head of Discipline before enrolling

Students with a different background of third-year courses may be accepted at the discretion of the Head of Statistics.

The lecture program will be determined from year to year. Students will be required to make a selection from courses offered by the Schools of Mathematical and Computer Sciences and by such other schools as may be agreed to by the Head of Statistics. Some compulsory courses may be prescribed. Each student will be assigned a supervisor who will advise on the choice of lecture program and give guidance in the writing of a project. Work on this project should begin in the School in the first week of February and should be completed by the end of the second semester's lecture program.

# **STATS 4003**

### **Honours Statistics & Computer Science**

- 24 units full year
- Prerequisite: completion of major in Statistics at high standard, major in Computer Science, passes satisfactory to Head of Discipline in suitable collection of Level II & III courses in Schools of Mathematical and Computer Sciences

Students with a different prerequisite background at Level II & III may be accepted at the discretion of the Head of Discipline

Candidates are required to undertake at least 3 Honours level Computer Science options and at least 3 Honours level Statistics options. Other topics may be included at the discretion of the Heads of both Schools. A project will involve interdisciplinary work at the interface of Statistics and Computer Science and may be taken in either Schools. The size of the project is determined by the Discipline in which it is undertaken.

Refer to STATS 4000 Honours Statistics and COMP SCI 4999 Honours Computer Science for further information.

# **STATS 4004**

### **Honours Statistics & Genetics**

- 24 units full year
- Prerequisite: Completion of a major in Statistics at a sufficiently high standard,satisfactory performance in appropriate level courses offered by Molecular & Biomedical Science - Students with a different background may be accepted at discretion of Head of Discipline
- Assessment: thesis, essays, examinations, oral presentations

Students are required to undertake four honours level Statistics options, the Frontiers in Genetics Proposal worth 30% and a research project in Statistics and Genetics worth 30%.

# VITICULTURE

## Level II

# VITICULT 2002WT

### Viticultural Science

- 4 units semester 1
- Average 7 hours per week including lectures, practicals. Important: Viticultural Science begins on the first Monday of O-Week where attendance to all lectures and practical sessions will be required to pass the course
- Assumed Knowledge: Foundations of Wine Science, 6 units of Level I Biology, or equivalent
- Assessment: O-Week attendance, final written exam, Mid-term exam, practical reports, practical exam

Viticultural Science covers the entire life cycle of the cultivated grapevine with an emphasis on fruit production for wine making. The practical component of the course takes advantage of the vine growth phases that occur from flowering and fruit-set leading up to harvest. Topics covered include: The growth cycle of the grapevine and the biology that underpins the different phenological stages. Grapevine physiology as it is relevant to growth and vine form, flowering, water use, mineral nutrition, berry development and ripening. Grapevine anatomy of the vegetative and reproductive parts. Techniques to monitor berry maturity development, and yield potential. Taxonomy of grapevines, characteristics of fruiting varieties and variety identification. Tutorial and practical sessions will focus in more depth on the

following topics: vine and bud anatomy, shoot and fruit based variety identification, yield estimation, canopy measurements, maturity sampling and mineral nutrition.

Approximately half the lectures will be provided from Botany II - these lectures will cover topics relating to the general principles of plant biology including structure and function, systematics, floral biology and the physiology of growth and development. The lectures are intended to complement the Viticulture based lecture material with topics of whole plant biology that are common amongst most plant systems.

Note: Viticultural Science begins classes on the Monday of 0-Week. Attendance at these classes is required to be able to complete the course.

# Level III

## VITICULT 3005WT

# Grape Industry Practice, Policy and Communication

- 2 units semester 1
- Average 6 hours per week including lectures, seminars &/or practicals
- Assessment: written assignments, seminar participation, presentation

The aims of the course are the development of a mature understanding of wine in society, the refinement of student's abilities in written and spoken communication and the provision of a forum for the exchange of information between students and wine industry professionals. Invited speakers explore important issues including occupational health and safety, alcohol awareness and current practices in Australia and the world. Emphasis is placed on student participation in questions, discussions and sensory sessions.

### VITICULT 3020WT

#### **Table and Drying Grape Production**

- 2 units semester 1
- Average 6 hours per week including lectures, seminars, practicals &/or field work
- Assessment: assignments, written exam, oral presentation on selected topic

Table grape production: varieties; genetic improvement; vineyard design; techniques to improve table grape quality particularly crop load adjustment and growth regulators; harvesting and handling including maturity standards, harvest methods, packing, post harvest handling, marketing. Dried grape production: climatic requirements, principles of grape drying; treatments to enhance drying; dried grape product types; preparation for harvest; harvesting and handling of fresh grapes for drying and trellis dried fruit; finish drying and dehydration; classing, processing and marketing.

# VITICULT 3021WT

#### **Viticultural Production**

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Eligibility: B Sc (Viticult) & B Oen. students only
- Prerequisite: VITICULT 2002WT Viticultural Science
- Restriction: VITICULT 3004WT Viticultural Production A, VITICULT 3018WT Viticultural Production B, VITICULT 3017WT Viticultural Production B (Oenology), VITICULT 3022WT Viticultural Production A (Oenology)
- Assessment: exams, assignments

Principles behind the establishment of a viticultural enterprise comprising site selection, choice of planting material and the design and establishment of the vineyard. Trellising design, pruning principles, practices and mechanisation. The relationship between production aspects and the physiology of the vine including phenology and shoot development, effect of node position on fruitfulness, interaction with climate response to pruning, trellising and canopy management. Vineyard management practices including: pests and diseases of grapevines, their recognition and control; propagation; soil management comprising weed control by chemical and non-chemical methods; the response of grapevines to irrigation; principles of irrigation scheduling and strategic irrigation practices; harvesting and handling methods used for winegrapes; cultural practices employed to produce winegrapes of particular end-use specification.

### VITICULT 3043WT

#### Industry Experience (Viticulture) A

- 3 units semester 1 or 2
- 10 weeks students must return to campus for at least 1 week in Feb/Mar for compulsory tour if enrolled in VITICULT 3020WT Table and Drying Grape Production
- Assessment: logbook, research & other projects, employers report

This course provides an opportunity for students majoring in Viticulture to experience, observe and acquire an understanding of the major activities undertaken in a typical vineyard operation. Further, this course will enable students to gain a working understanding of a vineyard, its management systems and structures. Students undertake 10 weeks work experience in approved viticultural enterprises gaining experience in a range of operations, e.g. pest and disease management, irrigation system management, yield estimation, and harvest activities, the emphasis and expectation being on gaining hands-on experience. A detailed logbook of work activities, networking exercise, vineyard benchmarking and a significant research project provide a broad perspective of the viticultural industry.

### VITICULT 3044WT

### Viticultural Methods and Procedures

- 3 units semester 2
- Average 6 hours per week including lectures, tutorials, &/or practicals
- Eligibility: B.Sc.(Viticult.) students only
- Assumed Knowledge: VITICULT 2002WT Viticultural Science
- Restriction: VITICULT 3004 Viticultural Production A, VITICULT 3018 Viticultural Production B
- Assessment: assignments, practical reports, exam

The practices associated with the development and operation of a viticultural enterprise. This includes training in the monitoring of pests and diseases, soil and plant water and nutritional status; yield estimation; experimentation. Lecture topics include: biotechnology in viticulture, organic viticulture, advanced propagation techniques, use of growth regulators in viticulture, control of bird pests. Tutorial/practical sessions include: climatic assessment for vineyard site selection; principles and practices of vineyard operations including spray equipment calibration and spray application; pruning, training, trellis erection and repair, propagation, canopy management and other activities, vineyard monitoring - phonological stages, bud fruitfulness, physiological pruning, yield estimation, pests and diseases, soil and plant water status; computer-aided decision-making systems such as VineLogic and precision viticulture. This course includes visits to commercial vineyards and equipment suppliers.

## Honours

# VITICULT 4004WT

### Honours Viticultural Science (BAgSc)

- 12 units full year
- 15 hours per week + at least 30 hours per week during Feb. & other vacations
- Prerequisite: credit or higher in at least 2 level III courses approved by Head of Discipline
- Assessment: coursework, essays or other assignments not part of research project, research project, research proposal, seminar, thesis, vivo voce

Substantial research project of the students choosing on a topic acceptable to the Discipline of Wine and Horticulture, as well as coursework, essays or other assignments deemed appropriate to each student's Honours program.

Intending candidates should consult the Head of Discipline, Honours Coordinator and potential supervisors as early as possible, but no later than December 1 immediately preceding the start of the Honours program. Research topics will be decided in December/January and full-time work must begin no later than February 1.

### VITICULT 4005WT

#### **Honours Wine and Horticulture**

- 24 units full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by Head of Discipline
- Assessment: research thesis, & associated seminars - remainder as deemed appropriate to each student's program

The course comprises a substantial research project of student's choice on a topic acceptable to the Discipline of Wine & Horticulture, plus coursework, essays or other assignments deemed appropriate to each student's program.

Intending candidates should consult the Head of Discipline and potential supervisors during the final year of the degree and be prepared to begin studies at the beginning of February, or other vacations.

# VITICULT 4006WT

#### **Honours Viticulture**

- 24 units full year
- 40 hours a week
- Prerequisite: credit or higher in 2 relevant Level III courses as approved by Head of Discipline
- Assessment: thesis, seminars, remainder as deemed appropriate to the student's program

This course comprises a substantial research project of the student's choosing on a topic acceptable to the Discipline of Wine and Horticulture, two seminars on that topic, and coursework, essays or other assignments deemed appropriate tot he individual student's honours program.

# WINE MARKETING

### Level I

# WINEMKTG 1003EX

## Legal Issues in Wine Marketing

- 3 units semester 2
- External only
- Assessment: exam, assignments

This course provides a general introduction to the Australian legal system and institutions, and to Australian commercial law. Emphasis will be placed on those parts of the law that have particular relevance to marketing, such as contract, sale of goods, consumer protection, trace practices and intellectual property law. The legal principles discussed have general commercial applicability, but where possible will be illustrated by topical examples drawn from wine and food marketing.

# WINEMKTG 1008EX

### Introduction to Managerial & Financial Accounting

- 3 units semester 1 or 2
- External only
- Assessment: written exams (open book), assignments

This course provides an introduction to the principles of accounting appropriate to the wine industry. The course deals with those accounting principles from the perspective of a winery business manager. The course does not seek to teach the detailed techniques of accounting, but rather to equip students with sufficient knowledge and skills of accounting to be better managers in the wine industry. The first half of the course deals with financial accounting matters, with a special emphasis on equipping students to be able to analyse financial statements, and to understand the techniques of managing cash flows in wine businesses. In the second half of the course, management accounting techniques such as product costing, budgeting, cost-volume-profit analysis and project evaluation are covered. At the end of the course, students will be able to deal with financial statements, management reports, and be able to make more effective decisions where financial implications are involved.

# WINEMKTG 1013EX/WT

### Wine and Food Marketing Principles

- 3 units semester 1
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Assessment: to be advised

The aim of this course is to give students an understanding of the role of the marketing manager through an introduction to the basic concepts and practices in marketing with particular emphasis on wine and food products. The topics covered include the marketing environment and marketing strategy formulation. There will be particular examination of product, price, place and promotion strategies.

# WINEMKTG 1015EX

# Data Analysis for Wine and Food Business

- 3 units semester 1
- External only
- · Assessment: exams, assignments

This course introduces a body of principles and methods concerned with extracting useful information from data for business decision making in the face of uncertainty, with emphasis on applications in the wine and food business area. Topics covered include visual presentation of data; summarising data numerically by measures of central tendency and dispersion; reasoning with probabilities; representing uncertainty by random variables and probability distributions; drawing and using samples to make estimates; assessing connections between variables by correlation and simple regression; tracking economic changes with index numbers; forecasting with time series and trend analysis; and drawing conclusion for data with statistical hypothesis testing.

## WINEMKTG 1026EX

## **Microeconomic Principles**

- 3 units semester 1
- External
- Assessment: assignments, final exam

The course provides an introduction to the essential elements of microeconomics, with emphasis on demonstrating how the understanding of microeconomic principles can lead to better analysis of management and marketing of wine and food products, and government microeconomic policies. Broadly, the course covers how production and consumption decisions of individual economic units are made and coordinated. Specific topics include fundamentals of supply and demand analysis, production economics, analysis of short and longrun costs of production, market structure, pricing policies and methods, market failure, welfare and public policy issues and the markets for factors of production.

#### WINEMKTG 1063EX

# Macroeconomic Essentials for Wine & Food Business

- 3 units semester 2
- External only
- Assessment: assignments, final exam

This course develops understanding of the macroeconomic environment in which wine and food businesses operate; and the ability to analyse the implications of specific macroeconomic events (eg, change in the interest rate, tax cut, or increasing unemployment) to success and profitability, and marketing strategies of wine and food businesses. Emphasis is on applications and policies, not formal economic theory. Coverage include: measurements of national income, cost of living, and unemployment; productivity and economic growth; the monetary system; the causes and effects of inflation and unemployment; impacts of monetary and fiscal policies; factors influencing the international flows of goods and capital; and current debates over macroeconomic policies.

# Level II

# WINEMKTG 2002EX/WT

### Wine and Society

- 4 units semester 1
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Assumed Knowledge: WINEMKTG 1013WT/EX Wine and Food Making Principles
- Assessment: to be advised

The student will be exposed to studies that cover the history and future of the Australian wine industry, presented in the wider context of European and other New World wine industries. Topics covered include: the origins of grape and wine production, the religious and cultural symbolism of wine, the development of an international wine trade in the 20th century, the role of fashion in wine markets, and examination of wine and other forms of alcohol and health issues. Also covered are: alcohol and wine consumption habits and attitudes, education and awareness programs, communication of wine information, food and wine complementarity, labelling and product laws.

# WINEMKTG 2003EX/WT

### **International Wine Law**

- 4 units semester 1
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Assumed Knowledge: WINEMKTG 1003EX Legal Issues in Wine Marketing or COMMLAW 1004 Commercial Law 1(S)
- Assessment: to be advised

The course will cover import and export licensing, labelling and standards requirements, appellation and place names requirements and restrictions, contracts for international sale and financing of sale and for transport, conflict of laws, the role of the OIV and other international agencies, treaties and trade agreements, and tax laws as related to the international wine trade.

# WINEMKTG 2010EX/WT

### **Strategic Marketing Management**

- 4 units semester 2
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- Assessment: to be advised

The critical role of strategic marketing in meeting the challenges facing organisations in complex markets will be the primary focus of this course, and will seek to explore how formulating and implementing unique strategic marketing moves serve not only to ensure survival, but also to yield significant and sustainable competitive advantage. Drawing on current and emerging perspectives on strategic marketing, the material covered will be structured in terms of a basic strategic marketing model, which deals with company, competition, customer, environment, strengths and weaknesses, objectives and goals, strategy formulations and implementation.

In order to contextualise this material students will be encouraged to develop an understanding of the practical necessity for interdependency and synergy between an organisation's corporate, business, and functional levels of strategy.

# WINEMKTG 2011EX/WT

## **Applied Marketing Research**

- 4 units semester 2
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- Assumed Knowledge: ECON 1008 Business Data Analysis or WINEMKTG 1015EX Data Analysis for Food and Wine Business
- Assessment: to be advised

The aim of this course is to study quantitative and gualitative marketing research for pro-active and reactive marketing intelligence systems as it applies to food and agricultural marketers. Topics included are problem analysis, types of data collection systems, steps in research projects, controls of a research project, questionnaire design, statistical methodology for data reduction, sampling theory and the industry and operative organisations. Dealing with a market research organisation will be a significant aspect of the course which is not aimed at producing researchers but clients who understand the intricacies of the process - and the limitations. The focus will be the application of the theory for use in the new wine/food product evaluation, advertising measurement, corporate/product/range analysis, attitudinal research, as primary sources. Secondary sources such as trade, governmental or syndicated data will be explored and assessed.

# WINEMKTG 2014EX/WT

# International Marketing of Wine & Agricultural Products

- 4 units semester 2
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Assumed Knowledge: WINEMKTG 1013WT/EX Wine and Food Marketing Principles
- · Assessment: to be advised

This course aims to provide a comprehensive review of the theory and practice of international marketing in relation to wine and agricultural products. Topics include: environmental factors affecting global wine marketing, especially the socio-cultural implications of international trade and wine export, strategic planning and organising for international marketing, market research for wine and agricultural products, decisions on segmentation, wine product policy, pricing, channels of distribution, international wine advertising, and coordinating and controlling global wine marketing operations.

## WINEMKTG 2037WT

#### Applied Management Science

- 4 units semester 1
- Up to 4 hours per week (incl. lectures, tutorials, practicals)
- This course involves teaching sessions that may be attended by both UG and PG students
- Assumed Knowledge: WINEMKTG 1013WT/EX Wine and Food Marketing Principles, and ECON 1008 Business Data Analysis or WINEMKTG 1015EX Data Analysis for Wine & Food Business
- Assessment: theory, practical exam, case studies, other assignments

The aim of this course is to introduce a collection of management science techniques that helps business managers make better decisions and to foster a logical, consistent and systematic approach to problem formulation, problem solving and decision making. Emphasis is placed on model formulation and interpretation rather than algorithms. Topics to be covered include mathematical programming, network modelling, Monte Carlo simulation, decision analysis under risk, and time series forecasting.

# Level III

# WINEMKTG 3006EX/WT Global Wine Market

- 4 units semester 1
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Eligibility: B. Wine Marketing students only
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles

This capstone course provides students with insights into the nature, structure, functional mechanisms, and the complexities of the world's wine market. A typology of open, governmentregulated and emerging wine markets is used as a framework within which to present this. In the process, the focus is across-the-board on specific countries' wine markets: large, medium, and small including markets that are of strategic importance. In addition, it examines key drivers in the world wine market and their impact on wine export dynamics and characteristics. There is an emphasis throughout on wine consumer behavioural aspects and successful marketing strategies employed in the wine consuming markets. The key factor of wine industry competitiveness is examined throughout as it manifests itself through the export performance of specific wine-producing country.

# WINEMKTG 3014EX/WT

### **Food Marketing**

- 4 units semester 1
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- Assumed Knowledge: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- · Assessment: to be advised

This course examines key issues in the development and marketing of primary and processed food and beverages products. Emphasis is placed on such areas as supply chain management, managing product development, exporting Australian food and beverage products, market research, packaging and labelling, consumer food consumption trends, food marketing strategies, and value-adding in Australian food and beverage industries.

### WINEMKTG 3028EX/WT

#### Winery Business Management III

- 4 units semester 2
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Eligibility: B. Wine Marketing students only
- Prerequisite: ACCTING 1002 Accounting for Decision Makers or WINEMKTG 1008EX Introduction to Managerial and Financial Accounting, and WINEMKTG
- Assessment: assignments, winery business plan
   project

This capstone course integrates all of the interfacing elements between wine and business management as these relate to the 'real-world' side of the wine industry of today. In the process wine marketing (with a strong emphasis on brand

building to differentiate the winery business), winery cost and management accounting and financial management, strategic winery business management, and organisation development are all examined as these relate to actual wineries. Key focus areas are winery brand building and management, understanding costs of production, and financing growth strategies for a winery business. The key activity performed in this course is the analysis and application of decision-making to winery operations and their application to an actual (operating) winery. The primary course outcome is the development of a realistic and fullyintegrated business plan for this operating winery.

#### WINEMKTG 3034EX/WT

#### **Advertising and Promotion III**

- 4 units semester 1
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Assumed Knowledge: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- · Assessment: to be advised

This course will provide the student with an overview of the Integrated Marketing Communications process. Students will learn to manage the formal communications process in the context of wine and agricultural businesses. Attention will be paid to developing communication plans and understanding strategic applications of advertising, sales promotion and public relations tools. Students should expect to gain knowledge of communications theory as well as practical application through study of texts and real world cases.

### WINEMKTG 3040EX/WT

#### Wine Retail and Distribution Management

- 4 units semester 2
- External & Internal: up to 3 hours per week (incl. lectures, tutorials)
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- · Assessment: assignments, exam

This course focuses on the principles of establishing and managing a retail concern. It will expose the student to the theoretical and practical aspects of selling and retail practices. Some of the areas this course will cover include: distribution and information systems, selling and marketing technology and trends, retail and wholesale operations, negotiation skills. The course can involve some fieldwork and practical case studies.

# WINEMKTG 3047EX/WT

#### **Internet Marketing and E-Commerce**

- 4 units semester 1
- External & Internal: up to 4 hours per week (incl. lectures, tutorials)
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- Assessment: To be advised

The course examines issues concerning the process, development and impact of e-commerce, and the use of Internet marketing in wine and food business from a managerial viewpoint, and within the context of creating consumer value. Topics include the underlying technology of e-commerce, conceptual foundations of marketing in an electronic environment; e-commerce business models; consumer attitudes and behaviour on the Internet; Internet marketing research; e-commerce and supply chain management, and advertising and promotional strategies in e-commerce. Coverage also includes issues associated with developing strategy, planning, designing, implementing, out-sourcing, securing and managing e-commerce systems and technologies. Emphasis will be on establishing a framework to keep abreast of the technology in a relatively new but fast moving field.

# WINEMKTG 3049EX

#### Wine & Food Tourism & Festivals

- 4 units semester 2
- External only
- Assumed Knowledge: WINEMKTG 1013WT/ 1013EX Wine and Food Marketing Principles
- · Assessment: to be advised

This course explores the basics of tourism and the structure of the tourism industry as it relates to both wine and food. It addresses the basics concepts of wine tourism and hospitality, wine and food festivals in the broad context of tourism and hospitality, and wine tourism as a vehicle to build a brand image for the wine(ry) business and/or wine region. Specific focus areas include wine tourism visitor (consumer) behaviour, the role of the winery cellar-door in wine marketing/distribution, the functions of wine routes/roads, wine region brand

building, and wine and/or food festival event fundamentals and management.

### WINEMKTG 3065EX/WT

#### **Database Marketing for Food and Wine Business**

- 4 units semester 2
- External & Internal: up to 4 hours per week (incl. lectures, tutorials)
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- Assessment: assignments, final exam

This course presents the evolving field of database marketing, broadly defined as the use of customer databases and information technology to promote one-to-one relationships with customers and to create precisely targeted marketing strategies; and its uses in food and wine businesses, especially for small to medium sized firms. Coverage includes the theories and practices of customer database design, implementation and maintenance; customer relationship management, and acquisition, retention and win-back strategies; applying customer lifetime value techniques; customer segmentation; and database marketing communication. More complex database marketing concepts including geodemographic applications, automatic cluster detection, and market basket analysis will be introduced.

### Honours

# WINEMKTG 4007WT Honours Wine Marketing

- 24 units full year
- Prerequisite: B.Wine Marketing, at least credit average in appropriate Level III courses, or equivalents acceptable to program coordinator
- · Assessment: research project/thesis

Candidates are expected to acquire a more detailed knowledge in a selected area of wine marketing or wine business than is required for the degree.

Candidates are required to carry out research in the field, to present seminar/s, and to present the results of the research in a written thesis. The student and the Honours Coordinator may decide to substitute some coursework for part of the research, however, a single mark based on 24 units will be assessed.

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