


## The University of Adelaide

 Calendar 2006Handbook of Undergraduate Programs

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## 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:

1 Knowledge and understanding of the content and techniques of a chosen discipline at advanced levels that are internationally recognised.

2 The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner.

3 An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.

4 Skills of a high order in interpersonal understanding, teamwork and communication.

5 A proficiency in the appropriate use of contemporary technologies.
6 A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.

7 A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.

8 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 2005

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 691).

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## Centre for Aboriginal Studies

 in MusicAssociate Diploma in Aboriginal Studies in Music (New)
Ass.Dip.Ab.St.Mus.(New). .. 3

Undergraduate awards in the
Centre for Aboriginal Studies in Music

- Associate Diploma in Aboriginal Studies in Music
- Associate Diploma in Aboriginal Studies in Music (New)


## 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 the 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 experience of at least two years 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 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.
4.2 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.
4.3 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, Satisfactory and Non Graded Pass.

If the Pass classification be in two divisions, a pass in the higher division may be prescribed for admission to further studies in that course or to other courses.
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 Department, 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 for the course may not enrol for that course again or for any other course which, in the opinion of Head of Department, contains a substantial amount of the same material, except by special permission of Head of Department and then only under such conditions as Head of Department may prescribe.
4.6 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 substantially the full course of instruction in that course, shall be deemed to have failed the examination.

## 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 Head of Department 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 Head of Department,, a candidate who is eligible in any year to enrol in MUSIC 1009A/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 Head of Department, or nominee, for the proposed courses of study and are required to take part in the general practical work of the Centre for Aboriginal Studies in Music.
5.1.5 To qualify for the Associate Diploma candidates shall satisfactorily complete the requirements for the courses listed below:

## Level I

either
MUSIC 1009 A/B Practical Music Study I MS Pt 1 \& 2
MUSIC 1010 A/B Theory of Music I MS Pt 1 \& 2
MUSIC 1011 A/B Research Studies (CASM) I MS Pt 1 \& 2
MUSIC 1013 A/B Performance I MS Pt 1 \& 24
MUSIC 1021 A/B Style Studies I MS Pt 1 \& 2
or
MUSIC 1001 A/B Style Studies I CM Pt 1 \& 2
MUSIC 1002 A/B Practical Music Study I CM Pt 1 \& 24
MUSIC 1014 A/B Performance I CM Pt 1 \& 2
4
MUSIC 1016 A/B Research Studies (CASM) I CM Pt 1 \& 2

MUSIC 1020 A/B Theory of Music I CM Pt 1 \& 2
and
MUSIC 1007 A/B Studies in Community \& Culture I Pt 1 \& 2
MUSIC 1015 A/B General Studies (New) I Pt 1 \& 2
MUSIC 1018 A/B Practical Extension I Pt $1 \& 2$
MUSIC 1024 A/B Aural Development (New) I Pt 1 \& 2

## Level II

either
MUSIC 2002 A/B Style Studies II MS Pt 1 \& 2
MUSIC 2003 A/B Theory of Music II MS Pt 1 \& 2
MUSIC 2004 A/B Performance II MS Pt 1 \& 2
MUSIC 2019 A/B Research Studies (CASM) II MS Pt 1 \& 2

MUSIC 2020 A/B Practical Music Study II MS Pt 1 \& 2
or
MUSIC 2000A Theory of Music II CM Pt 1 \& 2
MUSIC 2001 A/B Style Studies II CM Pt 1 \& 2
MUSIC 2006 A/B Practical Music Study II CM Pt 1 \& 2

MUSIC 2009 A/B Performance II CM Pt 1 \& 2
MUSIC 2023 A/B Research Studies (CASM) II CM Pt 1 \& 2
and
MUSIC 2005 A/B Practical Extension II Pt 1 \& 2
MUSIC 2011 A/B Aural Development(New) II Pt 1 \& 2
andeither
MUSIC 2016 A/B Studies in Community \& Culture II Pt 1 \& 2
or
MUSIC 2017 A/B General Studies (New) II Pt 1 \& 2
5.1.6 A candidate who satisfactorily completes all of the requirements of Level 1 of the course, but does not wish to proceed to the Associate Diploma may be awarded, upon application, the Advanced Certificate in Aboriginal Studies in Music.
5.1.7 A candidate who holds the Certificate in Aboriginal Studies in Music or the Advanced Certificate in Aboriginal Studies in Music shall surrender the Certificate before being admitted to the Associate Diploma.
5.2 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 concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.3 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.

## 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:

MS denotes Music Studies Stream
CM denotes Community Musician Stream

# School of Architecture, Landscape Architecture \& Urban Design 

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## 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 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 Culture, History and
Designed Environments
LAW 1002 Law of Torts
LAW 1003 Law of Contract

## Level III

DESST 3027 Urban Design
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 normally 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. 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.
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 the Department concerned, again complete the required work in that course to the satisfaction of the teaching staff concerned.
4.5 A candidate may present for the degree courses at Level I, II or III with an aggregate units value not exceeding 6 units for which a conceded pass grade has been awarded, provided that such courses do not have a value of more than three units each.
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.

* Conceded Passes are not awarded in the core courses listed in 5.1


### 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

DESST 1028 Natural and Urban Systems 3
DESST 1029 Construction and Design:
Theories and Practice6
DESST 1030 History of Settlements ..... 3
Level I Electives to the value of 6 units ..... 6
Level II
DESST 2036 Technology in Design ..... 8
DESST 2037 Culture, History and Designed Environments ..... 8
Level II Electives to the value of 8 units ..... 8
Level III
DESST 3027 Urban Design ..... 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 Studieswith a Landscape Studies major a candidate shall pass thefollowing courses to the value of at least 72 units:
Level I
DESST 1027 Human Environments:Design and Representation6
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 Culture, History and Designed Environments ..... 8
Level II Electives to the value of 8 units ..... 8
Level III
DESST 3027 Urban Design ..... 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 Studies with an Architectural and Landscape Studies major a candidate shall pass the following courses to the value of at least 72 units:

## Level I

DESST 1027 Human Environments: ..... 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 ..... 8
DESST 2037 Culture, History and Designed Environments ..... 8
Level II Electives to the value of 8 units ..... 8
Level III
DESST 3027 Urban Design ..... 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.
Design Studies courses
Level I, II and III courses listed below (subject to availabilityeach year):
Level I
DESST 1001 Special Topic in Design Studies IB ..... 3
DESST 1007 Special Topic in Design Studies IA ..... 3
DESST 1009 Art History and Theories IA ..... 3
DESST 1013 An Introduction to
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DESST 1019 Art History and Theories IB ..... 3
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DESST 2003 Islamic Architecture and Gardens II ..... 4
DESST 2006 Special Topic in Design Studies IIB ..... 4
DESST 2038 Digital Media II ..... 4
DESST 2010 Conservation in the Built Environment II ..... 4
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DESST 2013 Special Topic in Design Studies IIE ..... 4
DESST 2014 Special Topic in Design Studies IIF ..... 4
DESST 2022 Special Topic in Design Studies IIA ..... 4

DESST 2027 Special Topic in Design Studies IID
DESST 2032 Art History and Theories IIB
DESST 2033 Art History and Theories IIA

## Level III

DESST 3000 Conservation in the Built Environment III

DESST 3012 Colonial and Contemporary Issues in South Asian Architecture III

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

C\&ENVENG 1000 Engineering Planning and Design

## C\&ENVENG 1001Statics

CHEMENG 1002 Engineering Computing I 2
MECHENG 1000 Dynamics
MECHENG 1001Design Graphics

## 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

## Level II

LAW 1002 Law of Torts
LAW 1003 Law of Contract

## Level III

LAW 1004 Law of Crime
LAW 1005 Property Law 4
Law elective

* 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:

$$
\begin{array}{ll}
1 & \text { First Class } \\
2 \mathrm{~A} & \text { Second Class div A } \\
2 \mathrm{~B} & \text { Second Class div B } \\
3 & \text { Third Class } \\
\text { NAH } & \text { Not awarded. }
\end{array}
$$

### 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 Culture, History and Designed Environments and will be granted appropriate exemption from components of the course already completed.


## Bachelor of Design Studies - Graduate Atributes

## 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.


## 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 normally be four classifications of pass in the final assessment of any course for the Bachelors degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification be 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 relevant Academic Program Rules will not be classified.
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
ARCH 4030 Urban Design Studio
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
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
ARCH 5032 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 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.
(ii) 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*

## 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

* 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

## 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 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.
(iii) A candidate may not enrol in Level II courses unless he or she has passed at least 18 units of core courses at Level I.
(iv) A candidate must complete all courses in Years 1 and 2 of their study plan before proceeding to courses in Year 3.
(v) A candidate who completes all course in Year 1 as well as Year 2 of Option A will be eligible for the award of the Degree of Bachelor of Architecture.
(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 normally 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. If the Pass classification be 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 relevant Academic Program Rules will not be classified.
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
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.
(ii) 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*6or
LARCH 4018 Landscape Architecture Elective Studio A* ..... 6
*Note: B.Arch./B.L.Arch. double-degree students must completeeither Architecture Elective Studio B and Landscape ArchitectureElective Studio A; or Landscape Architecture Elective Studio Band Architecture Elective Studio A.
Option B
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
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.
(iii) A candidate may not enrol in Level II courses unless he or she has passed at least 18 units of core courses at Level I.
(iv) A candidate must complete all courses in Years 1 and 2 of their study plan before proceeding to courses in Year 3.
(v) A candidate who completes all courses in Year 1 as well as Year 2 of Option A will be eligible for the award of the Degree of Bachelor of Architecture.
(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 in 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 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, etc.
- 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.
- 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.


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

Note: Postgraduate tuition fees apply to these programs.

## 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 full-time 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 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 Culture, History and Designed
Environments IV
DESST 6020 Urban Design IV 6
DESST 6022 Architecture Design Studio IV 6
4.1.4 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 6010 Special Topic (Landscape) IVB*
DESST 6011 Special Topic (Landscape) IVA*
DESST 6019 Culture, History and Designed Environments IV
DESST 6020 Urban Design IV 6
DESST 6021 Natural and Landscape Systems IV 6
DESST 6023 Landscape Architecture Design Studio IV 6
*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) <br> - 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

## Contents

## Bachelor of Business Information Technology

$\qquad$B.Bus.IT.31
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(Corporate Finance)
B.Com.(Corporate Finance)
Bachelor of Commerce
(International Business)B.Com. (International Business)
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B.Fin.
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## Undergraduate awards in the School of Commerce

- Degree of Bachelor of Business Information Technology
- 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)
- 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 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 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 four classifications of pass in each course for the degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification be 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.
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
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 conceded passes in Level II and Level III courses provided that the units value for any individual course for which a conceded pass is presented does not exceed 3 units, and the aggregate value does not exceed 6 units. Conceded passes are not awarded for Commerce courses.
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
(ii) 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 $4.8(\mathrm{~b})$.

### 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)
1 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. 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 Program Rules for that degree. Courses presented
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.
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.

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.
(1) 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

Students enrolled in the Bachelor of Commerce program or Bachelor of Computer Science program may choose instead to graduate with the Bachelor of Business Information Technology degree provided they satisfy all requirements.

## Bachelor of Business Information Technology - Graduate Attributes

Students are encouraged to take responsibility for developing the following 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.
- Confidence in their skills levels.
- Teamwork and leadership capabilities.
- Good work habits.


## Attitudes and values

- 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.


## 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.

3 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 four classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification be 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.
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 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 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.
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 conceded passes in Level II and Level III courses provided that the units value for any individual course for which a conceded pass is presented does not exceed 3 units, and the aggregate value does not exceed 6 units. Conceded passes are not awarded for those courses listed in 4.8.1 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:
(i) 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 Il 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
(ii) 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 ! @ 3
ACCTING 1005 Accounting Method I@ 3
COMMLAW 1004 Commercial Law I(S) @ 3

ECOMMRCE 1000 Information Systems I@

## Level II

ACCTING 2001 Management Accounting ||@ ${ }^{\text {@ }}$
ACCTING 2010 Financial Accounting II@ ${ }^{@}$
COMMGMT 2007 Organisational Behaviour II ${ }^{+} 4$
COMMGMT 2008 Management II ${ }^{+} 4$
COMMLAW 2000 Commercial Law II@ 4
CORPFIN 2005 Investment Analysis and Valuation 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 I** 4

## Level III

ACCTING 3006 Accounting Theory III@ 4
ACCTING 3011 Corporate Accounting III@ ${ }^{\text {@ }}$
ACCTING 3012 Auditing III@ 4
ACCTING 3018 Management Accounting for Business Advice III

COMMGMT 3001 International Management III ${ }^{+} 4$
COMMGMT 3007 Strategic Management III ${ }^{+} 4$
COMMGMT 3014 Human Resource Management III $+\quad 4$
COMMLAW 3010 Income Tax Law 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\#
CORPFIN 3019 Corporate Investment and Strategy III\# 4
ECOMMRCE 3016 Electronic Commerce III 4
MARKETNG 3000 Marketing Communications III* 4
MARKETNG 3015 International Marketing III*
MARKETNG 3017 Market Research and Project III*
@ Accounting course
\# 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 degrees in the School of Commerce.

### 4.8.3 Humanities and Social Sciences courses

 Courses listed in the Academic Program Rules of the degree of Bachelor of Arts, excluding PUREMTH 1002 Quantitative Methods Using Computers I. Note that theProgram Rules include courses in Psychology (listed in the Academic Program Rules of the Degree of Bachelor of Health Sciences).

### 4.8.4 Law courses

Courses, to a maximum of 27 units, listed in the Academic Program Rules of the degree of Bachelor of Laws (see note 2 of the notes (not forming part of the Academic Program Rules) below)

### 4.8.5 Finance courses

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

### 4.8.6 Wine Marketing courses

Courses listed in the Academic Program Rules of the degree of Bachelor of Wine Marketing, excluding:

WINEMKTG 1013WT Food and Wine Marketing WINEMKTG 2011WT Applied Marketing Research II WINEMKTG 2014WT International Marketing of Wine and Agricultural Products II
WINEMKTG 2033WT Consumer Behaviour Analysis WINEMKTG 2034WT Strategic Marketing Management II WINEMKTG 3034WT Advertising and Promotion III
4.8.7 A candidate may not present both ECON3034 Economic Theory III and 4367 Applied Economics III for the degree.
4.8.8 A candidate may not present COMMLAW1004 Commercial Law I(S) for the degree if passed after LAW 1003 Law of Contract.
4.8.9 A candidate may not present COMMLAW2000 Commercial Law II for the degree if passed after LAW 2004 Corporate Law.
4.8.10 The Honours 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:

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)
1 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.
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.
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.
(1) 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 - 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.


## Dental School

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## Undergraduate awards in the Dental School

- Diploma in Dental Therapy*
- Degree of Bachelor of Dental Surgery
- Degree of Bachelor of Oral Health
- Honours degree of Bachelor of Science in Dentistry
* no further intake of new students into this program.


## 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. The Head of department 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 Student Guide 2003)
(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 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, 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.
4.4 A candidate who fails a stream shall, unless exempted wholly or partially therefrom by the Head 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 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 Dental School; 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 Dental School.

### 5.4 Academic program

### 5.4.1 Curriculum

### 5.4.1.1DENT 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

### 5.4.1.2DENT 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

### 5.4.1.3DENT 3000H0 Third Annual BDSExamination

At the Third Annual Examination the candidate shall satisfy the examiners in each of the following streams:
DENT 3001 AHO/BHO 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

### 5.4.1.4DENT 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

### 5.4.1.5DENT 5000HO Fitth Annual (Final) BDSExamination

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

4 Effectively manage a dental team by

- Working effectively as a team-member of an integrated dental team and interprofessional teams
- Managing self, resources, and people within the constraints of the practice context
- Utilising information technology for communication, patient management and practice management

5 Engage in self-directed life-long learning by

- Using reflection and critical self-assessment to inform evidence-based practice
- Accessing the most current information and research, and critically evaluating it, individually and in collaboration
- Using up-to-date learning technologies
- Monitoring social and economic trends and considering their implications for practice
- Recognising the need for further education and undertaking appropriate courses as necessary.


## 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 Dental School.

### 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 Dental School 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 Dental School mandates. Except by permission of the Dental School 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 agregate 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 PCls.

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.

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.
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 shall, unless exempted wholly or partially therefrom by the Dean of the Dental School, 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 Dental school may prescribe, in other course(s) of an annual examination.
5.5 A candidate who has twice failed the examination in any course for the Degree may not enrol for that course again except by special permission of the Dental School and then only under such conditions as Dental School 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 1200 HO First Annual Oral Health Examination:

DENT 1201 AHO/BHO Dental and Health Science I OH Part 1 \& 2

DENT 1202 AHO/BHO Clinical Practice I OH Part 1 \& 29
DENT 1203 AHO/BHO Human Biology I OH Part 1 \& 26
DENT 1204AHO/BHO General Studies IOH Part 1 \& 2
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

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DENT 2202 AHO/BHO Clinical Practice II OH Part 1 \& 212
DENT 2203 AHO/BHO Human Biology II OHPart 1 \& 2
DENT 2204 AHO/BHO General Studies II OH Part 1 \& 23
The following are the courses of study for DENT 3200H0 Third Annual Oral Health Examination:

DENT 3201 AHO/BHO Dental and Health Science IIIOH Part 1 \& 2

DENT 3202 AHO/BHO Clinical Practice IIIOH Part 1 \& 212
DENT 3203 AHO/BHO Human Biology IIIOH Part 1 \& 2
DENT 3204 AHO/BHO Oral Health Electives IIIOH Part 1 \& 2
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 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.
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 Dental School; 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 Dental School.
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.

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 Dental School, 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:
(a) have passed the Third Annual BDS examination or completed an appropriate undergraduate degree or equivalent
(b) have completed the prerequisite work, or work accepted by the Dental School 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 PCls .
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 one of the following disciplines:
ANAT SC 4000 A/B Honours Anatomical Sciences
BIOCHEM 4000 A/B Honours Biochemistry
DENT 4100 AHO/BHO Honours Dentistry
GENETICS 4005 A/B Honours Genetics
PATHOL 4000 A/B Honours Pathology
PHARM 4000 A/B Honours Pharmacology
PHYSIOL 4005 A/B Honours Physiology

### 5.1.2 Assumed knowledge

All programs of study assume a pass in the Third Annual BDSExamination for the degree of Bachelor of Dental Surgery; or a Bachelor degree in another field of study that the Dental School deems equivalent.

Honours Genetics specifically assumes a pass in the course Genetics II as prescribed for the degree of Bachelor of Science.
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.

## School of Economics



Bachelor of Economics
$\qquad$
Bachelor of Economics
(International Agricultural Business)
B.Ec.(Int.Ag.Bus.).............................. 63

Bachelor of Finance
B.Fin.

Bachelor of Finance (International)
B.Fin.(Int.)

Bachelor of Finance (Quantitative)
B.Fin.(Quant.)................................ 67

## Undergraduate awards in the School of Economics

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


## 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.

## 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. 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 STATS1000 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
(i) 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
(ii) 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;
(ii) 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 $4.4(\mathrm{~b})$.
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 of Bachelor of Economics conceded passes in Level II and Level III courses provided that the unit value for any individual course for which a conceded pass is presented does not exceed 3 units, and the aggregate value does not exceed 6 units. Conceded passes are not awarded in those courses listed in 4.7.1 (a) of the Degree of Bachelor of Economics.

## 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, STATS1000 Statistical Practice

I instead of ECON1008 Business Data Analysis I; and both of the 2-unit courses STATS 2003 Statistical Practice II and STATS2002 Introduction to Mathematical Statistics II instead of ECON2006 Economic \& Financial Data Analysis II).
3 Studies in Law within the Degree of Bachelor of Economics.
(1) It is possible for students in Economics to elect to 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.
(2) Students will enrol concurrently for the degree of B.Ec. 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.
(3) See also the Academic Program Rules of the LL.B degree and Introductory Notes to the LL.B Syllabuses.
4 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:
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.
(1) 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 Economics, together with the following minimum requirements for the other degree:
i they must complete the compulsory courses for that degree
ii 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.

### 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

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

## Level II

ECON 2000 International Trade and Investment Policy II 4
ECON 2001 Resource and Environmental Economics II 4
ECON 2005 Mathematical Economics II 4
ECON 2006 Economic and 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

* not available in 2006


## (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 ECON2006 Economic and Financial Data Analysis II, ECON 2009 Consumers, Firms \& Markets II and ECON2011 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 ECON2006 Economic and Financial Data Analysis II, ECON 2009 Consumers, Firms \& Markets II and ECON2011 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 nonEconomics 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 ECON3034 Economic Theory III or its equivalents (such as the previously offered courses ECON3010 Microeconomics III and ECON3011 Macroeconomics III), ECON 3023 Econometrics III or ECON 3013 Applied 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. Students who have not passed ECON2005 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 - 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 economic and 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 economic and financial 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 or financial nature.
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and cooperatively with other professional economics or 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 economics and finance areas.
- To stimulate and maintain intellectual curiosity and a commitment to continuous learning.
- The ability to take a leadership role in the economics or 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 economists or 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.


## 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 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 Conceded Pass may not be used to satisfy prerequisite requirements. Courses passed at the Conceded Pass level to a maximum total of eight units may be presented for the Bachelor Degree. 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:

$$
\text { ACCTING1002 Accounting for Decision Makers I } 3
$$

COMMLAW 1004 Commercial Law I (S) 3
ECON 1000 Principles of Macroeconomics I
ECON 1004 Principles of Microeconomics I 3
ECON1008 Business Data Analysis I
WINEMKTG 1013WT Wine and Food Marketing Principles

Note: candidates who have not completed SACEStage 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
(i) 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 of Bachelor of Economics (International Agricultural Business) conceded passes in Level II and Level III courses provided that the units value for any individual course for which a conceded pass is presented does not exceed 3 units, and the aggregate value does not exceed 8 units. Conceded passes are not awarded in those courses listed in 4.6.1 (a) of the Degree of Bachelor of Economics (International Agricultural Business).

## 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

## 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

## Level II

ECON 2000 International Trade and Investment Policy II 4 ECON 2001 Resource \& Environmental Economics II 4
ECON 2005 Mathematical Economics II 4
ECON2006 Economic and 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 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

* Not available in 2006
(b) Sciences courses


## Level I

WINEMKTG 1013WT Wine and Food Marketing Principles

## Level II

AGRIBUS 2004WT Issues in Australian Agribusiness II 4
WINEMKTG 2010WT Strategic Marketing
Management II
WINEMKTG 2011WT Applied Marketing Research II
WINEMKTG 2014WT International Marketing of
Wine and Agricultural Products II
WINEMKTG 2037WT Applied Management Science II 4

## Level III

AGRIBUS 3041WT International Agri-business Environment III

WINEMKTG 3014WT Food Marketing III 4
WINEMKTG 3034WT Advertising and Promotion III
WINEMKTG 3040WT Wine Retail and Distribution Management III

WINEMKTG 3047WT Internet Marketing \& E-Commerce 4
WINEMKTG 3065WT Database Marketing for Food and Wine Business
(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 PUREMTH 1002 Quantitative Methods Using Computers I
(d) Commerce courses

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 (International Agricultural Business)

- Graduate Atributes


## 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 economic and 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 economic and financial 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 or financial nature.
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and cooperatively with other professional economics or 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 economics and finance areas.
- To stimulate and maintain intellectual curiosity and a commitment to continuous learning.
- The ability to take a leadership role in the economics or 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 economists or 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.


## 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 parttime 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 four classifications of pass in each course for the Bachelor degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification be 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. There shall also be a classification of 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 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 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 Board of Studies contains a substantial amount of the same material, except by permission of the Board of Studies and then only under such conditions as the Board of Studies 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 ECON1000 Principles of Macroeconomics I ECON1004 Principles of Microeconomics I

ECON1008 Business and Data Analysis I or STATS 1000 Statistical Practice I

ECON1009 International Financial Institutions and Markets I
MATHS 1009 Introduction to Financial Mathematics I and
MATHS 1010 Applications of Quantitative Methods in Finance I
or
MATHS 1011/1012 Mathematics I A/B
or
MATHS 1013/1014 Mathematics IM A/B
(b) at least 24 units at Level II, including:

CORPFIN 2006 Business Finance II
ECON2012 Financial Economics II
and either
ECON2006 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 or
(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 1013/1014 Mathematics IM A/B
STATS 1000 Statistical Practice I
STATS 2002 Introduction to Mathematical Statistics II
STATS 2003 Statistical Practice II
APP MTH 3011 Financial Modelling Techniques III
PURE MTH 3014 Mathematics of Finance III
PURE MTH 2004 Mathematics IIM or
APP MTH 2005 Financial Computing II
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 Board of Studies.
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 Board of Studies. However, this requirement may be waived in special circumstances approved by the Board of Studies.
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:
(i) 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
(ii) 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
(ii) 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 conceded passes in Level II and Level III courses provided that the units value for any individual course for which a conceded pass is presented does not exceed 3 units, and the aggregate value does not exceed 6 units. Conceded passes are not awarded for those courses in 4.9.1 (a) and 4.9.1(b) below.

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

1 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 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.
(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
MATHS 1009 Introduction to Financial Mathematics I 3
MATHS 1010 Applications of Quantitative Methods
in Finance I
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
ECON2006 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
CORPFIN 3009 Portfolio Theory and Management III CORPFIN 3013 Options, Futures and Risk Management III
CORPFIN 3019 Corporate Investment and Strategy III
ECON 3021 International Trade III
ECON 3023 Econometrics III
ECON 3032 International Finance III
ECON 3034 Economic Theory III
ECON 3035 Money, Banking and Financial Markets III
MATHS 3014 Mathematics of Finance III
STATS 3005 Time Series III
(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 Board of Studies.
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 Board of Studies, 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 Board of Studies, 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 nonFinance 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 Board of Studies, 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 nonFinance 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 ECON 4005 A/B Honours Finance.
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 Board of Studies 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 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 Board of Studies 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 Board of Studies, 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 - 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 economic and 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 economic and financial 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 or financial nature.
- Skills in interpersonal understanding, with the capacity to communicate effectively and to work both independently and cooperatively with other professional economics or 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 economics and finance areas.
- To stimulate and maintain intellectual curiosity and a commitment to continuous learning.
- The ability to take a leadership role in the economics or 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 economists or 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 Education



## Bachelor of Teaching

$\qquad$B. Teach.75

## Undergraduate awards in the School of Education

- 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 or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

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.

A student of the School of Education who gains entry to another undergraduate degree program in the University, where that degree is associated with secondary school curricula, will have the following status granted towards the Bachelor of Teaching:
16 units of the other degree program at level 2 ,
24 units of the other degree program at level 3 .
3.1.1 No student may be granted more than 12 units of status in 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.

### 4.2 Review of Academic Progress

[^0]4.2.2 A student who has twice failed a course may not enroll 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, without 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

To qualify for the degree of Bachelor of Teaching, students must successfully complete courses to the value of 73 units, which satisfy the following requirements:

### 5.1.1 Level।

EDUC1000 Primary School Interaction

### 5.1.2 Level II

EDUC 2000 Issues in Contemporary Education
plus 16 units of Level II courses in the other degree program.

### 5.1.3 Level III

EDUC 3000 Secondary School Interaction
plus 24 units of Level III courses in the other degree program.

### 5.1.4 Level IV Education courses

Students must successfully complete courses to the value of 24 units comprising the following:
Teaching Practice courses to the value of 6 units:
semester 1
EDUC 4300 Teaching Practice Part I
semester 2
EDUC 4301 Teaching Practice Part II

Curriculum and Methodology courses to the value of 6 units:
semester 1
EDUC 4302 Curriculum and Methodology A 3
EDUC 4306 Curriculum Issues
in Australian Schools A
semester 2
EDUC 4303 Curriculum and Methodology B 3
EDUC 4307 Curriculum Issues
in Australian Schools B
Education Studies courses to a total value of 12 units:
semester 1
EDUC 4304 Advanced Education Studies A
semester 2
EDUC 4305 Advanced Education Studies B
5.2 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, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
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

The professional and transferable skills of the degree are those set out in the National Guidelines (Appendix A). As the Report to the Minister states, the Guidelines 'identify a comprehensive array of qualities expected of new graduates of initial teacher education programs. These qualities are held to be fundamental for any beginning teacher in the country.' (Report, p.1) In particular, the skills to be acquired by a student in the proposed program include:

- A significant understanding of basic domains of knowledge - gained through the discipline-based undergraduate degree.
- A competence in constructing a pedagogical approach to teaching the classroom - gained through the courses in the B. Teach 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.

In particular, the Bachelor of Teaching, as part of a double-degree program, w ill contribute to the development of the following graduate 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.

The objectives and graduate attributes will form the basis for the ongoing evaluation of the new degree.

## Faculty of Engineering, Computer and Mathematical Sciences

Bachelor of Computer Science
B.Comp.Sc.

Bachelor of Computer Science
(Software Engineering)
B.Comp.Sc. (Software Eng.).......................... 81
Bachelor of Engineering B.E. .95

Bachelor of Mathematical and Computer Sciences
B.Ma.\& Comp.Sc........................................ 88

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

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

## Academic Program Rules

## 1 General

1.1 There shall be a degree of Bachelor of Mathematical and Computer Sciences and a degree of Bachelor of Computer Science in the Faculty of Engineering, Computer and Mathematical Sciences. A candidate may obtain either degree or both.
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.
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 programs
The program of study for the Bachelor degrees shall extend over three years of full-time study or the equivalent parttime 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. If the Pass classification be 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 or as assumed knowledge for such studies. 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 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.
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 Division I 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 including:
COMPSCI 2000 Computer Systems and COMPSCI 2004 Data Structures and Algorithms
(d) MATHS 3015 Communication Skills III or MATHS 3016 Communication Skills (ESL) III
(e) At least 18 units of Level III Computer Science courses.
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 SCI2005 Systems Programming C
and $\mathrm{C}++$
COMP SCI2006 Introduction
to Software Engineering
COMP SCI3006 Software Engineering \& Project
At least one of:
COMP SCI 3011 Compiler Construction \& Project
or
COMP SCI3013 Event Driven Computing
4.1.5 Subject to 4.1.12, a candidate may present for the degree courses passed at the conceded pass level within the following limits: Level II and/or Level III 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:
COMPSCI 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, including Level II and Level III courses to the value of at least 24 units, which have not been presented for any other degree. This must include Level III Computer Science courses to the value of at least 18 units 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.
4.1.12 To complete a major in Computer Science, a candidate shall satisfy the criteria specified below and present passes (not Conceded Passes) in the required courses.

## Computer Science

Level Il courses offered by the School of Computer Science to the value of 8 units. In addition, candidates must present Level III Computer Science courses to the value of at least 12 units, including COMPSCI 3006 Software Engineering and Project.

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

 of Computer ScienceNote: 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 2006. The availability of all courses is conditional upon the availability of staff and facilities.

### 4.2.1 Level I

### 4.2.1.1Mathematical and Computer Sciences courses APP MTH1000 Scientific Computing I

COMP SCI1003 Internet Computing
COMP SCI1008 Computer Science IA 3

COMP SCI1009 Computer Science IB 3
MATHS 1008 Mathematics for Information Technology I
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB
MATHS 1013 Mathematics IMA
STATS 1000 Statistical Practice I

### 4.2.1.2Humanities and Social Sciences courses

Level I courses listed in 6.12.1 for the degree of B.A. except COMP SC1004 Computer Literacy I, LBST 1010 Democratic Organising Technology I, MATHS 1002 Quantitative Methods Using Computers I, and courses listed which are taught by the Schools of Economics and Commerce.

### 4.2.1.3Economics 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*

LAW 1001 Introduction to Australian Law

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


### 4.2.1.5Engineering 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.

### 4.2.1.6Science courses

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

### 4.2.1.7Design 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

## Applied Mathematics

APP MTH 2000 Differential Equations and Fourier Series 2
APP MTH2002 Vector Analysis and Complex Analysis 2
APP MTH2003 Modelling with Differential Equations II 2
APP MTH2008 Operations Research II 2
Computer Science
COMP SCI2000 Computer Systems 3
COMP SCI2002 Database and Information Systems 3
COMP SCI2003 Numerical Methods 3
COMP SCI2004 Data Structures and Algorithms 3
COMP SCI 2005 Systems Programming in C and $\mathrm{C}++3$
COMP SCI2006 Introduction to Software Engineering 3
Mathematical Physics
PHYSICS2001 Classical Mechanics II 2
PHYSICS2002 Classical Fields
and Mathematical Methods II
Pure Mathematics
PURE MTH2OOO Discrete Mathematics II 2
PURE MTH2002 Algebra II 2
PURE MTH2O03 Real Analysis II 2
PURE MTH2005 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
4.2.2.2Humanities and Social Sciences courses

Level Il courses listed in 6.12.2 for the degree of B. A. except LBST 2010 Democratic Organising Technology II and LING2033 Language, Communication and Technology.

### 4.2.2.3Economics and Commerce courses

Courses listed in 4.7.1.(a) for the degree of B.E c. except the courses ECON 2006 Economic \& Financial Data Analysis II and ECON 2005 Mathematical Economics II. Level 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. except APP MTH2005 Financial Computing II.
4.2.2.4Law courses*

LAW 1002 Law of Torts
LAW 1003 Law of Contract

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


### 4.2.2.5 Engineering courses

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

### 4.2.2.6Science 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
4.2.3.1Mathematical and Computer Sciences courses

Applied and Pure Mathematics
MATHS 3014 Mathematics of Finance III

## 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
and Optimal Control III
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

APP MTH 3017 Waves 3
Computer Science
COMP SCI3001 Computer Networks and Applications ..... 3
COMP SCI3002 Programming Techniques ..... 3
COMP SCI3003 Knowledge Representation ..... 3
COMP SCI3004 Operating Systems ..... 3
COMP SCI3005 Computer Architecture ..... 3
COMP SCI3006 Software Engineering and Project ..... 3
COMP SCI3007 Artificial Intelligence ..... 3
COMP SCI 3008 Systems Analysis and Project ..... 3
COMP SCI3009 Advanced Programming Paradigms ..... 3
COMP SCI3010 Numerical Analysis ..... 3
COMP SCI 3011 Compiler Construction and Project ..... 3
COMP SCI3012 Distributed Systems ..... 3
COMP SCI3013 Event Driven Computing ..... 3
COMP SCI3014 Computer Graphics ..... 3
Mathematical Physics
PHYSICS 3004 Quantum Mechanics III ..... 3
PHYSICS 3006 Advanced Dynamics and Relativity ..... 3
PHYSICS3009 Statistical Mechanics ..... 2
PHYSICS3022 Applied Quantum Mechanics ..... 2
Pure Mathematics
PURE MTH3002 Topology and Analysis III ..... 3
PURE MTH3003 Number Theory III ..... 3
PURE MTH3005 Fractal Geometry III ..... 3
PURE MTH3007 Groups and Rings III ..... 3
PURE MTH3009 Integration and Analysis III ..... 3
PURE MTH3010 Logic III ..... 3
PURE MTH3012 Fields and Geometry III ..... 3
PURE MTH3018 Coding and Cryptology III ..... 3
PURE MTH3019 Complex Analysis III ..... 3
PURE MTH 3020 Methods of Modern Mathematics III ..... 3
Statistics
STATS 3000 Industrial Statistics III ..... 2
STATS3001 Statistical Modelling III ..... 3
STATS 3002 Environmental Statistics III ..... 3
STATS 3003 Sampling Theory and Practice III ..... 3
STATS 3004 Multivariate Analysis III ..... 3
STATS 3005 Time Series III ..... 3
STATS3006 Mathematical Statistics III ..... 3
STATS 3007 Non-parametric Methods III ..... 3
STATS3008 Biostatistics III ..... 3

STATS3010 Experimental Design III
STATS3011 Bioinformatics III

### 4.2.3.2 Miscellaneous (non-Mathematical and Computer Sciences) courses

MATHS 3015 Communication Skills III
MATHS 4003 Industry Practicum (Maths. \& Comp. Sc.) 2

### 4.2.3.3Humanities and Social Sciences courses

Level III courses listed in 6.12.3 for the degree of B.A. except LING3033 Language, Communication and 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 MTH3011 Financial Modelling Techniques III.

### 4.2.3.5Law courses*

Law 1004 Law of Crime
Law 1005 Property Law
Law elective

* 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

### 4.2.3.7Science 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 an 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.
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.

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 - Graduate Attributes 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

1.1 There shall be a degree of Bachelor of Mathematical and Computer Sciences and a degree of Bachelor of Computer Science in the Faculty of Engineering, Computer and Mathematical Sciences. A candidate may obtain either degree or both.
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.
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 programs
The program of study for the Bachelor degrees shall extend over three years of full-time study or the equivalent parttime 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. If the Pass classification be 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 or as assumed knowledge for such studies. 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 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.
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 1013 Mathematics IMA and
MATHS 1011 Mathematics IA and
MATHS 2004 Mathematics IIM
for the degree, obtaining a Pass Division I 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
APP MTH 2004 Numerical Methods
in Engineering (Chemical)
APP MTH 2009 Numerical Analysis and Probability and Statistics

APP MTH 2010 Differential Equations
and Statistical Methods (Civil)
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

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 Il 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 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 Mathematics and Computer Science 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 programs 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 Il courses offered by the School of Computer Science to the value of 8 units. In addition, candidates must present Level III Computer Science courses to the value of at least 12 units, including COMPSCI 3006 Software Engineering and Project.

## 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:

APPMTH 3001 Applied Probability III*
APPMTH 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

* 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 2006.

### 4.2.1 Level I courses

4.2.1.1 Mathematical \& Computer Sciences courses APPMTH 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

### 4.2.1.2Humanities 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.

### 4.2.1.3Economics and Commerce courses

Courses listed in 4.7.1 (a) for the degree of B.Ec. except the courses ECON 1008 Business Data Analysis I and ECON 1005 Mathematics for Economists 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

* Available only to students who have been accepted for candidature to the LL.B.
4.2.1.5Engineering courses* C\&ENVENG1000 Engineering Planning and Design

CHEM ENG1000 Process Systems 2
CHEM ENG1003 Materials I 2
CHEM ENG1005 Process Heat Transfer 2
ELEC ENG1006 Electrical Engineering I 3

ELEC ENG1007 Engineering Planning, Design
and Communication
ELEC ENG1008 Electrical Engineering IM
MECH ENG1000 Dynamics
MECH ENG1001 Design Graphics
MECH ENG 1005 Engineering Planning, Design and Communication M

* CHEMENG 1002 Engineering Computing I and C\&ENVENG 1003 Engineering Modelling and Analysis I cannot be presented towards this degree.
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.


### 4.2.1.6Science courses <br> Level I Science courses listed in 5.6.1 for the degree of B.Sc. in the Faculty of Sciences.

### 4.2.1.7Design Studies courses <br> Level I Design Studies courses listed in 5.1.1 for the degree of Bachelor of Design Studies

### 4.2.2 Level Il courses

### 4.2.2.1 Mathematical and Computer Sciences courses

Applied and Pure Mathematics
MATHS 2004 Mathematics IIM
Applied Mathematics
APPMTH 2000 Differential Equations and Fourier Series APPMTH 2002 Vector Analysis and Complex Analysis 2
APPMTH 2003 Modelling with Differential Equations II 2
APPMTH 2008 Operations Research II
Computer Science
COMP SCI2000 Computer Systems
3
COMP SCI2002 Database \& Information Systems 3
COMP SCI2003 Numerical Methods 3
COMP SCI2004 Data Structures and Algorithms 3
COMP SCI2005 Systems Programming C and $\mathrm{C}++3$
COMP SCI2006 Introduction to Software Engineering 3
Mathematical Physics
PHYSICS 2001 Classical Mechanics II
PHYSICS 2002 Classical Fields and Mathematical Methods II

## Pure Mathematics

PUREMTH 2000 Discrete Mathematics II
PUREMTH 2002 Algebra II
PUREMTH 2003 Real Analysis II 2
PUREMTH 2005 Multivariable Calculus II

Statistics
STATS2002 Introduction to Mathematical Statistics II
STATS 2003 Statistical Practice II 2
STATS2011 Statistical Modelling II 2

### 4.2.2.2 Humanities and Social Sciences courses

Level Il 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 Economics and Commerce courses

Courses listed in 4.7 .1 (a) for the degree of B.Ec. except the courses ECON 2005 Mathematical Economics II and ECON 2006 Economic \& Financial Data Analysis II. Level 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. except the course APP MTH2005 Financial Computing II.

### 4.2.2.4 Engineering Courses

Candidates who have been previously enrolled in the an Engineering degree at the University of Adelaide are directed to Academic Program Rule 4.1.4.

### 4.2.2.5 Law courses*

LAW 1002 Law of Torts
LAW 1003 Law of Contract

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


### 4.2.2.6 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

4.2.3.1Mathematical and Computer Sciences courses

Applied and Pure Mathematics
MATHS 3014 Mathematics of Finance III

## Applied Mathematics

APP MTH3000 Computational Mathematics III 3
APP MTH3001 Applied Probability III 3
APP MTH3002 Fluid Mechanics III 3
APP MTH3003 Life Contingencies III 3
APP MTH3004 Mathematical Biology III 3
APP MTH3005 Mathematical Programming III 3
APP MTH3006 Industrial Mathematics III 3
APP MTH 3010 Variational Methods \& Optimal Control III 3
APP MTH3012 Financial Modelling III 3
APP MTH3013 Differential Equations III 3
APP MTH3014 Optimisation III 3
APP MTH3016 Telecommunication Systems Modelling III 3
APP MTH 3017 Waves 3
Computer Science
COMP SCI3001 Computer Networks
and Applications ..... 3
COMP SCl3002 Programming Techniques ..... 3
COMP SCI3003 Knowledge Representation ..... 3
COMP SCI3004 Operating Systems ..... 3
COMP SCI3005 Computer Architecture ..... 3
COMP SCI3006 Software Engineering and Project ..... 3
COMP SCI3007 Artificial Intelligence ..... 3
COMP SCI3008 Systems Analysis and Project ..... 3
COMP SCI3009 Advanced Programming Paradigms ..... 3
COMP SCI3010 Numerical Analysis ..... 3
COMP SCI3011 Compiler Construction and Project ..... 3
COMP SCI3012 Distributed Systems ..... 3
COMP SCI3013 Event Driven Computing ..... 3
COMP SCI3014 Computer Graphics ..... 3
Mathematical Physics
PHYSICS3004 Quantum Mechanics III ..... 3
PHYSICS3006 Advanced Dynamics and Relativity ..... 3
PHYSICS3009 Statistical Mechanics ..... 2
PHYSICS3022 Applied Quantum Mechanics ..... 2
Pure Mathematics
PUREMTH 3002 Topology and Analysis III ..... 3
PUREMTH 3003 Number Theory III ..... 3
PUREMTH 3005 Fractal Geometry III ..... 3
PUREMTH 3007 Groups and Rings III ..... 3
PUREMTH 3009 Integration and Analysis III ..... 3
PUREMTH 3010 Logic III ..... 3
PUREMTH 3012 Fields and Geometry III ..... 3
PUREMTH 3018 Coding and Cryptology III PREMT 3018 Coding and Cryptology II ..... 3
PUREMTH 3019 Complex Analysis III ..... 3
PURE MTH 3020 Methods of Modern Mathematics III ..... 3
StatisticsSTATS 3000 Industrial Statistics III2
STATS3001 Statistical Modelling III ..... 3STATS3002 Eni
STATS3002 Environmental Statistics III ..... 3
STATS3003 Sampling Theory and Practice III ..... 3
STATS3005 Time Series III ..... 3
STATS 3006 Mathematical Statistics III ..... 3
STATS3007 Non-parametric Methods III ..... 3
STATS 3008 Biostatistics III

STATS 3010 Experimental Design III

### 4.2.3.2 Miscellaneous (non-Mathematical and Computer

 Sciences) coursesMATHS 3015 Communication Skills III
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.

### 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.

### 4.2.3.5Law courses*

LAW 1004 Law of Crime

Law elective

* 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 an 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 MTH4011 A/B Honours Applied Mathematics and Computer Science
APP MTH4015 A/B Honours Applied Mathematics (B.A. or B.Sc.)

APP MTH4016 A/B Honours Applied Mathematics and Genetics
APP MTH4017 A/B Honours Applied Mathematics and Statistics
APP MTH4018 A/B Honours Applied Mathematics and Environmental Biology

COMP SCI4999 A/B Honours Computer Science
Maths 4000 A/B Honours Mathematical Sciences PHYSICS 4001 A/B Honours Mathematical Physics
PURE MTH4001 A/B Honours Pure Mathematics and Statistics
PURE MTH4002 A/B Honours Mathematical Physics and Pure Mathematics
PURE MTH4003 A/B Honours Pure and Applied Mathematics (B.A. or B.Sc.)
PURE MTH4004 A/B Honours Computer Science and Pure Mathematics
PURE MTH4005 A/B Honours Pure Mathematics (B.A. or B.Sc.)

PURE MTH4998 A/B Honours Philosophy and Pure Mathematics
STATS4000 A/B Honours Statistics (B.A or B.Sc.)
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 Arts or Bachelor of Mathematical and Computer Sciences or Bachelor of Science 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 graduate who has obtained the Honours degree of Bachelor of Arts may not proceed to the Honours degree of Bachelor of Science in the same program.
4.3.1.6 A graduate who has obtained the degree of Bachelor of Arts and has fulfilled the requirements of 4.5.1 of the degree of Bachelor of Mathematical and Computer Sciences shall be awarded the Honours degree of Bachelor of Arts.
4.3.1.7 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.
4.3.1.8 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.


## 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 6.5.1-6.5.11 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 the Head of the Engineering School responsible for the program to which the student wishes to transfer and 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.

## 5 Assessment and examinations

(i) 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.
If the Pass list be published in two divisions, a Pass in the higher division may be prescribed as a prerequisite for admission to other courses. 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) courses at Levels II-IV with an aggregate units value not exceeding 6 units, with no more than 4 units at Level IV and
(b) courses at Level I with an aggregate units value not exceeding 4 units.
(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

(i) 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) Petroleum Engineering
(k) Software Engineering
(I) 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 Faculty.

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

## Notes

1. A Pass Division I 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 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.BIt 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.

### 6.4.2.1Direct 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.
(ii) 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 I
Science courses to the value of 18 units as follows:

CHEM 1100 Chemistry IA
and
CHEM 1200 Chemistry IB 3
PHYSICS 1100 Physics IA
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
(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 3
and
CHEM 1200 Chemistry IB
either
BIOLOGY 1101 Biology I:
Molecules, Genes and Cells A **
or
BIOLOGY 1102 Biology I:
Molecules, Genes and Cells B ** 3
andeither
BIOLOGY 1202 Biology I: Organisms 3
or
BIOLOGY 1201 Biology I: Human Perspectives
or
PHYSICS 1100 Physics IA
and
PHYSICS 1200 Physics IB
or
GEOLOGY 1100 Earth's Interior I
and
GEOLOGY 1103 Earth Systems
andeither

MATHS 1011 Mathematics IA
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
CHEM ENG 1003 Materials I 2
CHEM ENG 1005 Process Heat Transfer 2
(v) Civil and Environmental 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
CHEM 1200 Chemistry IB
either
BIOLOGY 1101 Biology I:
Molecules, Genes and Cells A **
or
BIOLOGY 1102 Biology I:
Molecules, Genes and Cells B **
and
BIOLOGY 1202 Biology I: Organisms
or
PHYSICS 1100 Physics IA
and
PHYSICS 1200 Physics IB
or
GEOLOGY 1100 Earth's Interior I
and
GEOLOGY 1103 Earth Systems
and either
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB
or
MATHS 1013 Mathematics IMA *
3
MATHS 1011 Mathematics IA*
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
(vi) 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
and
CHEM 1200 Chemistry IB 3
either
BIOLOGY 1101 Biology I:
Molecules, Genes and Cells A **
or
BIOLOGY 1102 Biology I:
Molecules, Genes and Cells B **
and
BIOLOGY 1202 Biology I: Organisms 3
or
PHYSICS 1100 Physics IA
3
and
PHYSICS 1200 Physics IB 3
or
GEOLOGY 1100 Earth's Interior I 3
and
GEOLOGY 1103 Earth Systems 3
andeither
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:
CধENVENG 1000 Engineering Planning and Design 2
CgENVENG 1001 Statics 2
C\&ENVENG 1002 Civil \& Environmental Engineering $1 \quad 2$
C\&ENVENG 1003 Engineering Modelling and Analysis I 2
(vii) Mechanical Engineering

The following shall be the courses of study at Level I
Science courses to the value of 18 units as follows
CHEM 1100 Chemistry IA 3
and
CHEM 1200 Chemistry IB 3
PHYSICS 1100 Physics IA 3
and
PHYSICS 1200 Physics IB 3

MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB

## or

MATHS 1013 Mathematics IMA *
MATHS 1011 Mathematics IA*
Engineering courses to the value of 8 units as follows:
C\&ENVENG 1001 Statics
CHEM ENG 1002 Engineering Computing I
CHEM ENG 1003 Materials I
MECH ENG 1000 Dynamics

* 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.
** 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) Engineering Component

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.
(ix) 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.
(x) 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 Il courses to the value of not less than 8 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 Rules for the degree of B.Sc. in the Faculty of Sciences.
(xi) 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.
(xii) 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.

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

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

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

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

### 6.4.3.1Direct 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. (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.(Telecomm.)/B.Ma. \& Comp.Sc.
(ii) 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 all of the following criteria:
(a) Level III courses to the value of at least 20 units
(b) 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*.
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.


### 6.4.3.2Later 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 Chemical Engineering, Civil and Environmental Engineering, Civil and Structural Engineering or Mechanical 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 the degrees 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 Il 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 part-time 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.
(ii) 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 part-time 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..
(ii) 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 II M 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 <br> 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)
(i) Students may enrol directly in a program of study leading, after five years of full-time study (or the part-time 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 $\| I M$ 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
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

MECH ENG 2002 Stress Analysis and Design

MECH ENG 2011 Mechatronics IM

MECH ENG 2018 Design Practice
MECH ENG 2019 Dynamics and Control। 3
MECH ENG 2020 Materials and Manufacturing 3
MECH ENG 2021 Thermo-Fluids I 3

## Level III

MECH ENG 3006 Engineering Communication ESL (M) * 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 and 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

[^1]
## Level IV

MECH ENG 4034 Aerospace Navigation and Guidance ..... 2
MECH ENG 4035 A/B Aerospace Honours Project 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
PHYSICS 3014 Atmospheric \& Environmental Physics III ..... 2
Elective courses to the value of at least 8 units ..... 8
ElectivesElectives to the value of 8 units to be selected from thefollowing list. With the approval of the Head of the Schoolof Mechanical Engineering, courses offered by other schoolswithin the University may be included in the selection ofelectives. Of the four electives chosen, three must bethose 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 4040 High-Speed Aerodynamics ..... 2
MECH ENG 4046 Computation Technique for Engineering Applications ..... 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 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
CHEM ENG 1002 Engineering Computing I
CHEM ENG 1003 Materials I
ELEC ENG 1008 Electrical Engineering IM
MECH ENG 1000 Dynamics
PHYSICS 1003 Physics IHE
either
MATHS 1011 Mathematics IA
and
MATHS 1012 Mathematics IB

## or

MATHS 1013 Mathematics IMA*
and
MATHS 1011 Mathematics IA*
Level I Arts course(s) to the value of 6 units

* 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.
Second Year (26 units)
APP MTH 2000 Differential Equations and Fourier Series
APP MTH 2002 Vector Analysis and Complex Analysis
APP MTH 2009 Numerical Analysis and Probability and Statistics
MECH ENG 1001 Design Graphics ..... 2
MECH ENG 2002 Stress Analysis and Design ..... 3
MECH ENG 2018 Design Practice4
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


## MECH ENG 3020 Heat Transfer

2MECH 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 II ..... 3
Level I 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 \# ..... 8or
MECH ENG 4051 A/B Aerospace Design Project Level IV ..... 8
PHYSICS 3014 Atmospheric \& Environmental Physics III ..... 2
Engineering Elective courses to the value of at least 8 units ..... 8
\# Students accepted into the Honours stream will take AerospaceHonours Project Level IV and other students will take AerospaceDesign Project Level IV.
2
B.Ec. programTo qualify for both the award of the degree of BE (Aerospace)and the degree of B.Ec, candidates are required to completesatisfactorily:
First Year (24 units)
CধENVENG 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
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
orMATHS 1013 Mathematics IMA*3

and

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.

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 MTH2000 Differential Equations and Fourier Series 2
APP MTH2002 Vector Analysis and Complex Analysis 2
APP MTH2009 Numerical Analysis and Probability
and Statistics
ECON 1000 Principles of Macroeconomics I 3
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 2021 Thermo-Fluids I 3
Third Year (27 units)
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
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 chosen from those listed in the Academic Program Rules of the degree of Bachelor of Economics

Note:B.Ec. students currently must take an 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)
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
MECH ENG 4035 A/B Aerospace Honours Project Level IV\# 8
or
MECH ENG 4051 A/B Aerospace Design Project Level IV 8
Elective courses to the value of at least 2 units
\# 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 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.

4 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 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 MATHS 2004 Mathematics IIM is in addition to the normal requirements of the B.E. plan.

Second Year (24 units)
APP MTH2000 Differential Equations and Fourier Series 2
APP MTH2002 Vector Analysis and Complex Analysis 2
APP MTH2009 Numerical Analysis and Probability
and Statistics
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
MECH ENG 3031 Thermo-Fluids II
PHYSICS 2010 Space Science and Astrophysics II
PHYSICS 2100 Physics IIA
PHYSICS 2200 Physics IIB
Fourth Year (24 units)
MECH ENG 2011 Mechatronics IM
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 20
Fifth Year (24 units)
MECH ENG 4034 Aerospace Navigation and Guidance 2
MECH ENG 4036 Aerospace Propulsion I 2
MECH ENG 4038 Engineering Management and Professional Practice
either
MECH ENG 4035 A/B Aerospace Honours Project Level IV\# 8 or
MECH ENG 4051 A/B Aerospace Design Project Level IV 8
PHYSICS 3014 Atmospheric and Environmental Physics III 2
Engineering Elective courses to the value of at least 8 units 8
\# Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.

### 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.

C\&ENVENG1001 Statics

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
PHYSICS 1003 Physics IHE 3

## Level II

APP MTH 2000 Differential Equations and Fourier Series
APP MTH 2002 Vector Analysis and Complex Analysis 2
APP MTH 2009 Numerical Analysis and Probability and Statistics
MECH ENG 2002 Stress 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 2020 Materials and Manufacturing ..... 3
MECH ENG 2021 Thermo-Fluids I ..... 3
Level III
MECH ENG 3006 Engineering Communication ESL (M) *MECH ENG 3017 Engineering and the Environment2
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 notEnglish; may be presented in lieu of an elective at Level IV
Level IV
ELEC ENG 4048 Automotive Electrical and Electronic Systems ..... 2
MECH ENG 4011 Advanced Automatic Control ..... 2
MECH ENG 4039 Finance for Engineers ..... 2
MECH ENG 4043 Automotive NVH and Aerodynamics ..... 2
MECH ENG 4044 Automotive Safety ..... 2
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
Elective courses to the value of at least 4 units ..... 4
Electives*
APPMTH 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
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 for Engineering Applications

* Not all electives are offered each year. With the approval of the Head of the School of Mechanical Engineering, courses offered by other schools within the University may be included. Of the two electives chosen, at least one must be offered by the School of Mechanical Engineering.
** 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 Aerospace Design Project Level IV.


### 6.5.3 Chemical Engineering

Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels $\mathrm{I}, \mathrm{II}, \mathrm{III}$ and IV , in one of the programs listed under 6.5.3.1 to 6.5.3.4 below:

### 6.5.3.1 Chemical Engineering

Note: Combined/double degree students must undertake this program.

## Level I

C\&ENVENG1000 Engineering Planning and Design ..... 2
C\&ENVENG1001 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 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 present CHEM ENG 3004 Engineering communication ESL(H) 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 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
CHEM ENG 4024 Environmental Engineering ..... 2
Level IV
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 4026 Chemical Engineering Research Project (H) ${ }^{\#}$ ..... 2
orCHEM ENG 4027 Chemical Engineering ResearchProject (N) ${ }^{\text {\# }}$2
Chemical Engineering Electives * ..... 6
Electives*Electives to the value of 6 units to be selected from thefollowing list. (With the approval of the Head of the Schoolof Chemical Engineering, courses offered by other schoolswithin the University may be included in the selection ofelectives.)
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
CHEM ENG 4020 A/B Chemical Engineering Research Elective

CHEM ENG 4021 Combustion Processes 2
CHEM ENG 4024 Environmental Engineering

* not all courses are offered each year. - Information on course availability provided at time of enrolment.
** Approval is needed from the Head of the School of Chemical Engineering to enrol in this course.
\# 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 \& Fourier Series
APP MTH 2004 Numerical Methods
in Engineering (Chemical)
CHEM 2104 Chemistry IIAE 4
CHEM 2204 Chemistry IIBE 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 3002 Essay \& Seminar * 2
STATS 2004 Laplace Transforms and Probability and Statistical Methods

* Students whose native language is not English may present CHEM ENG 3004 Engineering Communication ESL (H) in lieu of Essay and Seminar

Level III (not available in 2006)
CHEM ENG 3001 Materials III(CH)
CHEM ENG 3003 A/B Chemical Engineering Projects III
CHEM ENG 3005 Separation Processes
2
CHEM ENG 3006 Transport Phenomena


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CHEM ENG1002 Engineering Computing I
CHEM ENG 1003 Materials I
CHEM ENG 1005 Process Heat Transfer
CHEM ENG 1200 Chemistry IB
ENV BIOL1002 Environmental Biology I
MATHS 1011 Mathematics IA
MATHS1012 Mathematics IB

## Level II

APP MTH 2000 Differential Equations \& Fourier Series
APP MTH 2004 Numerical Methods in Engineering (Chemical)

CHEM 2003 Environmental Chemistry II
CHEM ENG 2000 Chemical Engineering Thermodynamics
CHEM ENG 2001 Chemical Process Principles II 3
CHEM ENG 2003 Introductory Process Fluid Mechanics
CHEM ENG 2006 Plant and Process Engineering 2
CHEM ENG 2007 Environmental Essay \& Seminar * 2
CHEM ENG 3011 Transport Processes
in the Environment
GEOLOGY 2005 Geology for Engineers

* Students whose native language is not English may present CHEM ENG 3004 Engineering Communication ESL (H) in lieu of Environmental Essay and Seminar

Level III (not available in 2006)
C\&ENVENG 2035 Water Engineering II S2
CHEM ENG 3001 Materials III(CH)
CHEM ENG 3003 A/B Chemical Engineering Projects III
CHEM ENG 3005 Separation Processes
CHEM ENG 3006 Transport Phenomena
CHEM ENG 3014 Process Design and Plant Engineering
CHEM ENG 3015 Process Control and Instrumentation
CHEM ENG 3017 Kinetics and Reactor Design
CHEM ENG 3018 Fluid and Particle Mechanics
CHEM ENG 4024 Environmental Engineering
Level IV (not available in 2006)
CHEM ENG 4028 Advanced Environmental Design and Cleaner Production

CHEM ENG 4010 Advanced Separation Techniques and Thermal Processes
CHEM ENG 4025 \# Chemical Engineering Projects IV
CHEM ENG 4021 Combustion Processes
CHEM ENG 4003 Process Dynamics and Control
CHEM ENG 4026 Chemical Engineering Research Project (H) \#
or

$$
\begin{aligned}
& \text { CHEM ENG } 4027 \text { Chemical Engineering } \\
& \text { Research Project }(\mathrm{N})^{\#}
\end{aligned}
$$

CHEM ENG 4018 Industrial Economics \& Management ..... 2
CHEM ENG 4029 Process Design Project
(Environmental) ..... 6
Chemical Engineering Electives* ..... 6
\# Students accepted into the honours stream will take ChemicalEngineering Research Project ( H ) and other students will takeChemical Engineering Research Project ( N ).
Electives*
Electives to the value of 6 units to be selected from thefollowing list. (With the approval of the Head of the Schoolof Chemical Engineering, courses offered by other Schoolswithin the Schools of Engineering may be included in theselection of electives.)
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 ChemicalEngineering 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
** 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 CHEM ENG 3004 Engineering Communication ESL (H) in lieu of Essay and Seminar FWB

Level III (not available in 2006)
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 3
FOODT\&M 1000RG Introduction to Food Technology 3
FOODT\&M 3003RG Food Preservation \& Packaging 3
Level IV (not available in 2006)
CHEM ENG 4010 Advanced Separation Techniques and Thermal Processes

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
Research Project (H) ${ }^{\text {\# }}$
or
CHEM ENG 4027 Chemical Engineering Research Project (N) \#
CHEM ENG 4031 Process Design Project (FWB) 6
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 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
FOODT\&M 2002WT Nutrition II ..... 4
FOODT\&M 3011RG Food Chemistry ..... 3
FOODT\&M 3014RG Food Quality \& Regulation ..... 3
** Approval is needed from the Head of the School of ChemicalEngineering to enrol in this course.
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 ** ..... 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.
** Students should undertake either Contract Law II or Advanced Torts (seek advice from the Law School).


## 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
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
LAW 1001 Introduction to Australian Law 4
MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB 3
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 2000 Differential Equations and Fourier Series 2
APP MTH 2004 Numerical Methods in Engineering (Chemical) 2
CHEM ENG 2000 Chemical Engineering Thermodynamic s 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
LAW 1002 Law of Torts 4
LAW 1003 Law of Contract 4
STATS 2004 Laplace Transforms and Probability
and Statistical Methods
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
LAW 2117 Contract Law II 4
LAW 1007 Advanced Torts 4
Fourth Year (22 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

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
LAW 1004 Law of Crime 4
\# Students accepted into the Honours stream will take Chemical Engineering Research Project ( H ) and other students will take Chemical Engineering Research Project ( N ).

* Students should consult the Law School at enrolment for advice on electives offered.

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

## Later Years <br> In accordance with LL.B. Academic Program Rules. <br> 2 Direct entry B.E.(Chem.)/B.Sc. (see also Academic Program Rule 6.4.2)

To qualify for both the award of the degree of B.E.(Chem.) and the award of the degree of B.Sc., candidates are required to complete satisfactorily the courses listed below:
First Year (24 units)
CHEM 1100 Chemistry IA
and
CHEM 1200 Chemistry IB
either
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A **
or
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B **
and either
BIOLOGY 1202 Biology I: Organisms
or
BIOLOGY 1201 Biology I: Human Perspectives
or
PHYSICS 1100 Physics IA
and
PHYSICS 1200 Physics IB
or
GEOLOGY 1100 Earth's Interior I
and
GEOLOGY 1103 Earth systems
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 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.

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
or
another Level II Science course to the value of 4 units
CHEM 2200 Chemistry IIB
or
another Level II Science course to the value of 4 units
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
CHEM ENG 3002 Essay and Seminar
STATS 2004 Laplace Transforms and Probability and Statistical Methods
** Students enrolled in Chemistry IIA/B need not enrol in Chemical Engineering Thermodynamics, but are strongly advised to attend lectures.
Third Year (24 units)
CHEM ENG 3001 Materials III (CH)
CHEM ENG 3003 A/B Chemical Engineering Projects III
CHEM ENG 3005 Separation Processes
CHEM ENG 3006 Transport Phenomena
CHEM ENG 3010 Introduction to Biochemical Engineering
CHEM ENG 3014 Process Design and Plant Engineering
CHEM ENG 3015 Process Control and Instrumentation
CHEM ENG 3017 Kinetics and Reactor Design 3
CHEM ENG 3018 Fluid and Particle Mechanics 3
CHEM ENG 4024 Environmental Engineering 2
Fourth Year (24 units)
Level III Science courses to the value of 24 units.
Fifth 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
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)*
Engineering Elective courses to the value of 6 . units from list above

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

3 Direct Entry B.E.(Chem.)/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.(Chem)
To qualify for the award of the degrees of B.E.(Chem) and B.A., candidates are required to complete satisfactorily:
(i) All the courses for the Chemical Engineering program with the exception of the following courses amounting to eight units:

Essay and Seminar 2

Three Electives at Level IV 6
(ii) The Arts requirements set out in Section 6.4.4 of these Academic Program Rules.

Thus the B.E. (Chem)/B.A. may be completed in five years of fulltime study without any overload.
$5 \quad$ Program of study for the direct entry B.E.(Chem.)/B.Ec. program
To qualify for both the award of the degree of B.E.(Chem.) and the degree of B.Ec., candidates are required to complete 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
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 II M 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 STATS 2004 Laplace Transforms and Probability and Statistical Methods at Level II.
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 Proc | 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 En | 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 chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics |  |
| Note: B.Ec. students currently must take an Economic History course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree. |  |
| Fitth 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 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 |
| or |  |
| CHEM ENG 4026 Chemical Engineering Research Project (H)\# 2 |  |
| Plus at least 6 units of Level IV Chemical Engineering electives (listed above) |  |
| \# 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) and the degree of B.Fin., candidates are required to complete satisfactorily courses as indicated below:

## First Year (24 units)

C\&ENVENG 1000 Engineering Planning and Design ..... 2
CgENVENG 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 $\mathrm{A} / \mathrm{B}$. 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 ECON1008 Business Data Analysis I or STATS 1000 Statistical Practice I( 3 units) will be considered satisfied by students taking CHEM ENG1002 Engineering Computing I at Level I and STATS 2004 LaplaceTransforms and Probability and Statistical Methods at Level II.
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 Thermodynamic s ..... 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

CHEM ENG 4018 Industrial Economics and Management
CHEM ENG 4025 Chemical Engineering Projects IV 2
CHEM ENG 4026 Chemical Engineering Research Projects (H) ${ }^{\#}$ or
CHEM ENG 4027 Chemical Engineering Research Projects (N) \# 2
CORPFIN 2006 Business Finance II
ECON 2006 Economic and Financial Data Analysis II 4
ECON 2012 Financial Economics II 4
\# Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project ( N ).

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 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 and either APP MTH 3011 Financial Modelling Techniques III or CORPFIN 3013 Options, Futures and Risk Management III.

## 7 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.(Chem.) and the degree of B.Sc. (Biotech.), candidates are required to 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 ** 3
and
BIOLOGY 1201 Biology I: Human Perspectives 3
BIOTECH 1000 Introduction to Biotechnology 3
CHEM 1100 Chemistry IA
and
CHEM 1200 Chemistry IB 3
CHEM ENG 1000 Process Systems 2
CHEM ENG 1002 Engineering Computing I 2
either
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB 3
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 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
in Engineering (Chemical)
BIOCHEM 2100 Biochemistry IIA 4
BIOTECH 2005 Principles of Biotechnology II 4
CHEM ENG 1003 Materials I 2
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 4
CHEM ENG 3005 Separation Processes 2
CHEM ENG 3010 Introduction to Biochemical Engineering 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
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 Alll 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
and Thermal Processes
CHEM ENG 4014 Plant Design Project 6
CHEM ENG 4018 Industrial Economics and Management 2
CHEM ENG 4024 Environmental Engineering 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) \#

Level IV Chemical Engineering Elective courses to the value of at least 4 units
\# 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 <br> C\&ENVENG 1001 Statics

C\&ENVENG 1002 Civil \& Environmental Engineering I
C\&ENVENG 1003 Engineering Modelling and Analysis I
CHEM1100 Chemistry IA
CHEM ENG 1000 Process Systems
ENVBIOL1002 Environmental Biology 1
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB
MECH ENG 1000 Dynamics

## Level II

APP MTH 2010 Differential Equations
and Statistical Methods (Civil)
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 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
CGENVENG 2036 Strength of Materials IIE 2
ENVBIOL 2005 Ecology E 3
GEOLOGY 2005 Geology for Engineers 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

CধENVENG 3008 Engineering Modelling \& Analysis III2
C\&ENVENG 3009 Environmental Engineering and Design III ..... 3
CGENVENG 3011 Engineering Management and Planning ..... 2
CধENVENG 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 III3
and courses to the value of at least 3 units from the following:
C\&ENVENG 3066 EngineeringCommunication and Language (ECL) ..... 2
GEOLOGY 3010 Remote Sensing (S) ..... 3
SOIL\&WAT 3007WT GIS for Environmental Management ..... 3
Level II or III courses offered by the School of MathematicalSciences to the value of 4 units4

* 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 Research6
C\&ENVENG 4034 Civil Engineering Management IV ..... 3
ÇENVENG 4037 Introduction to Environmental Law ..... 3
Elective* courses to the value of 12 units ..... 12
The elective courses offered by the School in any one yearwill depend on student interest and staff availability, andwill be chosen from the following:
Electives *
Group II: Geotechnical Engineering
CgENVENG 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 Modelling, Managementand Design3
C\&ENVENG 4091 Waste Management Analysis \& Design 3C\&ENVENG 4092 Wastewater Engineering and Design3

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 and Environmental Engineering, replace one or more elective courses with appropriate courses offered by other schools within the University.

* Students may present a maximum of 6 units of elective Level II or III courses offered by the School of Mathematical Sciences.
\# Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project.


## 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** 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.
** Students should undertake either Contract Law II or Advanced Torts (seek advice from the Law School).


## 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
LAW 1001 Introduction to Australian Law 4
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

* 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)
C\&ENVENG 2006 Geotechnical Engineering II 2
C\&ENVENG 2014 Engineering Modelling \& Analysis II 2
CGENVENG 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
LAW 1002 Law of Torts 4
LAW 1003 Law of Contract 4
Third Year (24 units)
CGENVENG 3008 Engineering Modelling and Analysis III 2
CধENVENG 3009 Environmental Engineering and Design III 3
C\&ENVENG 3011 Engineering Management and Planning 2
CধENVENG 3012 Geotechnical Engineering Design III 3
CধENVENG 3013 Water Engineering and Design IIIA 2
CGENVENG 3014 Water Engineering and Design IIIB 2
CHEMENG 3011 Transport Processes and the Environment 2
LAW 2117 Contract Law II 4
LAW 1007 Advanced Torts * 4

* Students should consult the Law School at enrolment for advice on courses offered
Fourth Year (25 units)
C\&ENVENG 4005 A/B Civil \& Environmental Research
Project \#
6
ÇENVENG 4034 Civil Engineering Management IV 3
LAW 1004 Law of Crime 4
Plus 12 units of Engineering Elective courses (see 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.
Note: to complete the B.E.(Civil \& Environmental) 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.(Civil \& Environmental)/B.Sc.
(see also Academic Program Rule 6.4.2).
To qualify for the award of the degree of B.E.(Civil \& Environmental) and the degree of B.Sc., candidates are required to complete satisfactorily:
First Year (26 units)
C\&ENVENG 1000 Engineering Planning and Design 2
CGENVENG 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 IB3
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 l: Organisms ..... 3
orGEOLOGY 1100 Earth's Interior I 3
and
GEOLOGY 1103 Earth Systems ..... 3
orPHYSICS 1100 Physics IA3
andPHYSICS 1200 Physics IB3
either
MATHS 1011 Mathematics IA ..... 3
MATHS 1012 Mathematics IB ..... 3
or
MATHS 1013 Mathematics IMA * ..... 3
MATHS 1011 Mathematics IA* ..... 3\# Choice of courses may be restricted by timetabling. Studentsshould consult the Head of School or nominee at enrolment.* Students who have not taken SACE Stage 2 Specialist Mathswill be required to take MATHS 1013 Mathematics IMA andMATHS 1011 Mathematics IA in lieu of MATHS 1011/1012Mathematics I A/B. Such students must also take the Level IIcourse MATHS 2004 Mathematics IIM. The satisfactorycompletion of Mathematics II M is in addition to the normalrequirements of the B.E. plan.${ }^{* *}$ Students who have not taken SACE Stage 2 Biology will berequired to take Biology I :Molecules, Genes and Cells A in lieu ofBiology I:Molecules, Genes and Cells B.
Second Year (25 units)
APP MTH 2000 Differential Equations and Fourier Series2
APP MTH 2002 Vector Analysis \& Complex Analysis* ..... 2
C\&ENVENG 2006 Geotechnical Engineering II ..... 2
C\&ENVENG 2014 Engineering Modelling \& Analysis II ..... 2
ÇENVENG 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
ENVBIOL 1002 Environmental Biology I ..... 3
GEOLOGY 2005 Geology for Engineers ..... 2STATS 2004 Laplace Transforms and Probabilityand Statistical Methods2

## Third Year (25 units)

C\&ENVENG 3009 Environmental Engineering and Design III3
CধENVENG 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
ECON 3018 Environmental Economics E III ..... 2
Level II Science courses ..... 8
Fourth Year (24 units)
Level III Science courses24
Fifth Year (24 units)
C\&ENVENG 4005 A/B Civil \& Environmental Research Project \# ..... 6
C\&ENVENG 4034 Civil 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 required tocomplete two additional final year specialisation courses insteadof the Research Project.Direct Entry B.E.(Civil \& Environmental)/B.Ma.\& Comp.Sc.Refer to Academic Program Rule 6.4.3 for the requirements ofthis program.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 satisfactorilycourses listed below:
To satisfy the requirements of the Arts component, studentsmust undertake 32 units of Arts courses, including an approvedmajor 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
CধENVENG 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
ENVBIOL 1002 Environmental Biology I ..... 3
either
MATHS 1011 Mathematics IA ..... 3
MATHS 1012 Mathematics IB ..... 3

or
MATHS 1013 Mathematics IMA * ..... 3
MATHS 1011 Mathematics IA* ..... 3
MECH ENG1000 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 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 II
C\&ENVENG 2015 Construction and Surveying
CGENVENG 2026 Environmental Engineering II
C\&ENVENG 2032 Structural Design IIA
C\&ENVENG 2033 Water Engineering II S1
C\&ENVENG 2035 Water Engineering II S2
C\&ENVENG 2036 Strength of Materials IIE
ENVBIOL 2005 Ecology E
GEOLOGY 2005 Geology for Engineers
Third Year (16 units)
CGENVENG 3008 Engineering Modelling and Analysis III
C\&ENVENG 3009 Environmental Engineering and Design III
C\&ENVENG 3011 Engineering Management and Planning
C\&ENVENG 3012 Geotechnical Engineering Design III 3
ÇENVENG 3013 Water Engineering and Design IIIA
C\&ENVENG 3014 Water Engineering and Design IIIB
CHEMENG 3011 Transport Processes in the Environment
Fourth Year (24 units)
C\&ENVENG 4005 A/B Civil \& Environmental Research Project \#
C\&ENVENG 4034 Civil Engineering Management IV 3
CgENVENG 4037 Introduction to Environmental Law 3
Engineering Elective courses to the value of at least 12 units
\# Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project.

## 5 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.(Civil \& 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
ENVBIOL 1002 Environmental Biology I ..... 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 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 C\&ENVENG ENG 1003 Engineering Modelling $\&$ Analysis I at Level I and APPMTH 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
CgENVENG 2032 Structural Design IIA ..... 2
C\&ENVENG 2033 Water Engineering II S1 ..... 2
CধENVENG 2035 Water Engineering II S2 ..... 2
CGENVENG 2036 Strength of Materials IIIE ..... 2
ENVBIOL 2005 Ecology E ..... 3
GEOLOGY 2005 Geology for Engineers ..... 2
Third Year (25 units)
C\&ENVENG 3008 Engineering Modelling \& Analysis III ..... 2
CGENVENG 3009 Environmental Engineering and Design III ..... 2
CধENVENG 3012 Geotechnical Engineering Design III ..... 3
C\&ENVENG 3013 Water Engineering and Design IIIA ..... 2
ÇENVENG 3014 Water Engineering and Design IIIB ..... 2
CHEMENG 3011 Transport Processes 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:
GEOLOGY 3010 Remote Sensing (S)3
SOIL\&WAT 3007WT GIS for Environmental Management ..... 3
Level II or III courses offered by the School of Mathematical Sciences ..... 3


## Fourth Year (24 units)

COMMGMT 2007 Organisational Behaviour II 4
ECON 2006 Economic and Financial Data Analysis II
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

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 4005 A/B Civil \& Environmental Research Project \#
C\&ENVENG 4034 Civil Engineering Management IV
C\&ENVENG 4037 Introduction to Environmental Law
Plus at least 12 units of Level IV Engineering Elective courses listed above
\# Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project.
$6 \quad$ 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
ÇENVENG 1001 Statics
C\&ENVENG 1002 Civil \& Environmental Engineering I
C\&ENVENG 1003 Engineering Modelling and Analysis I
CHEM1100 Chemistry IA
ECON 1000 Principles of Macroeconomics I
ECON 1004 Principles of Microeconomics I
ENVBIOL 1002 Environmental Biology I
either
MATHS 1011 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.
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 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 I3
APP MTH 2010 Differential Equations
\& Statistical Methods (Civil) ..... 3
C\&ENVENG 2006 Geotechnical Engineering II ..... 2
C\&ENVENG 2014 Engineering Modelling \& Analysis II ..... 2
CGENVENG 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
ENVBIOL 2005 Ecology E ..... 3
ECON 1009 International Financial Institutions and Markets I ..... 3
Third Year (24 units)
C\&ENVENG 2032 Structural Design IIA2
ÇENVENG 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
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
CHEMENG 3011 Transport Process in the Environment ..... 2
and courses to the value of at least 3 units from the following:3
SOIL\&WAT 3007WT GIS for Environmental Management ..... 3
orLevel II or III courses offered by Mathematical Sciences
Plus at least 16 units of Level III Finance courses chosen fromthose listed in Academic Program Rule 4.9.1 of the degree ofBachelor 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 III4
Fifth Year (24 units)
C\&ENVENG 4005 A/B Civil \& Environmental Research Project \# ..... 6
C\&ENVENG 4034 Civil Engineering Management IV ..... 3
C\&ENVENG 4037 Introduction to Environmental Law ..... 3
Plus at least 12 units of Level IV Engineering Elective courseslisted above12
\# 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

CgENVENG 1000 Engineering Planning and Design 2
CGENVENG 1001 Statics 2
CGENVENG 1002 Civil and Environmental Engineering I 2
CqENVENG 1003 Engineering Modelling and Analysis I 2
CHEM ENG 1003 Materials I 2
MECHENG1000 Dynamics 2
MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB
and courses to the value of 6 units from the following:
CHEM1100 Chemistry IA
and
CHEM1200 Chemistry IB or
PHYSICS 1100 Physics IA
and
PHYSICS 1200 Physics IB

CHEM1100 Chemistry IA
ENVBIOL 1002Environmental Biology I 3
PHYSICS 1003 Physics IHE

## Level II

APP MTH 2010 Differential Equations
\& Statistical Methods (Civil)
CgENVENG 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
CgENVENG 2032 Structural Design IIA 2
C\&ENVENG 2033 Water Engineering II S1 2
CgENVENG 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 \& Structural)/ 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

CgENVENG 3001 Structural Mechanics IIIA
CgENVENG 3003 Environmental Engineering III 2
CgENVENG 3005 Structural Design III (Concrete) 3
CgENVENG 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
CgENVENG 3013 Water Engineering and Design IIIA 2
C\&ENVENG 3014 Water Engineering and Design IIIB 2
either
CgENVENG 3000 Engineering Communication ESL/EAL (C) 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

* Available only to students whose native language is not English;
may be presented in lieu of 2 units of elective courses at Level III


## Level IV

C\&ENVENG 4003 A/B Civil \& Structural Engineering
Research Project \#
6
C\&ENVENG 4034 Civil 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 4070 Structural Dynamics due to Wind
and Earthquake
CgENVENG 4071 Special Topics
in Structural Engineering
C\&ENVENG 4094 High Rise \& Long Span Steel Structures

C\&ENVENG 4096 FRP Retrofitting of Concrete
Structures

Group II: Geotechnical Engineering

C\&ENVENG 4081 Expansive Soils and Footing Design 3
Group III: Water Engineering
C\&ENVENG 4077 Coastal Engineering and Design
C\&ENVENG 4097 Analysis of Rivers and Sediment Transport

3
Group IV: Management Engineering
C\&ENVENG 4085 Traffic Engineering and Design

Group V: Environmental Engineering
C\&ENVENG 4037 Introduction to Environmental Law 3
C\&ENVENG 4087 Environmental Modelling, Management and Design
C\&ENVENG 4090 Special Topics in
Environmental Engineering IV N
C\&ENVENG 4091 Waste Management Analysis \& Design 3 C\&ENVENG 4092 Wastewater Engineering and Design3
\# 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 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.
** Students should undertake either Contract Law II or Advanced Torts (seek advice from the Law School).

## Notes:

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

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

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
PHYSICS1003 Physics IHE 3
LAW 1001 Introduction to Australian Law 4

## either

MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB 3
or
MATHS 1013 Mathematics IMA * 3
MATHS 1011 Mathematics IA* 3
MECHENG1000 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 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)
C\&ENVENG 2006 Geotechnical Engineering II 2
CধENVENG 2014 Engineering Modelling and Analysis II 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
CধENVENG 2035 Water Engineering II S2 2
LAW 1002 Law of Torts 4
LAW 1003 Law of Contract 4
Third Year (24 units)
C\&ENVENG 3001 Structural Mechanics IIIA 3
CধENVENG 3005 Structural Design III (Concrete) 3
CধENVENG 3007 Structural Design III (Steel) 3
C\&ENVENG 3012 Geotechnical Engineering Design III 3
C\&ENVENG 3013 Water Engineering and Design IIIA 2
CধENVENG 3014 Water Engineering and Design IIIB 2
LAW 1004 Law of Crime 4
LAW 2117 Contract Law II 4
Fourth Year (25 units)
C\&ENVENG 4003 A/B Civil \& Structural Engineering Research Project \#
ÇENVENG 4034 Civil Engineering Management IV 3
LAW 1005 Property Law 4
Plus 12 units of Engineering Elective courses(see above) 12

* Students should consult the Law School at enrolment for advice on electives offered.
\# Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Research Project.
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.


## 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.(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:
First Year (26 units)
CGENVENG 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
andeither\#
BIOLOGY 1101 Biology I: Molecules, Genes and Cells A ** 3
or
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B **
and
BIOLOGY 1202 Biology I: Organisms
or
GEOLOGY 1100 Earth's Interior I
and
GEOLOGY 1103 Earth Systems
or
PHYSICS 1100 Physics IA
and
PHYSICS 1200 Physics IB
\# choice of courses may be restricted by timetabling - students should consult the school at enrolment.

* 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.
** Students who have not taken SACE Stage 2 Biology will 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.

Second Year (25 units)
APP MTH 2000 Differential Equations and Fourier Series 2
APP MTH 2002 Vector Analysis and Complex Analysis 2
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
ÇENVENG 2035 Water Engineering II S2 2
STATS 2004 Laplace Transforms and Probability
and Statistical Methods
\#Students may avoid a 1 unit overload in semester 1 by taking
C\&ENVENG 2036 Strength of Materials IIE(2 units) instead of C\&ENVENG 2025 Strength of Materials IIA, but the latter is strongly preferred by the School.

Third Year (24 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 3012 Geotechnical Engineering Design III 3
C\&ENVENG 3013 Water Engineering and Design IIIA 2
CধENVENG 3014 Water Engineering and Design IIIB 2
Level II Science courses 8
Fourth Year (24 units)
Level III Science courses 24
Fifth Year (24 units)
C\&ENVENG 4003 A/B Civil \& Structural Engineering Research Project \# 6
C\&ENVENG 4034 Civil Engineering Management IV 3
Level IV elective courses to the value of at least 15 units (see above)
\# Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project.

3 Direct Entry B.E.(Civil \& Structural)/ 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 \& Structural))
(see also section 6.4.4 of these Rules)
To qualify for the award of the degrees of B.E.(Civil \& Structural) and B.A., candidates are required to complete 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 (20 units)

C\&ENVENG 1000 Engineering Planning and Design

C\&ENVENG 1001 Statics 2
C\&ENVENG 1002 Civil and Environmental Engineering I
C\&ENVENG 1003 Engineering Modelling and Analysis I
either
MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB 3
or
MATHS 1013 Mathematics IMA * 3
MATHS 1011 Mathematics IA* 3
Courses to the value of 6 units from the following:
CHEM 1100 Chemistry IA
and
CHEM 1200 Chemistry IB 3
or
PHYSICS1100 Physics IA 3
and
PHYSICS1200 Physics IB 3
or two of:
CHEM 1100 Chemistry IA 3
ENV BIOL 1002 Environmental Biology I 3
PHYSICS1003 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.
Second Year (24 units)
APP MTH 2010 Differential Equations
\& Statistical Methods (Civil)
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 and Planning ..... 2
C\&ENVENG 3012 Geotechnical Engineering Design III ..... 3
C\&ENVENG 3013 Water Engineering and Design IIIA ..... 2
ÇENVENG 3014 Water Engineering and Design IIIB ..... 2
Fourth Year (24 units)
C\&ENVENG 4003 A/B Civil \& Structural Engineering ResearchProject \#6
C\&ENVENG 4034 Civil 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 required tocomplete two additional final year elective courses instead of theResearch Project.
5 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 \& Structural) and the degree of B.Ec., 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
MECHENG1000 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 eitherCHEM 1100 Chemistry IA3
or
PHYSICS1003 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 C\&ENVENG 1003 Engineering Modelling \& Analysis I at Level I and APP MTH 2010 Differential Equations \& Statistical Methods (Civil).

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
PHYSICS1003 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)
ACCTING 1002 Accounting for Decision Makers I 3
APP MTH 2010 Differential Equations
\& Statistical Methods (Civil)
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
ÇENVENG 2034 Structural Design IIB 2
C\&ENVENG 2035 Water Engineering II S2 2
ECON 1009 International Financial Institutions
and Markets I
Third Year (23 units)
C\&ENVENG 2026 Environmental Engineering II 2
CgENVENG 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
C\&ENVENG 3012 Geotechnical Engineering Design III
C\&ENVENG 3013 Water Engineering and Design IIIA
C\&ENVENG 3014 Water Engineering and Design IIIB
Plus at least 16 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
and either
APP MTH 3011 Financial Modelling Techniques III

CORPFIN 3013 Options, Futures and Risk Management III
Fifth Year (24 units)
C\&ENVENG 4003 A/B Civil \& Structural Engineering Research
Project \#
C\&ENVENG 4034 Civil Engineering Management IV 3
Plus 15 units of Level IV Engineering Elective courses listed above
\# Students who are not selected for Honours will be required to complete two additional final year elective courses instead of the Research Project.
7 Program of study for the direct entry B.E.(Civil \& Structural)/ B.E.(Civil \& Environmental) program

To qualify for both the award of the degree of B.E.(Civil \& Structural) and B.E. (Civil \& Environmental), candidates are required to complete satisfactorily courses listed below
First Year (24 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 \& Analysis I 2
CHEM 1100 Chemistry IA 3
CHEMENG 1000 Process Systems 2
ENVBIOL 1002 Environmental Biology 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

* 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)

APP MTH 2010 Differential Equations
\& Statistical Methods (Civil)
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
C\&ENVENG 4034 Civil Engineering Management IV 3
ECON 3018 Environmental Economics Elll 3
ENVBIOL 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)
GEOLOGY 3010 Remote Sensing (S) 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 area of structural and/or geotechnical engineering while the Environmental Research Project must be in the area of water 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
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 and 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

## Level III

COMP SCI 3006 Software Engineering and Project 3
ELEC ENG 3012 Engineering Communication
ESL/EAL (E) *
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 $3019 \mathrm{~A} / \mathrm{B}$ Practical Electrical
\& Electronic Design III
ELEC ENG 3020 Embedded Computer Systems 3
ELEC ENG 3022 Real Time Systems IV 3
*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 Practice for Engineers ..... 2
STATS 4001 Reliability and Quality Control ..... 2
Elective courses to the value of 5 units selected from the following list ..... 5
Electives*
APP MTH 3016 Telecommunications Systems3
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 4004 Electrical Engineering Research ..... 2
ELEC ENG 4033 Advanced Telecommunications ..... 2
ELEC ENG 4034 Analog Microelectronics ..... 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 4047 Topics in Electrical \& Electronic Engineering ..... 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 1003 Law of Contract ..... 4
LAW 1004 Law of Crime ..... 4

LAW 1005 Property Law
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.
** Students should undertake either Contract Law II or Advanced Torts (seek advice from the Law School).


## 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
LAW 1001 Introduction to Australian Law 4
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 (27 units)
APP MTH 2000 Differential Equations and Fourier Series
APP MTH 2002 Vector Analysis and Complex Analysis 2
COMP SCI 2004 Data Structures and Algorithms 3
ELEC ENG 1007 Engineering Planning, Design
\& Communication
ELEC ENG 2007 Signals and Systems 3
LAW 1002 Law of Torts 4
LAW 1003 Law of Contract 4
LAW Elective 4
STATS 2004 Laplace Transforms and Probability
and Statistical Methods
Third Year (23 units)
COMP SCl 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
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)
COMPSCI3001 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
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.

## 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.
(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
COMP SCI 1009 Computer Science IB
ELEC ENG 1006 Electrical Engineering I
ELEC ENG 1007 Engineering Planning, Design
\& Communication

## either

MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB
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
Third Year (23 units)
Level II Arts courses
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.
5 Program of study for the direct entry
B.E.(Computer Systems)/B.Ec. program
To qualify for both the award of the degree of B.E. (ComputerSystems) and the degree of B.Ec., candidates are required tocomplete 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 1008/9 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 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 \& 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
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 ..... 3Plus at least 8 units of Level III Economics courses chosen fromthose listed in Academic Program Rule 4.7.1 of the degree ofBachelor of Economics8
Note: B.Ec. students currently must take an Economic History course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.
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.)
\# Students accepted into the Honours stream will take Honours Project and other student will take Design Project.
6 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. (Computer Systems) and the degree of B.Fin., 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.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 1008/9 Computer Science I A/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 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
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

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

Fifth Year (24 units)
COMP SCI 3001 Computer Networks and Applications
ELEC ENG 3022 Real Time Systems IV 3
ELEC ENG 4035 Communications IV 2
ELEC ENG 4036 A/B Design Project ${ }^{\text {\# }} 6$
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
and either
APP MTH 3011 Financial Modelling Techniques II
or
CORPFIN 3013 Options, Futures and Risk Management III
\# 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


### 6.5.7 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
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 Series2
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
Level III
ELEC ENG 3012 Engineering Communication ESL/EAL (E)* ..... 2
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
ELEC ENG 3021 Electric Energy Systems ..... 3
ELEC ENG 3024 Project Management for Electrical Engineering ..... 3* Available only to students whose native language is notEnglish. May be presented in lieu of an elective at Level IV.
Level IV
ELEC ENG 4036 A/B Design Project ${ }^{\text {\# }}$ ..... 6
or
ELEC ENG 4039 A/B Honours Project \# ..... 6
ELEC ENG 4037 Digital Microelectronics ..... 2
ELEC ENG 4038 Financial Management for Engineers ..... 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
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


## Notes:

## 1 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
LAW 1001 Introduction to Australian Law 4
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 Mathswill be required to take MATHS 1013 Mathematics IMA andMATHS 1011 Mathematics IA in lieu of MATHS 1011/1012Mathematics I A/B. Such students must also take the Level IIcourse MATHS 2004 Mathematics IIM. The satisfactorycompletion of Mathematics IIM is in addition to the normalrequirements of the B.E. plan.
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
LAW 1002 Law of Torts ..... 4
LAW 1003 Law of Contract ..... 4
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
LAW 1004 Law of Crime ..... 4
LAW 1005 Property Law ..... 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 \# ..... 6

or
ELEC ENG 4039 A/B Honours Project \# ..... 6
ELEC ENG 4042 Power Electronics \& Drive Systems ..... 2
ELEC ENG 4044 RFEngineering IV ..... 2

## either

ELECENG 4037 Digital Microelectronics
or
MECHENG 4046 Telecommunications
Law courses* to the value of 14 units
\# 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. (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 the degrees of B.E.(Electrical \& 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
COMP SCI 1009 Computer Science IB
ELEC ENG 1006 Electrical Engineering I
ELEC ENG 1007 Engineering Planning, Design
\& Communication
either
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB

## or

MATHS 1013 Mathematics IMA *
MATHS 1011 Mathematics IA*
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 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
APP MTH 2002 Vector Analysis and Complex Analysis
ELEC ENG 2007 Signals and Systems
ELEC ENG 2008 Electronics II
ELEC ENG 2010 A/B Practical Electronic Design II
PHYSICS 2100 Physics IIA
PHYSICS 2200 Physics IIB
STATS 2004 Laplace Transforms and Probability and Statistical Methods

## 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
PHYSICS elective ..... 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 Level III Physics courses listed under Academic Program Rule 5.6.5 and 5.6.6 of the degree of Bachelor of Science ..... 6
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
Engineering elective course to the value of 2 units listed above ..... 2
plus at least 9 units of Level III Physics courses listed underAcademic Program Rule 5.6.5 and 5.6.6 of the degreeof Bachelor of Science9
\# Students accepted into the Honours stream will take Honours Project and other students will take Design Project .

3 Direct Entry B.E.(Electrical \& Electronic) /B.Ma.\& Comp.Sc.
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.

To qualify for the combined award of the degrees 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
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

## 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
ELEC ENG 3019 A/B Practical Electrical and Electronic Design III
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
\# Students accepted into the Honours stream will take HonoursProject and other students will take Design Project.
$6 \quad$ Program of study for the direct entry B.E. (Electrical \& Electronic)/B.Ec. program
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

APP MTH 2002 Vector Analysis and Complex Analysis 2

COMP SCI 2004 Data Structures and Algorithms
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 Electrica and Electronic Design III ..... 3
ELEC ENG 3021 Electric Energy Systems ..... 3
ELEC ENG 3024 Project Management for Electrical Engineering3
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
Note: B.Ec. students currently must take an 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)
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
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 accepted into the Honours stream will take Honours Project and other students will take Design Project

## 7 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)
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 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

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

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
ELEC ENG 3021 Electric Energy Systems 3
ELEC ENG 3024 Project Management for Electrical Engineering
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

Fifth Year (22 units)
ELEC ENG 4036A/B Design Project \#
or
ELEC ENG 4039A/B Honours Project \# 6
ELEC ENG 4037 Digital Microelectronics 2
ELEC ENG 4046 Telecommunications IV 2
ELEC ENG 4042 Power Electronics \& Drive Systems 2
ELEC ENG 4044 RF Engineering 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 of Bachelor of Finance, including:
CORPFIN 3009 Portfolio Theory and Management III
and either
APP MTH 3011 Financial Modelling Techniques III
or
CORPFIN 3013 Options, Futures and Risk Management III
\# 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 $\mathrm{I}, \mathrm{II}, \mathrm{II}$ 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
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
MECH ENG 2002 Stress Analysis \& Design 3
MECH ENG 2011 Mechatronics IM 2
MECH ENG 2018 Design Practice 4
MECH ENG 2019 Dynamics \& Control 13
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
MECH ENG 3006 Engineering Communication ESL (M)* 2
MECH ENG 3016 Aeronautical Engineering I 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 \& 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 \#
or
MECH ENG 4041 A/B Mechanical Design Project

> Level IV \#

MECH ENG 4038 Engineering Management
\& Professional Practice

Electives to the value of at least 14 units selected from the list below

## 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)**

| 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 |
| 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 for Engineering Applications | 2 |
| \# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students will Mechanical Design Project Level IV |  |
| * Not all courses are offered each year. Information as to whi courses are to be offered in a given year will be available at time of enrolment. |  |
| ** not offered by School of Mechanical Engineering. |  |
| 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 studen undertake Law of Contract II and Advanced Torts as electives (new courses for 2006) |  |
| * available only to students who have been admitted to the program. Students may present these courses towards their Bachelor of Engineering in accordance with the scheme of study set out in note 1 below. |  |

and Signal Processing** 2

MECH ENG 4002 Combustion Technology
and Emission Control
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
\# 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 of enrolment.

Law courses*
LAW 1001 Introduction to Australian Law

Law electives - it is strongly recommended that students undertake Law of Contract II and Advanced Torts as electives (new courses for 2006)

* available only to students who have been admitted to the LL.B. program. Students may present these courses towards their 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
LAW 1001 Introduction to Australian Law 4
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 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 \& Fourier Series 2
APP MTH 2002 Vector Analysis \& Complex Analysis 2
APP MTH 2009 Numerical Analysis \& Probability \& Statistics 2
LAW 1002 Law of Torts 4
LAW 1003 Law of Contract 4
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
Third Year (24 units)
ELEC ENG 3023 Electric Energy Systems M 2
Law electives* 8
MECH ENG 2019 Dynamics \& Control 13
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

* 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 or

MECH ENG 4041 A/B Mechanical Design Project Level IV\# 8
Mechanical Engineering Electives* to the value of 2 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
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)
Science courses to the value of 18 units as follows
CHEM 1100 Chemistry IA
and
CHEM 1200 Chemistry IB
either
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB

## or

MATHS 1013 Mathematics IMA *
MATHS 1011 Mathematics IA*
PHYSICS 1100 Physics IA
and
PHYSICS 1200 Physics IB

Engineering courses to the value of 8 units as follows

C\&ENVENG 1001 Statics

CHEM ENG 1002 Engineering Computing I 2
CHEM ENG 1003 Materials I
MECH ENG 1000 Dynamics
Second Year (24 units)
APP MTH 2000 Differential Equations and Fourier Series
APP MTH 2002 Vector Analysis \& Complex Analysis

APP MTH 2009 Numerical Analysis \& Probability \& Statistics
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 1 ..... 3
MECH ENG 2020 Materials and Manufacturing ..... 3
MECH ENG 2021 Thermo-Fluids I ..... 3
Third Year (24 units)
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\# ..... 8
or
MECH ENG 4041 A/B Mechanical Design Project Level IV\# ..... 8
MECH ENG 4038 Engineering Management \& Professional Practice

Mechanical Engineering Electives* from the list above to the value of 8 units
\# 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 chosen, at least three must be from the School of Mechanical Engineering.

3 Direct Entry B.E.(Mech)/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.
4 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) and B.A., candidates are required to complete satisfactorily courses as indicated below:
First Year (25 units)
Level I Arts course(s) to the value of 6 units
C\&ENVENG 1001 Statics 2
CHEM ENG 1002 Engineering Computing 1

CHEM ENG 1003 Materials I
ELEC ENG 1008 Electrical Engineering IM

## either

MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB

## or

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 1011/1012
Mathematics $\mid A / B$. 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 Il 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
MECH ENG 2020 Materials \& Manufacturing 3
MECH ENG 3027 Design \& Communication 3
MECH ENG 3031 Thermo-Fluids 23
Fourth Year (24 units)
Arts course/s to the value of 6 units 6
APP MTH 3009 Engineering Mathematics III 2
ELEC ENG 3023 Electrical Energy Systems M 2
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 and Control 2
MECH ENG 3029 Manufacturing Engineering 2
MECH ENG 3030 Structural Design \& Solid Mechanics 3
Fifth Year (24 units)
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

Mechanical Engineering Elective* courses to the value of at least 14 units from the list above
\# 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.
$5 \quad$ 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.EC., 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
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 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
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 13
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
MECH ENG 3030 Structural Design \& Solid Mechanics 3
MECH ENG 3031 Thermo-Fluids 2
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 chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics

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 (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

Plus at least 6 units of Mechanical Engineering elective* courses from the list above (may not present MECH ENG 4039 Finance for Engineers)

* Of the four electives selected, not less than three must be from the School of Mechanical Engineering.
\# Students accepted into the Honours stream will take Mechanical Honours Project Level IV and other students will take Mechanical Design Project Level IV

6 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)
CgENVENG 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 ..... 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 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)
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 13
MECH ENG 2011 Mechatronics IM 2
MECH ENG 2018 Design Practice 4
MECH ENG 2019 Dynamics \& Control 13
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
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 of Bachelor of Finance including:

APP MTH 3011 Financial Modelling Techniques III
or
CORPFIN 3013 Options, Futures and Risk Management III
Fifth Year (24 units)
MECH ENG 3017 Engineering and the Environment
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 \#
MECH ENG 4038 Engineering Management for Professional Practice
plus Mechanical Engineering elective courses to the value of at least 6 units (may not present MECH ENG 4039 Finance for Engineers)*
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.


### 6.5.9 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

CgENVENG 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
PHYSICS 1003 Physics IHE 3

## Level II

APP MTH 2000 Differential Equations \& Fourier Series2

APP MTH 2002 Vector Analysis \& Complex Analysis 2
APP MTH 2009 Numerical Analysis \& Probability and Statistics
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
MECH ENG 3006 Engineering Communication ESL (M)* ..... 2
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 \& Control II ..... 3
MECH ENG 3029 Manufacturing Engineering ..... 2
MECH ENG 3032 Micro-Controller Programming ..... 3

* Available only to students whose native language is notEnglish; may be presented in lieu of an elective at Level IV
Level IVMECH ENG 4019 A/B Mechatronics Honours ProjectLevel IV \#8
or
MECH ENG 4050 A/B Mechatronics Design ProjectLevel 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 additional elective course offered by Mechanical Engineering


## 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 the School of Mechanical Engineering:
APP MTH 4007 Computational Fluid Dynamics (Engineering)** 2
APP MTH 4043 Transform Methods and Signal Processing**
MECH ENG 4003 Fracture Mechanics 2
MECH ENG 4004 Engineering Acoustics
MECH ENG 4020 Advanced VibrationsMECH ENG 4023 Advanced Topics in Fluid Mechanics
MECH ENG 4024 Materials Selection and Failure Analysis2
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* not all courses are offered each year.** courses not offered by School of Mechanical Engineering.\# Students accepted into the Honours stream will takeMechatronics Honours Project Level IV and other students willtake 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
or
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 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 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 fromthe list above6\# Students accepted into the Honours stream will takeMechatronics Honours Project Level IV and other students willtake Mechatronics Design Project Level IV
* Of the three elective courses chosen, at least two must be offered by the School of Mechanical Engineering.


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

First Year (24 units)
CGENVENG 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
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 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 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
APP MTH 2002 Vector Analysis \& Complex Analysis
APP MTH 2009 Numerical Analysis \& Probability \& Statistics
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 chosen from those listed in Academic Program Rule 4.7.1 of the degree of Bachelor of Economics
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 (25 units)
MECH ENG 3020 Heat Transfer 2
MECH ENG 3028 Dynamics \& Control 2
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
plus Engineering elective courses to the value of at least
2 units from the list above (may not present MECHENG 4039 Finance for Engineers
\# 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 Petroleum Engineering

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

## Level I

C\&ENVENG 1001 Statics
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

## Level II

APP MTH 2000 Differential Equations \& Fourier Series
APP MTH 2009 Numerical Analysis and Probability and Statistics

C\&ENVENG 2001 Stress Analysis (C) 2
ELEC ENG 1006 Electrical Engineering I
MECH ENG 2021 Thermo-fluids I 3
PETROENG 2001 Reservoir Thermodynamics and Fluid Properties
PETROENG 2005 Sedimentology and Stratigraphy 3
PETROENG 2008 Reservoir Engineering 3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties

## Level III

PETROENG 3001 Reservoir Simulation III
PETROENG 3002 Economic Evaluation III 3
PETROENG 3005 Reservoir Characterisation
and Modelling III
PETROENG 3007 Well Testing III and Pressure Transient Analysis III
PETROENG 3012 Engineering Communication ESL(P) *
PETROENG 3018 Drilling Engineering and Well Completion III
PETROENG 3019 Structural Geology and Seismic Methods
PETROENG 3020 Production Optimisation \& Project 3
PETROENG 3021 Petroleum Exploration \& Management

* Available only to students whose native language is not English - may be presented in lieu of 2 units, seek School advice.

Level IV - Reservoir*
PETROENG 4002 Enhanced Oil Recovery 3
PETROENG 4003 Development Geology IV 2
PETROENG 4004A/B Petroleum Engineering Honours
Project
or
PETROENG 4020A/B Petroleum Engineering Design Project
PETROENG 4009 Integrated Reservoir Management IV 3
PETROENG 4022 Integrated Field Development Planning and Economics Project IV
PETROENG 4024 Decision-Making under Uncertainty IV 2
PETROENG 4025 Gas Fields Optimisation IV
*Well \& Facilities options not offered in 2006

## Notes:

## 1 Program of study for the direct entry B.E.(Petroleum)/B.E.(Chemical)

To qualify for the combined award of the degrees 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
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 (25 units)
APP MTH 2000 Differential Equations and Fourier Series ..... 2
APP MTH 2004 Numerical Methods in Engineering (Chemical) ..... 2
CHEM ENG 1005 Process Heat Transfer ..... 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
PETROENG 2005 Sedimentology \& Stratigraphy ..... 3
PETROENG 2008 Reservoir Engineering ..... 3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties ..... 3
Third Year (25 units)
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
PETROENG 3002 Economic Evaluations III ..... 3
PETROENG 3005 Reservoir Characterisation \& Modelling III ..... 3
PETROENG 3018 Drilling Engineering and Well Completion ..... 3
PETROENG 3020 Production Optimisation and Project ..... 3

Fourth Year (24 units)
CHEM ENG 4003 Process Dynamics and Control
CHEM ENG 4009 Advanced Chemical Engineering 2
CHEM ENG 4010 Advanced Separation Techniques \& Thermal Processes
CHEM ENG 4014 Plant Design Project 6
CHEM ENG 4018 Industrial Economics and Management
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 *
\# Students accepted into the Honours stream will take Chemical Engineering Research Project $(\mathrm{H})$ and other students will take Chemical Engineering Research Project ( N ).

* See Chemical Engineering electives above

Fifth Year (24 units)
Reservoir Engineering
PETROENG 4002 Enhanced Oil Recovery
PETROENG 4003 Development Geology IV
PETROENG 4004A/B Petroleum Engineering Honours Project
or
PETROENG 4020A/B Petroleum Engineering Design
Project
PETROENG 4009 Integrated Reservoir Management IV 3
PETROENG 4022 Integrated Field Development Planning and Economic Project IV
PETROENG 4024 Decision-Making and Uncertainty IV 2
PETROENG 4025 Gas Fields Optimisation IV 3

## 2 Program of study for the direct entry B.E.(Petroleum)/B.E.(Civil \& Environmental)

To qualify for the combined award of the degrees 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
CgENVENG 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
ENVBIOL 1002 Environmental Biology I 3
MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB 3
or
MATHS 1013 Mathematics IMA * 3
MATHS 1011 Mathematics $I A^{*} 3$

PETROENG 1001 Introduction to Rock \& Fluid Properties

* 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)
APP MTH 2010 Differential Equations
\& Statistical Methods (Civil)
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
PETROENG 2005 Sedimentology and Stratigraphy 3
PETROENG 2008 Reservoir Engineering II 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
CgENVENG 3014 Water Engineering and Design IIIB 2
CHEMENG 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
PETROENG 3020 Production Optimisation and Project 3
Fourth Year (24 units)
C\&ENVENG 4037 Introduction to Environmental Law 3
C\&ENVENG 4005A/B Civil \& Environmental Research
Project \#
C\&ENVENG 4034 Civil Engineering Management IV 3
Electives to the value of 12 units from the following groups:
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
C\&ENVENG 4091 Waste Management Analysis \& Design
C\&ENVENG 4092 Wastewater Engineering and Design
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 and Environmental Engineering, replace one or more elective courses with appropriate courses offered by other schools within the University.
\# Students who are not selected for Honours will be required 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

PETROENG 4020A/B Petroleum Engineering Design Project
PETROENG 4009 Integrated Reservoir Management IV
PETROENG 4022 Integrated Field Development Planning and Economic Project IV
PETROENG 4024 Decision-Making and Uncertainty IV
PETROENG 4025 Gas Fields Optimisation IV

* Well and Facilities options not offered in 2006

3 Program of study for the direct entry B.E.(Petroleum)/B.E.(Civil \& Structural)

To qualify for the combined award of the degrees 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
C\&ENVENG 1001 Statics 2
C\&ENVENG 1002 Civil \& Environmental Engineering I 2
C\&ENVENG 1003 Engineering Modelling and Analysis I 2
CHEM ENG 1003 Materials I
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB
or
MATHS 1013 Mathematics IMA *
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

* 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)
C\&ENVENG 2006 Geotechnical Engineering II 2
C\&ENVENG 2025 Strength of Materials II A 2
C\&ENVENG 2032 Structural Design IIA 2
CধENVENG 2033 Water Engineering II S1 2
C\&ENVENG 2034 Structural Design IIB 2
CgENVENG 2035 Water Engineering II S2 2
PETROENG 2005 Sedimentology and Stratigraphy 3
PETROENG 2008 Reservoir Engineering II 3
PETROENG 2009 Formation Evaluation, Petrophysics
and Rock Properties
Third Year (26 units)
ÇENVENG 3001 Structural Mechanics IIIA 3
CধENVENG 3005 Structural Design III (Concrete) 3
ÇENVENG 3007 Structural Design III (Steel) 3
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
PETROENG 3019 Structural Geology \& Seismic Methods 3
PETROENG 3020 Production Optimisation and Project 3
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
ÇENVENG 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
CধENVENG 4077 Coastal Engineering and Design
C\&ENVENG 4097 Analysis of Rivers and Sediment Transport

Group IV: Management Engineering
C\&ENVENG 4085 Traffic Engineering and Design
Group V: Environmental Engineering
C\&ENVENG 4037 Introduction to Environmental Law
C\&ENVENG 4087 Environmental Modelling, Management and Design

C\&ENVENG 4091 Waste Management Analysis \& Design
C\&ENVENG 4092 Wastewater Engineering and Design
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 and Environmental Engineering, replace one or more elective courses with appropriate courses offered by other schools within the University.

[^2]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 or
PETROENG 4020A/B Petroleum Engineering Design Project
PETROENG 4009 Integrated Reservoir Management 3
PETROENG 4022 Integrated Field Development Planning and Economic Project IV
PETROENG 4024 Decision-Making and Uncertainty IV
PETROENG 4025 Gas Fields Optimisation IV

* Well and Facilities options not offered in 2006

Program of study for the direct entry B.E.(Petroleum)/B.Sc.(Geology \& Geophysics)

To qualify for the combined award of the degrees 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
CHEM ENG 1000 Process Systems 2
CHEM ENG 1002 Engineering Computing I 2
GEOLOGY 1100 Earth's Interior I 3
GEOLOGY 1103 Earth Systems 3
either
MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB
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 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 and Projects ..... 3
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
PETROENG 4020A/B Petroleum Engineering Design Project
PETROENG 4009 Integrated Reservoir Management IV
PETROENG 4022 Integrated Field Development Planning
and Economic Project IV
PETROENG 4024 Decision-Making and Uncertainty IV
PETROENG 4025 Gas Fields Optimisation IV
* Well and Facilities options not offered in 2006
$5 \quad$ Program of study for the direct entry B.E.(Petroleum)/B.E.(Mechanical)

To qualify for the combined award of the degrees 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
CHEM ENG 1002 Engineering Computing 12
CHEM ENG 1003 Materials I 2
ELEC ENG 1008 Electrical Engineering 1M 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
PETROENG 1001 Introduction to Rock and Fluid Properties
PETROENG 1003 Introduction to Petroleum Geosciences 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.

Second Year (26 units)
APP MTH 2000 Differential Equations and Fourier Series 2
APP MTH 2009 Numerical Analysis and Probability and Statistics

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 13
PETROENG 2005 Sedimentology and Stratigraphy 3
PETROENG 2008 Reservoir Engineering 3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties
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 and Well Completion III ..... 3
PETROENG 3019 Structural Geology and Seismic Methods ..... 3
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 \# ..... 8
or
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
or
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 2006
6 Program of study for the direct entryB.E.(Petroleum)/B.Sc.(Physics)
To qualify for the combined award of the degrees 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


## or

MATHS 1013 Mathematics IMA * 3
MATHS 1011 Mathematics IA* 3
PETROENG 1001 Introduction to Rock and Fluid Properties 2
PETROENG 1003 Introduction to Petroleum Geosciences
PHYSICS 1100 Physics IA
PHYSICS 1200 Physics IB

* Students who have not taken SACEStage 2 Specialist Maths will be required to take MATHS 1013/1014 Mathematics IM A/IMB 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 requirement of the B.E. plan.
Second Year (25 units)
APP MTH 2000 Differential Equations \& Fourier Series
APP MTH 2002 Vector Analysis and Complex Analysis
APP MTH 2009 Numerical Analysis and Probability and Statistics
ELEC ENG 1006 Electrical Engineering 13
PETROENG 2005 Sedimentology \& Stratigraphy 3
PETROENG 2008 Reservoir Engineering II 3
PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties
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
PETROENG 3018 Drilling Engineering III
and Well Completion III
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
PHYSICS 3002 Experimental Physics III 3
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
PETROENG 4003 Development Geology 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
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
6.5.11Software Engineering


## Level 1

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
MATHS 1011 Mathematics IA 3
MATHS 1012 Mathematics IB 3
Elective courses to the value of 6 units chosen from below:
BIOLOGY 1101 Molecules, Genes \& Cells A* 3
or
BIOLOGY 1102 Molecules, Genes \& Cells B* 3
and
BIOLOGY 1201 Human Perspectives 3
or
BIOLOGY 1202 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

Level 1 Engineering courses**

* 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 lieu of Biology I: Molecules, Genes and Cells B.
** except ChEM ENG 1002.


## Level II

APP MTH 2000 Differential Equations \& Fourier Series
COMP SCI 2000 Computer Systems
COMP SCI 2004 Data Structures and Algorithms
COMP SCI 2005 Systems Programming in
$C$ and $\mathrm{C}++$
COMP SCI 2006 Introduction to Software Engineering
ELEC ENG 3017 Digital Electronics
PURE MTH 2000 Discrete Mathematics II
STATS 2004 Laplace Transforms and Probability and Statistical Methods

One Level II elective to be chosen chosen from:
COMP SCI 2002 Database \& Information Systems
COMP SCI 2003 Numerical Methods
ELEC ENG 2007 Signals and Systems

## Level III *

COMP SCI 3001 Computer Networks and Applications
COMP SCI 3002 Programming Techniques 3
COMP SCI 3005 Computer Architecture 3
COMP SCI 3011 Compiler Construction \& Project 3
ELEC ENG 3020 Embedded Computer Systems 3
COMP SCI 3004 Operating Systems 3
Level III project course to be decided 6

## Level IV *

COMP SCI 3006 Software Engineering and Project 3
ELEC ENG 4038 Financial Management for Engineers
ELEC ENG 4040 Management and Professional Practice for Engineers
PURE MTH 3018 Coding and Cryptology III 3
Level IV project course to be decided
Three Level IV electives to be chosen from:
COMP SCI 3007 Artificial Intelligence
COMP SCI 3012 Distributed Systems
COMP SCI 3013 Event Driven Computing
ELEC ENG 3022 Real Time Systems IV
*Level Illand IV not available in 2006

### 6.5.12 Telecommunications Engineering

Candidates are required to complete satisfactorily courses to the value of 24 units at each of Levels $\mathrm{I}, \mathrm{II}, \mathrm{II}$ 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
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 SystemsModelling III3
COMP SCI 3006 Software Engineering and Project ..... 3
ELEC ENG 3012 Engineering Communication ESL/EAL (E)* ..... 2
ELEC ENG 3015 Communications, Signals and 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

* 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 ${ }^{\#}$ ..... 6

or

ELEC ENG 4039 A/B Honours Project \# 6
ELEC ENG 4038 Financial Management for Engineers
ELEC ENG 4040 Management \& Professional Practice for Engineers
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 4004 Electrical Engineering Research ..... 2
ELEC ENG 4033 Advanced Telecommunications ..... 2
ELEC ENG 4034 Analog Microelectronics ..... 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 4047 Topics in Electrical and Electronic Engineering ..... 2
PURE MTH 3018 Coding and Cryptology III ..... 3
\# Students accepted into the Honours stream will take HonoursProject 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 (new for 2006)
** 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 award of the degree of B.E. (Telecomm.) 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
LAW 1001 Introduction to Australian Law 4
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 (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
ELEC ENG 2007 Signals and Systems 3
LAW 1002 Law of Torts 4
LAW 1003 Law of Contract 4
STATS 2004 Laplace Transforms and Probability
and Statistical Methods
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 |
| or | 6 |
| ELEC ENG 4039A/B Honours Project \# | 2 |
| ELEC ENG 4046 Telecommunications IV |  |
| 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 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 award of the degrees 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
COMP SCI 1009 Computer Science IB
ELEC ENG 1006 Electrical Engineering I
ELEC ENG 1007 Engineering Planning, Design and Communication
either
MATHS 1011 Mathematics IA
MATHS 1012 Mathematics IB
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) ..... 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 Courses ..... 12
APP MTH 3016 Telecommunications Systems Modelling III ..... 3
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
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
or
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 HonoursProject and other students will take Design Project.

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

To qualify for both the award of the degree of B.E.(Telecomm.) and the degree of $\mathrm{B} . \mathrm{Ec}$., candidates are required to complete satisfactorily courses listed below:
First Year (24 units)
COMP SCI 1008 Computer Science IA
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

orMATHS 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 \& 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


## 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 fromthose listed in Academic Program Rule 4.7.1 of the degree ofBachelor of Economics8
Note: B.Ec. students currently must take an Economic History course to qualify for the B.Ec. degree. Please refer to the Academic Program Rules of the B.Ec. degree.
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 ..... 2Plus at least 8 units of Level III Economics courses chosen fromthose listed in Academic Program Rule 4.7.1 of the degree ofBachelor of Economics8
\# Students accepted into the Honours stream will take HonoursProject and other students will take Design Project.
Program of study for the direct entryB.E.(Telecomm.)/B.Fin. program
To qualify for both the award of the degree of B.E.(Telecomm.)and the degree of B.Fin., candidates are required to completesatisfactorily 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.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.

Second Year (24 units)
APP MTH 2000 Differential Equations and Fourier Series
APP MTH 2002 Vector Analysis and Complex Analysis
COMP SCI 2004 Data Structures and Algorithms
ECON 1000 Principles of Macroeconomics I
ELEC ENG 2007 Signals and Systems
ELEC ENG 2008 Electronics II
ELEC ENG 2010 A/B Practical Electronic Design II
ECON 1009 International Financial Institutions and Markets I 3
STATS 2004 Laplace Transforms and Probability and Statistical Methods

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
Fourth Year (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 of 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 IIII 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
or
CORPFIN 3013 Options, Futures and Risk Management III
\# Students accepted into the Honours stream will take Honours Project and other students will take Design Project.
6.6 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.

### 6.7 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.

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 (Aerospace) - Graduate Attributes Bachelor of Engineering (Automotive) - Graduate Attributes Bachelor of Engineering (Mechanical) - Graduate Attributes Bachelor of Engineering (Mechatronic) - 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.
- 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 (Chemical) - 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 (Civil \& Environmental)- 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 (Civil \& Structural)- 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 (Computer Systems) - Graduate Attributes Bachelor of Engineering (Electrical \& Electronic) - Graduate Attributes Bachelor of Engineering (Software) - Graduate Attributes Bachelor of Engineering (Telecomm.) - 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 (Petroleum) - 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.


# Faculty of Humanities and Social Sciences 

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## Undergraduate awards in the <br> Faculty of Humanities and Social Sciences

- Diploma in Languages
- Degree of Bachelor of Arts
- Degree of Bachelor of Arts (Asian Studies)
- Degree of Bachelor of Arts (European Studies)
- Degree of Bachelor of Environmental Studies
- Degree of Bachelor of International Studies
- Degree of Bachelor of Media
- Degree of Bachelor of Social Sciences
- Honours degree of Bachelor of Arts
- Honours degree of Bachelor of Environmental Studies
- Honours degree of Bachelor of International Studies
- Honours degree of Bachelor of Media Studies
- 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 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.

## 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।
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 General
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 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 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 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 in the BA and Arts 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 Il 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 $B A$.

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 $B A$ 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

(a) 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 Il 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 8 units chosen from those listed in 6.12.2 Humanities and Social Sciences courses
(e) Level Il courses to the value of 8 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
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

(a) 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 Il 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 Il 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

(a) 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 Il 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

## $6 \quad$ All Degrees

The following rules apply to the Bachelor of Arts and the named degrees, the 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 Level I or Level II 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
6.12.1Humanities and Social Sciences courses

Anthropology
semester 1
ANTH 1101 Inside Out:
An Anthropology of University Life
semester 2
ANTH 1102 Introducing Social Anthropology
Asian Studies
semester 1
ASIA 1101 Introduction to Chinese Society and Culture
semester 2
ASIA 1102 Introduction to Japanese Society and Culture
ASIA 1103 Asia and the World
Chinese
semester 1
CHIN 1001 Chinese IA
CHIN 1011 Chinese ISA
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
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
semester 2
CLAS 1002 Classics: From Ancient Greece to Rome 3
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
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
ENGL 1106 Landmarks in English Literature:
Chaucer to Austen
semester 2
ENGL 1102 Introduction to English: Gothic 3
ENGL 1104 Professional English (ESL) 3
ENGL 1105 Film Studies 3
European Studies
semester 1
EUST 1000 Modern Imagination in Europe
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 semester 1
GWSI 1001 Social Sciences in Australia
GWSI 1002 Image, Text and Representation
GWSI 1004 Introduction to Gender Studies
semester 2
GWSI 1003 Gender, Work and Society
Geographical and Environmental Studies semester 1
GEST 1002 Sustaining a Fragile Planet
semester 2
GEST 1001 Globalisation, Justice and a Crowded Planet
German Studies
semester 1
GERM 1002 German Studies IA:
Beginners' German
GERM 1011 German Studies ISA
semester 2
GERM 1003 German Studies IB:
Beginners' German
GERM 1012 German Studies ISB
History
semester 1
HIST 1105 Europe, Empire and the World: 1492-1914
semester 2
HIST 1106 The Twentieth Century: A World in Turmoil
Indonesian
semester 1
INDO 1001 Indonesian Introductory A
INDO 1011 Indonesian Introductory SA
semester 2
INDO 1002 Indonesian Introductory B
INDO 1012 Indonesian Introductory SB
Italian
semester 1
ITAL 1001 Italian IA
semester 2
ITAL 1002 Italian IB
Japanese
semester 1
JAPN 1001 Japanese IA
JAPN 1011 Japanese ISA
semester 2
JAPN 1002 Japanese IB 3
JAPN 1012 Japanese ISB 3
Linguistics
semester 1
LING 1101 Foundations of Linguistics 3
semester 2
LING 1102 Language \& Ethnography of Communication 3
Mathematics
semester 1
MATHS 1011 Mathematics IA 3
MATHS 1013 Mathematics IMA 3
semester 2
MATHS 1012 Mathematics IB 3
MATHS 1014 Mathematics IMB 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
MUSCORE 1009 Foundations of Music History IA 3
semester 2
GENMUS 1014 Sound \& Media Technology I 3
MUSCORE 1008 Contrapuntal Analysis \& Composition I 3
MUSCORE 1010 Foundations of Music History IB 3
Philosophy
semester 1
PHIL 1101 Argument and Critical Thinking 3
PHIL 1103 Morality, Society and the Individual 3
semester 2
PHIL 1102 Mind, Knowledge and God 3
PHIL 1110 Logic I: Beginning Logic 3
Physics
semester 2
PHYSICS 1005 Physics, Ideas and Society I 3

Politics
semester 1

POLL 1101 Introduction to Australian Politics
POLI 1104 Introduction to Comparative Politics
semester 2
POLI 1102 Introduction to International Politics
POLI 1103 Justice, Liberty, Democracy:
Debates \& Directions
Psychology
semester 1
PSYCHOL 1000 Psychology IA
semester 2
PSYCHOL 1001 Psychology IB
Spanish
semester 1
SPAN 1001 Spanish IA
semester 2
SPAN 1002 Spanish IB

## Level II

6.12.2Humanities and Social Sciences courses

Anthropology
semester 1
ANTH 2003 Anthropology of Health and Medicine

ANTH 2022 Popular Culture:
Sex, Drugs and Rock ' $n$ ' Roll
ANTH 2026 Anthropology of Food and Drink
semester 2
ANTH 2004 Anthropology of Ritual, Performance \& Art
ANTH 2013 Media Analysis 4
ANTH 2017 Culture and Society: Contemporary Debates
ANTH 2018 Anthropology and the Environment 4
ANTH 2024 Anthropology of Conflict and Crisis 4
ANTH 2025 Southeast Asian Buddhist Social Worlds 4
Asian Studies
semester 1
ASIA 2002 Asian Studies (core topic)
ASIA 2005 Foundations of Chinese Thought
ASIA 2015 Politics and Foreign Policy
in Contemporary Japan
semester 2
ASIA 2003 Australia and the Asia Pacific 4
ASIA 2012 Contemporary Japan: Culture and Identity 4

ASIA 2017 From Manchus to Mao:
The History of Modern China
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 2004 Classical Mythology 4
CLAS 2010 Greek History: Archaic and Classical 4 semester 2
CLAS 2009 Greek History to Alexander the Great 4
CLAS 2013 Later Roman Archaeology 4
CLAS 2015 Media and Communications:
From Papyrus to Print
summer semester
CLAS 2021 Eastern Mediterranean Archaeological Field School

## Economics

semester 1
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
semester 2
ECON 2000 International Trade and Investment Policy II 4
ECON 2001 Resource and Environmental Economics II 4
ECON 2006 Economic \& Financial Data Analysis II 4
ECON 2007 Australian Economic History II 4
ECON 2009 Consumers, Firms and Markets II 4
ECON 2011 Macroeconomic Theory and Policy II 4
English
semester 1
ENGL 2009 A Festival of Contemporary Writing
ENGL 2016 English for Professional Purposes
ENGL 2021 Women's Writing: The Nineteenth Century 4
ENGL 2023 American Gothic 4
ENGL 2026 Self Writing 4
ENGL 2033 Shakespeare 4
ENGL 2104 Professional English (ESL) 4
semester 2
ENGL 2012 Medieval English Literature
ENGL 2015 Dangerous Liaisons: Writing Out of Africa 4
ENGL 2024 From the Beats to Bongs: The Sixties 4
ENGL 2030 Passions 4
ENGL 2032 Classic Australian Texts: Literature and Film 4
ENGL 2104 Professional English (ESL) 4
summer semester
ENGL 2034 Representing Truth and Reconciliation
European Studies
semester 1
EUST 2014 Ancient Philosophy
semester 2
EUST 2013 European Film Movements
EUST 2015 Music and Politics:
German Song and Society
Faculty Courses
semester 1 or 2
EXCHANGE 1000 ARTS International Exchange for H\&SS Students

## French Studies

semester 1
FREN 2002 French IIA: Language and Culture 4
FREN 2007 French Studies II: Culture Topic 4
Language Topic 4
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 4
FREN 2012 French IISB: Language and Culture 4
summer semester
Gender, Work and Social Inquiry semester 1
GWSI 2002 Social Organisation of Work 4
GWSI 2003 Women in Australian History 4
GWSI 2004 Gender, 'The Body' and Health 4
semester 2
GWSI 2001 Animals in Society:
Relations, Meanings, Desires 4
GWSI 2015 Social Research 4
Geographical and Environmental Studies
semester 1
GEST 2003 Urban Biodiversity Management 4
GEST 2020 Urban Futures:
Environmental and Social Issues 4
GEST 2005 Living on the Edge: Humans \& Landscape 4
GEST 2006 Indigenous People and Environmental
Management
GEST 2022 Introductory Spatial Information Systems 4
semester 2
GEST 2001 Managing Coastal Environments 4
GEST 2002 Environmental Management 4
GEST 2019 Environment and Media:
Communicating Change 4
GEST 200 Population in Policy and Planning 4
GEST 2021 Resource Scarcity and Allocation 4
German Studies
semester 1
GERM 2002 German Studies IIA: Language \& Culture 4
GERM 2008 German Special Topic II: Culture Topic 4
Language Topic 4
GERM 2011 German Studies IISA: Language \& Culture 4
semester 2
GERM 2003 German Studies IIB: Language \& Culture 4
GERM 2008 German Special Topic II: Culture Topic 4
Language Topic 4
GERM 2012 German Studies IISB: Language \& Culture 4
summer semester

GERM 2005 German in Germany
History
semester 1
HIST 2021 Modern France: From Revolution to Resistance

HIST 2041 Aboriginal Peoples and the Colonial World
HIST 2045 Migrants, Refugees and the Making of Modern Australia

HIST 2044 Slavery and Emancipation in the
Atlantic World
semester 2
HIST 2002 Uniting the Kingdoms: Britain 1534-1707
HIST 2004 Australia and the World in the
Twentieth Century
HIST 2009 Europe at War: 1792-1919
HIST 2019 The Origins of Modern America
HIST 2022 Modern Indonesia: War, Islam \& Authority
HIST 2031 Ethnic Cleansing and Genocide
in Modern Europe
Indonesian
semester 1
INDO 2001 Indonesian Intermediate A
INDO 2011 Indonesian Intermediate SA
semester 2
INDO 2002 Indonesian Intermediate B
INDO 2012 Indonesian Intermediate SB
International Studies
semester 2
INST 2001 International Studies (core topic)
Italian
semester 1
ITAL 2001 Italian IIA
semester 2
ITAL 2002 Italian IIB
Japanese
semester 1
JAPN 2001 Japanese IIA
JAPN 2011 Japanese IISA
semester 2
JAPN 2002 Japanese IIB
JAPN 2012 Japanese IISB

## Linguistics

semester 1
LING 2006 Language and Meaning 4
LING 2033 Language, Communication and Technology 4 semester 2

LING 2005 Language and Environment 4
LING 2009 Australian Indigenous Languages 4
LING 2011 Mass Communicative Discourses 4
summer semester
LING 2007 Kaurna Language and Ecology 4
Mathematics
See syllabus entries for Mathematics for available courses.
Modern Greek
semester 1
MGRE 2001 Modern Greek IIA
semester 2

MGRE 2002 Modern Greek IIB
4

Music Studies
semester 1
MUSCORE 2001 Music in Context IIA:
Polyphony \& Harmony
3
MUSST 2001 Approaches to Music IIA 3
semester 2
GENMUS 2009 Music, Media and Contemporary Society (Arts) II

MUSCORE 2002 Music in Context IIB:

19th Century Music

3

MUSST 2002 Approaches to Music IIB
Philosophy
semester 1
PHIL 2002 Crime and Punishment
PHIL 2003 Cognitive Science: Minds, Brains and Computers

4
PHIL 2011 Moral Problems 4
PHIL 2013 Philosophy of Science 4
PHIL 2110 Logic II: Intermediate Logic 4
semester 2
PHIL 2005 Evolution, Ethics and the Meaning of Life 4
PHIL 2012 Philosophy of Religion 4
PHIL 2017 Reality and Knowledge: Metaphysics and Epistemology
PHIL 2023 Professional Ethics 4

Physics
semester 2

Physics 2008 Physics, Ideas and Society II
Politics
semester 1
POLI 2002 Comparative Politics 4
POLI 2005 Understanding Modern Europe 4
POLI 2006 International Justice and Society 4
POLI 2009 Justice, Virtue and the Good 4
POLI 2018 Environmental Politics 4
POLI 2030 Conflict and Change:
Contemporary African Politics
POLI 2061 Sex, Gender and Politics
POLI 2079 Politics, Power and Popular Culture
POLI 2081 Post-Cold War International Relations
POLI 2092 Problems and Policy in Australia
semester 2
POLI 2010 Modern Political Theory 4
POLI 2071 Issues in Australian Politics 4
POLI 2013 Culture, Globalisation and Power 4
POLI 2016 Current Debates in Political Thought 4
POLI 2017 Passions and Interests: The History of Greed 4
POLI 2031 Global Environments: Security,
Resistance, Survival
POLI 2062 State of the World 4
POLI 2019 Media, Identity and Politics 4
Psychology
semester 1
PSYCHOL 2001 Psychological Research Methodology II
PSYCHOL 2002 Psychology IIA 4
semester 2
PSYCHOL 2003 Psychology IIB
Social Sciences
semester 1
SOCI 2002 Social Science Techniques
Spanish
semester 1
SPAN 2001 Spanish IIA
semester 2
SPAN 2002 Spanish IIB

## Level III

6.12.3Humanities and Social Sciences courses

Anthropology
semester 1
ANTH 3003 Anthropology of Health and Medicine 6
ANTH 3012 Media and Culture 6
ANTH 3021 Anthropology of Development 6
ANTH 3022 Popular Culture:
Sex, Drugs and Rock 'n' Roll 6
ANTH 3026 Anthropology of Food and Drink 6 semester 2
ANTH 3004 Anthropology of Ritual, Performance \& Art 6
ANTH 3013 Media Analysis 6
ANTH 3017 Culture and Society: Contemporary Debates 6
ANTH 3018 Anthropology and the Environment 6
ANTH 3024 Anthropology of Conflict and Crisis 6
ANTH 3025 Southeast Asian Buddhist Social World 6
Asian Studies
semester 1
ASIA 3005 Foundations of Chinese Thought 6
ASIA 3015 Politics and Foreign Policy
in Contemporary Japan
semester 2
ASIA 3003 Australia and the Asia Pacific 6
ASIA 3012 Contemporary Japan: Culture and Identity 6
ASIA 3017 From Manchus to Mao:
The History of Modern China
Chinese
semester 1
CHIN 3001 Chinese IIIA 6
CHIN 3003 Chinese for Chinese Speakers IIIA 6
CHIN 3011 Advanced Chinese A 6
semester 2
CHIN 3002 Chinese IIIB 6
CHIN 3004 Chinese for Chinese Speakers IIIB 6
CHIN 3012 Advanced Chinese B 6
Classical Languages
semester 1
AGRE 3002 Ancient Greek IIIA 6
AGRE 3011 Ancient Greek IIISA 6
LATN 3002 Latin IIIA 6
LATN 3011 Latin IIISA 6
semester 2
AGRE 3003 Ancient Greek IIIB 6
AGRE 3012 Ancient Greek IIISB 6
LATN 3003 Latin IIIB 6
LATN 3012 Latin IIISB 6
Classical Studies
semester 1
CLAS 3004 Classical Mythology
CLAS 3010 Greek History: Archaic and Classical
semester 2
CLAS 3009 Greek History to Alexander the Great
CLAS 3013 Later Roman Archaeology
CLAS 3015 Media and Communications:
From Papyrus to Print
summer semester
CLAS 3021 Eastern Mediterranean Archaeological Field School

Economics
semester 1
ECON 3013 Applied Econometrics III
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
ECON 3006 Development Economics III 4
ECON 3016 Strategic Thinking for Decision Makers III
ECON 3021 International Trade III
ECON 3023 Econometrics III 4
ECON 3030 International Economic History III 4
ECON 3034 Economic Theory III 4
English
semester 1
ENGL 3009 A Festival of Contemporary Writing 6
ENGL 3016 English for Professional Purposes 6
ENGL 3021 Women's Writing: The Nineteenth Century 6
ENGL 3023 American Gothic 6
ENGL 3026 Self Writing 6
ENGL 3033 Shakespeare 6
semester 2
ENGL 3012 Medieval English Literature 6
ENGL 3015 Dangerous Liaisons: Writing Out of Africa 6
ENGL 3024 From the Beats to Bongs: The Sixties ..... 6
ENGL 3030 Passions ..... 6
ENGL 3032 Classic Australian Texts: Literature \& Film ..... 6
summer semester
ENGL 3034 Representing Truth and Reconciliation ..... 6
European Studies
semester 1
EUST 3014 Ancient Philosophysemester 2
EUST 3013 European Film Movements ..... 6
EUST 3015 Music and Politics: German Song \& Society ..... 6
Faculty Courses
semester 1 or 2
EXCHANGE 1000ARTS International Exchangefor H\&SS Students12
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 Inquirysemester 1
GWSI 3002 Social Organisation of Work ..... 6
GWSI 3003 Women in Australian History ..... 6
GWSI 3004 Gender, 'The Body' and Health ..... 6
semester 2
GWSI 3001 Animals in Society: Relations, Meanings and Desires ..... 6
GWSI 3015 Social Research ..... 6
Geographical and Environmental Studiessemester 1
GEST 3003 Urban Biodiversity Management ..... 6
GEST 3005 Living on the Edge: Humans \& Landscape ..... 6
GEST 3006 Indigenous People and Environmental Management ..... 6
GEST 3022 Introductory Spatial Information Systems
semester 2
GEST 3001 Managing Coastal Environments
GEST 3002 Environmental Management 6
GEST 3004 Population in Policy and Planning 6
GEST 3019 Environment and Media:
Communicating Change
GEST 3100 Environmental Studies Internship 6
GEST 3021 Resource Scarcity and Allocation 6
GEST 3101 Advanced Spatial Analysis 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
History
semester 1
HIST 3021 Modern France: From Revolution to Resistance
HIST 3041 Aboriginal Peoples and the Colonial World
HIST 3044 Slavery and Emancipation in the Atlantic
World
HIST 3045 Migrants, Refugees and the Making of Modern Australia
semester 2
HIST 3002 Uniting the Kingdoms: Britain 1534-1707
HIST 3004 Australia and the World in the Twentieth Century
HIST 3009 Europe at War: 1792-1919
HIST 3019 The Origins of Modern America
HIST 3022 Modern Indonesia: War, Islam \& Authority
HIST 3031 Ethnic Cleansing and Genocide
in Modern Europe
Indonesian
semester 1
INDO 3001 Indonesian Advanced A
INDO 3011 Indonesian Advanced SA
semester 2
INDO 3002 Indonesian Advanced B 6
INDO 3012 Indonesian Advanced SB
6
Italian
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 3033 Language, Communication and Technology 6
semester 2
LING 3005 Language and Environment 6
LING 3009 Australian Indigenous Languages 6
LING 3011 Mass Communicative Discourses 6
summer semester
LING 3007 Kaurna Language and Ecology 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
Music Studies
semester 1
MUSCORE 3001 Music in Context III: Music since 19003
MUSST 3001 Approaches to Music III 3
MUSST 3002 Advanced Seminar in Music IIIA 3
MUSST 3013 The Music of Messiaen III 3
MUSST 3015 The Science of Music III 3
semester 2
GENMUS 3009 Music, Media and Contemporary

Society (Arts) III

MUSCORE 3004 Music in Australia III 3
MUSST 3003 Advanced Seminar in Music IIIB 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
Philosophy
semester 1
PHIL 3002 Crime and Punishment 6
PHIL 3003 Cognitive Science:
Minds, Brains and Computers
PHIL 3011 Moral Problems 6
PHIL 3013 Philosophy of Science 6
semester 2
PHIL 3005 Evolution, Ethics and the Meaning of Life 6
PHIL 3012 Philosophy of Religion 6
PHIL 3017 Reality and Knowledge: Metaphysics and Epistemology
PHIL 3023 Professional Ethics 6
Politics
semester 1
POLI 3002 Comparative Politics 6
POLI 3005 Understanding Modern Europe 6
POLI 3006 International Justice and Society 6
POLI 3009 Justice, Virtue and the Good 6
POLI 3018 Environmental Politics 6
POLI 3030 Conflict and Change:
Contemporary African Politics 6

POLI 3061 Sex, Gender and Politics 6
POLI 3079 Politics, Power and Popular Culture 6
POLI 3081 Post-Cold War International Relations 6
POLI 3092 Problems and Policy in Australia 6
semester 2
POLI 3010 Modern Political Theory 6
POLI 3013 Culture, Globalisation and Power 6
POLI 3016 Current Debates in Political Thought 6
POLI 3017 Passions and Interests: The Intellectual History of Greed
POLI 3019 Media, Identity and Politics 6
POLI 3031 Global Environments: Security,
Resistance, Survival
POLI 3062 State of the World

POLI 3071 Issues in Australian Politics 6
POLI 3083 SA Parliamentary Internship 6
POLI 3087 South Australian Internship Scheme 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
semester 2
PSYCHOL 3003 Developmental Psychology III 2
PSYCHOL 3005 Perception and Cognition 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
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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following 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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following 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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following 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.


## Academic Program Rules

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 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 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:
ANTH 1101 Inside Out:
An Anthropology of University Life 3
APP ECOL 1002RW Field Studies IA 3
ECON 1004 Principles of Macroeconomics I 3
ENV BIOL 1002 Environmental Biology I 3
GEOLOGY 1103 Earth Systems 3
POLI 1101 Introduction to Australian Politics 3
GWSI 1001 Social Sciences in Australia 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.

## Level II

(d) GEST 2002 Environmental Management
(e) Level II Geographical and Environmental Studies courses to the value of 8 units
(f) Level Il 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 courses to the value of 12 units (may include GEST 3100 Environmental Studies: Internship - but a quota applies)
(h) Level III Geographical and Environmental Studies courses or approved elective courses to the value of 12 units.

### 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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following 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.


## Bachelor of International Studies

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 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 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

(a) 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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following 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.


## Academic Program Rules

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 3

MDIA 1002 Media Engagements 3
SOCI 1002 Image, Text and Representation 3
(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 or

Media Production courses (to a maximum of 4 units) or

Media courses not previously undertaken.

## 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 or MDIA 3302 Media Industry Placement or Media Production courses (to a maximum of 6 units) 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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following attributes:

- Depending on a candidate's area/s of interest and/or specialisation, graduates of the Bachelor of Media are expected to have highly developed theoretical, critical and practical skills necessary to function effectively in any field of the media and communication industry (radio, television, film, publishing, multimedia, advertising and public relations).
- Graduates are empowered with the understanding of the role and effects of media and new technologies on everyday life.
- Graduates are equipped with the necessary tools to understand and analyse media cultures from a global perspective.
- Graduates acquire a professional media training that emphasises a synergy between theory and practice.
- Graduates acquire cognitive and critical skills necessary to produce, evaluate, synthesise and interpret media texts (audiovisual and literary materials).
- Graduates acquire conceptual, analytic and communication skills necessary to function effectively in their chosen field of media practice.
- Graduates acquire technological skills necessary to successfully navigate their way through the ever-changing media landscape.
- Graduates acquire the necessary skills required to develop positive interpersonal relationships in their place of work.
- Graduates see their training as an integral part of social formation.
- Graduates will have an understanding of the impacts of changing media technologies in society.
- Graduates will have an understanding of professional, ethical and cultural policy issues in relation to the media.
- Graduates will have an understanding of multicultural sensitivities both within Australia and the convergent global media market.
- Graduates will have an understanding of the need to be reflexive practitioners and to develop a sense of social responsibility in the execution of their duties.


## 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
GWSI 1001 Social Sciences in Australia
(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
(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 Il 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
(i) 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
Economics
Gender Studies
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 fulltime 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
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 Il courses to the value of 8 units chosen from those listed in 5.1.1 as Social Sciences, being the Level Il component of a major sequence (see 5.1.1 above)
(e) Level Il 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 IIImajor 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)
(h) Level IIII 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 Illcourses 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

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates are encouraged to take personal responsibility for developing the following 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
(ii) 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 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 5.7 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

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 Schools 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.

Notes 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 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 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 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 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. | $0-49$. |

### 4.2 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.

### 4.3 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.
5.1 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:
ENVT4401A/B Honours Environmental Studies
Students who have been granted permission to study an honours program supervised by two Schools 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.

## Notes 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 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. | $0-49$. |

### 4.2 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.

### 4.3 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.
5.1 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
Students who have been granted permission to study an honours program supervised by two Schools 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
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 2.1 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 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 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.
5.1 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:
MDIA 4401A/B Honours Media 24
Students who have been granted permission to study an honours program supervised by two Schools 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.

## Notes 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 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 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
ECON 4403 A/B Honours Economics 24
GEST 4401A/B Honours Geography and Environmental Studies
GWSI 4401A/B Honours Gender, Work
and Social Inquiry
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
PSYCHOL 4000 A/B Honours Psychology 24
Students who have been granted permission to study an honours program supervised by two Schools 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 course
Honours Social Sciences course
Thesis jointly supervised between Health Sciences and Social Sciences.

### 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.

## Law School

Bachelor of Laws
LL.B.
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## Undergraduate awards in the Law School

- 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.

## Academic Program Rules

## 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, fulltime study shall extend over 4 years for non-graduates, 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.

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 code
> 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 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 four 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.
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 a candidate shall comply with the relevant provisions of the Academic Program Rules.
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.
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 ClassDivision 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
(ii) 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
(iii) 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.(b)(ii.) below, or non-law courses subject to the approval of the School / Faculty concerned.
(b) the candidate has passed:
(i) all the following compulsory courses:

LAW 1001 Introduction to Australian Law
LAW 1002 Law of Torts
LAW 1003 Law of Contract 4
LAW 1004 Law of Crime 4
LAW 1005 Property Law 4
LAW 2001 Legal Research and Writing 2
LAW 2002 Administrative Laws 4
LAW 2003 Australian Constitutional Law 4
LAW 2004 Corporate Law 4
LAW 2005 Equity 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 32 units from the following (note 5.4.1.1 (a)(iv) above):

LAW 1006 Introduction to Public
International Law
LAW 2006 Australian Legal History 4
LAW 2007 Workers Compensation Law 2
LAW 2010 Research Project B 4
LAW 2011 Tax and the Revenue Concept Law 2
LAW 2013 Restitution 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
LAW 2023 Roman Law 4
LAW 2024 Moot A 2
LAW 2026 Aboriginal People and the Law 4
LAW 2031 Financial Transactions 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
LAW 2061 Public \& Private Provision
of Income Maintenance
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
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 2117 Advanced Contract 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
LAW 3020 Public Interest Litigation 4
LAW 3021 Capital Gains Tax and the Taxation
of Entities 2
LAW 3022 Immigration and Refugee Law 2
LAW 3025 Statutory Interpretation 4
LAW 3028 Regulation of Competition 4
LAW 3029 Corporate Finance 4
LAW 3044 Labour and Industrial
Relations Law
LAW 3047 Environmental Protection Law 4
LAW 3049 Comparative Corporate Law and Theory

2
LAW 3060 Comparative Corporate Rescue Law 2
LAW 3065 Land and Water Resources Law 4
LAW 3066 Public International Law 4
LAW 3069 Corporate Governance 2

| LAW 3071 Conservation Law | 4 |
| :--- | :--- |
| LAW 3080 Clinical Legal Education | 4 |
| LAW 3089 Honours Research and Writing | 2 |
| LAW 3090 Planning and Heritage Law | 2 |
| LAW 3098 Corporate Insolvency Law | 4 |
| LAW 3099 Dissertation Honours Law | 6 |
| LAW 4041 Wine Law |  |
| LAW 4144 International Justice | 4 |
| and the Rule of Law |  |
| POLI3082 South Australian Parliamentary | 4 |
| Internship (Law) | 4 |
| POLI3085 South Australian Internship |  |
| Program (Law) |  |

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
5.4.1.2 A candidate may be awarded the degree of Bachelor of Law with Honours.

A document setting out guidelines approved by the School providing the criteria by which the award of the Honours degree is determined in any given year is available from the School Office and is published in the Bachelor of Laws Handbook.

### 5.4.2 The Honours degree

Introductory note to Academic Program Rule 5.4.2
(not forming part of the Rule). (not forming part of the Rule).
A student who wishes to obtain an Honours degree of Bachelor of Laws must complete the courses LAW 3089 Honours Research and Writing (2 units) and LAW 3099 Dissertation Honours Law ( 6 units). These courses are normally undertaken in the second semester of the penultimate year and the first semester of the final year of the LL.B. program respectively. They are taken in lieu of other 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 Rule a candidate 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
(ii) 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
(i) granted status in a course(see relevant section on status under Student Related Polices In Student Guide 2003)
(ii) 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
(ii) 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
(ii) 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 purposes 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.

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

- Knowledge and understanding of the Australian legal system and its relationship to the international legal system.
- Knowledge and understanding of the basic principles of the primary areas of Australian law.
- Knowledge and understanding of the rule of law.
- Knowledge and understanding of the law within an interdisciplinary context.
- Knowledge and understanding of the continuing development of legal principle and legal systems.
- Knowledge and understanding of the means by which the law can be used to achieve goals and to resolve problems.


## Intellectual and Social Capabilities

- The ability to locate, analyse, evaluate and present legal and related information in an appropriate and persuasive form as oral or written legal argument, opinion, advice, report or instructions.
- The ability to present the results of legal analysis or research in a planned and timely manner.
- The ability to engage in high order critical thinking and legal problem solving skills.
- The ability to think creatively and to generate innovative solutions by legal and related means.
- The ability to work both independently and cooperatively in a legal professional environment.
- The ability to devise legal solutions that respond to changing social and technological circumstances.
- The capacity to work in a professional and ethical relationship both on an individual basis and as a member of a team .
- Proficiency in the use of contemporary techniques and technology in legal research and professional practice.


## Attitudes and Values

- A commitment to lifelong learning and the capacity to maintain intellectual curiosity in the practice of law and law related professions.
- A commitment to the highest standards of professional endeavour in the practice of the law and an understanding of and commitment to professional behaviour.
- An awareness of the significance of potential leadership roles through the law in the wider community.
- An understanding of and commitment to justice in the development and application of the law.
- An awareness of the importance of ethical behaviour in the exercise of legal and related professional skills and responsibilities.
- An awareness of social and cultural diversity and sensitivity to the operation of the law and legal structures in that context.


## Medical School



Bachelor of Health Sciences
$\qquad$
Bachelor of Medical Science (Honours)
B.Med.Sc.(Hons). ..... 227
Bachelor of Medicine and Bachelor of Surgery
M.B.,B.S. ..... 220
Bachelor of Nursing
B.Nurs ..... 229
Bachelor of Psychology
B.Psych ..... 233
Bachelor of Psychology (Honours)
B.Psych.(Hons.) ..... 237

## Undergraduate awards in the Medical School

- Degree of Bachelor of Health Sciences
- Degrees of Bachelor of Medicine and Bachelor of Surgery
- Degree of Bachelor of Nursing
- 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


## 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. The Head of department or centre may approve minor changes to any previously approved syllabus.

## Bachelor of Health Sciences

## 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.

### 3.2 Status granted in combined degree programs

### 3.2.1 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.

### 3.2.2 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.

### 3.2.3 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

SOCI 1001 Social Sciences in Australia
(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 PATHOL 2000 Biology of Disease II
(d) Level Il 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 IIImajor sequence in Health Sciences.

## Level III \& IV

24 units for each award separately as follows:

## Bachelor of Social Sciences

(f) SOCl 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 Illcourses offered by the Faculty of Humanities and Social Sciences.

## 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. 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 other courses.
In addition there shall be a classification of conceded pass for courses up to a maximum of 7 units 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 lower division pass or a conceded 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.
(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।
(a) ANAT SC 1102 Human Biology IA

ANAT SC 1103 Human Biology IB
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

PSYCHOL 1000 Psychology IA 3

PSYCHOL 1001 Psychology IB

### 5.1.2 Level II

(a) PATHOL 2000 Biology of Disease II
(b) Level II Health Sciences courses to the value of 8 units chosen from the following:
ANAT SC 2102 Cells, Tissues \& Development II 4
ANAT SC 2103 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 \& 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 and Computer Sciences or Faculty of Sciences that are available to them ${ }^{+}$.
5.1.3 Level 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
ANAT SC 3102 Comparative Reproductive Biology of Mammals
ANAT SC 3103 Integrative and
Comparative Neuroanatomy
ANAT SC 3104 Structural Cell Biology
ANAT SC 3106 Ethics, Science \& Society III
Clinical and Experimental Pharmacology
PHARM 3010 Pharmacology A III
PHARM 3011Pharmacology B III
Pathology
PATHOL 3103 General Pathology
PATHOL 3104 Pathology of Organ Systems
Psychology
PSYCHOL 3000 Psychological Research Methodology III
PSYCHOL 3003 Developmental Psychology III
PSYCHOL 3005 Perception and Cognition III PSYCHOL 3006 Psychology:
Physiology and Behaviour III
PSYCHOL 3009 Metapsychology III
PSYCHOL 3010 Social Psychology III
PSYCHOL 3013 Learning and Behaviour III
PSYCHOL 3014 Individual Differences III
PSYCHOL 3015 Human Relations III
PSYCHOL 3016 Language Processes III
PSYCHOL 3017 Health Psychology III
Public Health
PUB HLTH 3101HO Aboriginal Health Policy IIIHS 6
PUB HLTH 3104HO Epidemiology of Infectious Disease IIIHS

PUB HLTH 3106HO Health Promotion IIIHS
PUB HLTH 3108HO Environmental and Occupational Health IIIHS

PUB HLTH 3109HO Introduction to
Epidemiology and Biostatistics IIIHS
PUB HLTH 3117HO Rural Public Health IIIHS 6
PUB HLTH 3119HO Public Health Internship III

PUB HLTH 3120HO Public Health Theory and Practice III in Practice III

Other Health Sciences
MICRO 3003 Medical Microbiology and Immunology III

OB\&GYNAE 3000 Human Reproductive Health III
(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 level or above, of at least 9 units of courses from within a single discipline.
(c) Candidates are able to present a maximum of 12 units of courses at Level III offered by the Faculty of Humanities and Sciences, School of Commerce, School of Economics, School of Law *, School of Mathematical and Computer Sciences, or the Faculty of Sciences ${ }^{+}$.

* Candidates for the Bachelor of Health Sciences may only undertake Law courses if they are also candidates for the Bachelor of Laws.
+ 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 department 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 OA/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:
(a) 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 department in another faculty. Candidates must consult the Head of the department concerned and apply, in writing, to the Faculty before 30 November in the preceding year for admission to the Honours program.

### 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.

## 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.

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 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 (PCl) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students ${ }^{\prime}$ 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 PCls .

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 relevantlegislation, 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 must also undertake 18 units of elective courses over Years 1-3 to broaden their education. The Medical School will provide guidelines on approved electives, on an annual basis.

In addition, a student is required to undertake a period of elective study approved by the School of Medicine before commencing the study and practice for the Final Year Program.
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 ST1102 A/B Clinical Skills I

MEDIC ST1103 A/B Medical Professional and
Personal Development I

## Electives

Students must attempt and pass at least six units of
approved elective course/s

## 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
$\begin{array}{ll}\text { MEDIC ST } 2103 \text { A/B Medical Professional and } \\ \text { Personal Development II } & 6\end{array}$

## Electives

Students must attempt and pass at least six units of approved elective course/s

6

## Medic St 3000 A/B Third Year Examination

Core courses
MEDIC ST 3102 A/B Clinical Skills III

MEDIC ST 3103 A/B Medical Professional and
Personal Development III ..... 6
MEDIC ST3104 A/B Scientific Basis of Medicine III ..... 6
Electives

Students must attempt and pass approved elective courses to an aggregate, over Years 1, 2 and 3, of 18 units

## Medic St 4000 A/B Fourth Year Examination

MEDIC ST4005 AHO/BHO Medical Home Unit 5
MEDIC ST4006 AHO/BHO Surgical Home Unit 5
MEDIC ST4007 AHO/BHO Psychological Health 3
MEDIC ST4008 AHO/BHO Acute and Chronic Care 13
MEDIC ST 4009 AHO/BHO Medical and Scientific Attachment 1

MEDIC ST4010 AHO/BHO Medical and Scientific

Attachment 2
MEDIC ST4011 AHO/BHO Research Proposal MEDIC ST 4012 AHO/BHO Common Program

## Medic St 5000 A/B Fifth Year Examination

MEDIC ST5005 AHO/BHO Medical and Scientific Attachment 3

## MEDIC ST5006 AHO/BHO Medical and Scientific

 Attachment 4MEDIC ST 5007 AHO/BHO Medical and Scientific Attachment 5
MEDIC ST 5008 AHO/BHO Medical and Scientific Attachment 6
MEDIC ST5009 AHO/BHO Acute and Chronic Care 2
MEDIC ST 5010 AHO/BHO Paediatrics and Child Health
MEDIC ST5011 AHO/BHO Human Reproductive Health
MEDIC ST5012 AHO/BHO Common Program
Medic St 5013 AHO/BHO External Elective

## Medic St $\mathbf{6 0 0 0}$ A/B Final (Sixth Year) Assessment

MEDIC ST 6001 AHO/BHO Clinical Elective and Specials Week VI
MEDIC ST 6002 AHO/BHO Medicine Internship and Common Program VI
MEDIC ST 6003 AHO/BHO Surgery Internship VI
MEDIC ST 6004 AHO/BHO Emergency Medicine Internship VI
MEDIC ST 6005 AHO/BHO Primary Care SCAP VI
MEDIC ST 6006 AHO/BHO Psychological Health SCAP VI
MEDIC ST 6007 AHO/BHO Medicine SCAP VI
MEDIC ST 6008 AHO/BHO Surgery SCAP VI

### 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 Dean of the School of Medicine (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.


## 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,
(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 longterm 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)

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 the department 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 the department 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 OBGGYNAE 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.

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 Department. 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 Department 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 Surgery, the 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 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.
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 Department 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 attachment 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 qualify 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 Level I

## semester 1

Human Sciences IA 6
Nursing Practice IA 6
semester 2
Human Sciences IB
Nursing Practice IB

### 5.1.2 Level II

semester 1
Human Sciences IIA 6
Nursing Practice IIA 6
semester 2
Human Sciences IIB 6
Nursing Practice IIB 6
5.1.3 Level III
semester 1
Human Sciences IIIA 6
Nursing Practice IIIA 6
semester 2
Human Sciences IIIB 6
Nursing 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.
7.9 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 Dean of the School of Medicine (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.


## 1 General

There shall be a degree of Bachelor of Psychology.

## 2 Duration of program

The program of study shall extend over three years of fulltime 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 Department 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 Department 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 With the permission of the Executive Dean of the Faculty of Health Sciences and the Executive Dean of the other Faculty, in lieu of up to 14 units described under 6.3 below, a candidate may take courses from the Academic Program Rules of any Faculty that are considered appropriate coursework for the Bachelor of Psychology degree.
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 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.

## Science

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 Il 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.

## Science

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 3005 Perception and Cognition 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 PsychologyIII ..... 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 Specific Academic Program Rule 4.2 of the Bachelor of Mathematical and Computer Sciences.

## Science

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.

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.


## Bachelor of Psychology (Honours)

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 fulltime 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 Department 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 Department 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 Department 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 $4000 \mathrm{~A} / \mathrm{B}$ Honours Psychology (24 units).
6.1.1 With the permission of the Executive Dean of the Faculty of Health Sciences and the Executive Dean of the other Faculty, in lieu of up to 14 units described under 6.2 below, a candidate may take courses from the Academic Program Rules of any Faculty which are considered appropriate coursework for the Bachelor of Psychology (Honours) degree.
6.1.2 All other components (a total of 72 units) must be completed before undertaking the Fourth Year program.
6.1.3 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.

## Science

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 Il courses listed under Academic Program Rule 4.7 of the degree of Bachelor of Economics.

## Health Sciences

Level Il 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.

## Science

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 3005 Perception and Cognition 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 PsychologyIII 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.

## Science

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.

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.


## Elder Conservatorium of Music

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 www.music.adelaide.edu.au
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- 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 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:

Diploma in Music (Classical)
Diploma in Music (Jazz)
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 full-time 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 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 fulltime 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 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 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 Certificate IV in Music (Classical)

Admission to the program of study for 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.

### 3.4 Certificate IV in Music (Jazz)

Admission to the program of study for 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.

### 3.5 Certificate IV in Music (Technology)

Admission to the program of study for 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 the equivalent.

A candidate will not be permitted to defer an offer of admission to the program.

### 3.6 Certificate III in Music

Admission to the program of study for 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 three classifications of pass in the final assessment of any course for the Certificate awards offered by the School: Pass with Distinction, Pass with Credit, and Pass.

If the Pass classification be 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. A particular competency shall be deemed to have been achieved when all relevant sections of courses mapped against it have been completed.
5.6 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 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
VETMUS 1504 A/B Career Management Part 1 \& 2
VETMUS 1505 Copyright Law
VETMUS 1614 A/B Aural Development (Dip) Part 1 \& 2
VETMUS 1755 Sound Production A 2
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VETMUS1850 A/B Individual Tuition (Classical Dip)
Part 1 \& 2
VETMUS 1851 A/B Small Ensemble (Classical Dip) Part $1 \& 2$
VETMUS 1852 A/B Classical Diploma Forum Part 1 \& 21
VETMUS 1853 A/B Music Language Studies Part 1 \& 24

VETMUS 1854 A/B Keyboard Musicianship (Class.Dip) Part 1 \& 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.
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 2006) 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
VETMUS 1504 A/B Career Management Part 1 \& 2
VETMUS 1505 Copyright Law
VETMUS 1614 A/B Aural Development (Dip) Part 1 \& 2
VETMUS 1750 A/B Individual Tuition (Jazz Dip) Part 1 \& 24
VETMUS 1751 A/B Small Ensemble (Jazz Dip) Part 1 \& 23
VETMUS 1752 A/B Jazz Diploma Workshop Part 1 \& 24
VETMUS 1753 A/B Jazz Diploma Forum Part 1 \& 2
VETMUS 1754 A/B Jazz Accompaniment Part 1 \& 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.

## 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 2006) 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:

Certificate IV in Music (Classical)
6.3.1 The program for the Certificate IV in Music (Classical) may be taken with a major study in Classical Performance on an instrument or voice.
6.3.2 To qualify for the Certificate a candidate shall satisfactorily complete the requirements for courses listed below 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 Classical Performance

Candidates shall satisfactorily complete the following:
VETMUS 1501 Music Industry and
Business Management
VETMUS 1502 OH\&S
VETMUS 1503 Assignment Writing \& Research Skills
VETMUS 1602 A/B Aural Development (VET)Part 1 \& 2
VETMUS 1605 A/B Ensemble (C4) Part 1 \& 2
2
VETMUS 1607 A/B History of 20th Century Music Part 1 \& 2

VETMUS 1608 A/B Theory of Music Part $1 \& 2$
VETMUS $1609 \mathrm{~A} / \mathrm{B}$ Individual Tuition (C4) Part 1 \& 2
VETMUS 1801 A/B Composition Class Part 1 \& 2
VETMUS 1804 A/B Performance Class Part 1 \& 2
VETMUS 1807 A/B Technique \& Repertoire Part 1 \& 2
and
VETMUS 1802 A/B Keyboard Musicianship (Majors) Part 1 \& 2
or
VETMUS 1808 A/B Keyboard Musicianship (Minors) Part $1 \& 2$
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)
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 2006) 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.

### 6.4 Academic program: Certificate IV in Music (Jazz)

6.4.1 The program for the Certificate IV in Music (Jazz) may be taken with a major study in Jazz Performance.
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 Certificate IV in Music (Jazz)

Candidates shall satisfactorily complete the following:
VETMUS 1501 Music Industry and
Business Management
VETMUS 1502 OH\&S
VETMUS 1503 Assignment Writing \& Research Skills 1
VETMUS 1602 A/B Aural Development (VET)Part 1 \& 2
VETMUS 1701 A/B Jazz Styles I Part 1 \& 2
VETMUS 1702 A/B Jazz Theory I Part $1 \& 2$
VETMUS 1703 A/B Jazz Piano Class Part 1 \& 2
VETMUS 1704 A/B Jazz Performance I Part 1 \& 24
VETMUS 1705 A/B Improvisation I Part 1 \& 2
VETMUS 1707 A/B Small Ensemble Part 1 \& 2
VETMUS 1708 A/B Jazz Masterclass Part 1 \& 2
VETMUS 1709 A/B Jazz Forum 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 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 2006) 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: <br> Certificate IV in Music (Technology)

6.5.1 The program for the Certificate IV in Music (Technology) may be taken with a Practical Study in Music Technology.
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 Music Technology

Candidates shall satisfactorily complete the following:
VETMUS 1501 Music Industry \& Business Management 1 VETMUS 1502 OH\&S
VETMUS 1503 Assignment Writing \& Research Skills ..... 1
VETMUS 1602 A/B Aural Development (VET)Part 1 \& 2 ..... 2
VETMUS 1603 A/B Theoretical studies Part 1 \& 2 ..... 2
VETMUS 1606 A/B History of Commercial MusicPart $1 \& 2$2
VETMUS 1801 A/B Composition Class Part 1 \& 2 ..... 2
VETMUS 1904 A/B Recital part 1 \& 2 ..... 1
VETMUS 1907 A/B Digital Audio Studies (C4)Part 1 \& 24
VETMUS 1908 Music Technology (C4) ..... 1

VETMUS 1910 A/B Technology Journal (C4) Part 1 \& 2

## and

VETMUS 1802 A/B Keyboard Musicianship (Majors) Part 1 \& 2
or
VETMUS 1808 A/B Keyboard Musicianship (Minors) Part 1 \& 2
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 (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 2006) 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.

### 6.6 Academic program: Certificate III in Music

6.6.1 The program for the Certificate III in Music may be taken with a major study in performance or composition.
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 14 units must be presented. No student shall gain credit for a course more than once.

### 6.6.2.1 Certificate III in Music

Candidates shall satisfactorily complete the following:
VETMUS 1501 Music Industry and
Business Management
VETMUS 1502 OH\&S
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
VETMUS 1612 A/B Ensemble (C3) Part 1 \& 2
VETMUS 16013 A/B Theory of Music (C3) Part 1 \& 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 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 2006) 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.

# Bachelor of Music <br> 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 full-time 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 fulltime 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 fulltime 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 undergraduate awards offered by the School: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
If the Pass classification be 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.
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.
5.7 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 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.

### 6.1.2.1 Classical Performance

Candidates shall satisfactorily complete the following courses:

## Level I

MUSCORE 1007 Introduction to Theory \& Analysis of Music I

MUSCORE 1008 Contrapuntal Analysis \& composition IB 3
MUSCORE 1009 Foundations of Music History IA
MUSCORE 1010 Foundations of Music History IB
and
PERF 1500 A/B Classical Performance I Part 1 \& $2 \quad 9$
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
ENS 1002 A/B Adelaide Connection I Part 1 \& 2
ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 \& 2
ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 \& 2

ENS 1025 A/B Elder Conservatorium Chorale I Part $1 \& 2$
ENS 1026 A/B Adelaide Voices I Part 1 \& 2
ENS 1027 A/B Bella Voce I Part 1 \& 2
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 I Part 1 \& 2
or
ENS 1010 A/B Elder Conservatorium Wind Orchestra I Part 1 \& 2

Keyboard:
PERF 1002 A/B Keyboard Musicianship I Part 1 \& 2
Percussion:
ENS 1017 A/B Percussion Ensemble I Part 1 \& 2
Strings:
ENS 1009 A/B Elder Conservatorium Symphony Orchestra I
Part $1 \& 2$
Voice:
One of:
ENS 1025 A/B Elder Conservatorium Chorale I Part 1 \& 23
ENS 1026 A/B Adelaide Voices I Part 1 \& 2
ENS 1027 A/B Bella Voce I Part 1 \& 2
Woodwind:
ENS 1009 A/B Elder Conservatorium Symphony Orchestra I Part 1 \& 2
or
ENS 1010 A/B Elder Conservatorium Wind Orchestra I
Part 1 \& 2
Level II
MUSCORE 2001 Music in Context IIA:
Polyphony \& Harmony
MUSCORE 2002 Music in Context IIB:
Nineteenth Century Music
and
PERF 2500 A/B Classical Performance II Part 1 \& 29
and an Ensemble from one of the following:
ENS 2001 A/B A Kind of Blue II Part 1 \& 2
ENS 2002 A/B Adelaide Connection II Part 1 \& 2
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II
Part 1 \& 2
3
ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 \& 2

ENS 2025 A/B Elder Conservatorium Chorale II Part 1 \& 2
ENS 2026 A/B Adelaide Voices II Part 1 \& 2
ENS 2027 A/B Bella Voce II Part 1 \& 2
and specialist requirements as listed below:
Brass:
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II Part 1 \& 2
or
ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 \& 2

Keyboard:
PERF 2001 A/B Accompanying II Part 1 \& 2
Percussion:
ENS 2017 A/B Percussion Ensemble II Part 1 \& 2
and
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II
Part 1 \& 2
or
ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 \& 2
Strings:
ENS 2009 A/B Elder Conservatorium Symphony Orchestra II
Part 1 \& 2
ENS 2030 Chamber Music IIA 1.5
ENS 2031 Chamber Music IIB 1.5

Voice:
PERF 2003 A/B Stagecraft II Part 1 \& 2
PERF 2004 A/B Voice Practicum II Part 1 \& 2
and one of:
ENS 2025 A/B Elder Conservatorium Chorale II
Part 1 \& 2
ENS 2026 A/B Adelaide Voices II Part 1 \& 2
ENS 2027 A/B Bella Voce II Part 1 \& 2
Woodwind:
ENS 2009 A/B Conservatorium School Symphony Orchestra II Part 1 \& 2
or
ENS 2010 A/B Elder Conservatorium Wind Orchestra II Part 1 \& 2
and
ENS 2030 Chamber Music IIA
ENS 2031 Chamber Music IIB
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

## Level III

MUSCORE 3001 Music Since 19003
MUSCORE 3004 Music \& Music Making
in the Australian Context III
and
PERF 3500 A/B Classical Performance III Part 1 \& 2
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
ENS 3002 A/B Adelaide Connection III Part 1 \& 2
ENS 3009 A/B Elder Conservatorium
Symphony Orchestra III Part 1 \& 2
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 \& 2
ENS 3025 A/B Elder Conservatorium Chorale III Part 1 \& 2

3
ENS 3026 A/B Adelaide Voices III Part 1 \& 2
ENS 3027 A/B Bella Voce III Part 1 \& 2
and specialist requirements as specified:
Brass:
ENS 3009 A/B Elder Conservatorium
Symphony Orchestra III Part $1 \& 2$
or
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
Percussion:
ENS 3017 A/B Percussion Ensemble III Part 1 \& 2
and
ENS 3009 A/B Elder Conservatorium
Symphony Orchestra III Part 1 \& 2
or
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 \& 2
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
Voice:
PERF 3003 A/B Stagecraft III Part 1 \& 2
PERF 3004 A/B Voice Practicum III Part 1 \& 2
and one of:
ENS 3025 A/B Elder Conservatorium Chorale III Part $1 \& 2$

ENS 3026 A/B Adelaide Voices III Part 1 \& 2
ENS 3027 A/B Bella Voce III Part 1 \& 2
Woodwind:
ENS 3009 A/B Elder Conservatorium
Symphony Orchestra III Part 1 \& 2
or
ENS 3010 A/B Elder Conservatorium Wind Orchestra III Part 1 \& 2
and
ENS 3030 Chamber Music IIIA
ENS 3031 Chamber Music IIIB
and Electives selected from Clause 6.1.2.3 to complete a full load of 24 units.

### 6.1.2.2 Jazz

Candidates shall satisfactorily complete the following courses:

## Level I

JAZZ 1000 A/B Jazz Performance I Part 1 \& 29
JAZZ 1003 A/B Jazz Improvisation I Part 1 \& 2
MUSCORE 1005 Music Foundations I: Jazz 3
MUSCORE 1006 Music in Context I: Jazz
and an Ensemble from one of the following:
ENS 1001 A/B A Kind of Blue I Part 1 \& 2
ENS 1002 A/B Adelaide Connection I Part 1 \& 2
ENS 1004 A/B Big Band One I Part 1 \& 2
ENS 1005 A/B Big Band Two I Part 1 \& 2
ENS 1006 A/B Big Band Three I Part 1 \& 2
ENS 1011 A/B Jazz Guitar Band One I Part 1 \& 2
ENS 1012 A/B Jazz Guitar Band Two I Part 1 \& 2
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 \& 29
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 lieuof 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 afull 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 Orchestra 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

## ENS 1023 A/B Chamber Orchestra I Part 1 \& 2

3ENS 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 \& 23
ENS 2010 A/B Elder Conservatorium Wind Orchestra 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
ENS 2023 A/B Chamber Orchestra II Part 1 \& 23
ENS 2025 A/B Elder Conservatorium Chorale II Part 1 \& 2 ..... 3
ENS 2026 A/B Adelaide Voices II Part 1 \& 2 ENS 2026 AB Adelaide Voices II Part 1 \& ..... 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 ConservatoriumSymphony Orchestra III Part 1 \& 23
ENS 3010 A/B Elder Conservatorium Wind Orchestra 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
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
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
GENMUS 1014 Sound \& Media Technology ..... 3 ..... 3
GENMUS 1026 A/B Perspectives in Music Technology I Part 1 \& 2 ..... 3
GENMUS 2003 Instrumental Music Pedagogy II ..... 3
GENMUS 2005 Music, Media
and Contemporary Society II ..... 3
GENMUS 2006 Orchestration II ..... 3
GENMUS 2010 A/B Studies in Composition II Part 1 \& 2
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 3003 Instrumental Music Pedagogy III ..... 3
GENMUS 3005 Music, Media and Contemporary Society IIIA ..... 3
GENMUS 3010 A/B Studies in Composition III Part 1 \& 23
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
GERM 2006 Music \& Politics: German Song \&Society II ..... 3
GERM 3006 Music \& Politics: German Song \&Society III ..... 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 2001 Music in Context IIA:
Polyphony \& Harmony ..... 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
MUSST 3001 Approaches to Music III
MUSST 3002 Advanced Music Seminar IIIA 3
MUSST 3003 Advanced Music Seminar IIIB 3
MUSST 3005 Foundation for Honours III: Music Studies
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
PERF 1002 A/B Keyboard Musicianship I Part 1 \& 2
PERF 2003 A/B Stagecraft II
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 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 2006) 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 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:
(1) 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.

## 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.

### 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
MUSED 2003 A/B Music Education Ensembles II
Part 1 \& 2
and either
MUSCORE 2001 Music in Context IIA:
Polyphony \& Harmony
MUSCORE 2002 Music in Context IIB:
Nineteenth Century Music
or
MUSCORE 2003 Music in Context IIA: Jazz
MUSCORE 2004 Music in Context IIB: Jazz
and
COMP 2500 A/B Composition II Part 1 \& 2
or
MUSTECH 2003 A/B Music Technology II Part 1 \& 2
and
GENMUS 2026 A/B Perspectives in Music Technology II
Part $1 \& 2$
or
PERF 2600 A/B Practical Study II:
Performance Part 1 \& 2
or
JAZZ 2600 A/B Practical Study II: Jazz Part 1 \& 2
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

## Level III

MUSED 3001 Music Education IIIA
MUSED 3002 Music Education IIIB
MUSED 3003 A/B Music Education Ensembles III Part $1 \& 2$
MUSED 3004 Music Education Practicum III
and either
MUSCORE 3001 Music in Context: Music Since 1900
or
MUSCORE 3002 Music in Context IIIA: Jazz
or
MUSCORE 3003 Music in Context IIIB: Jazz
and
COMP 3500 A/B Composition III Part 1 \& 2
or
MUSTECH 3003 A/B Music Technology III Part 1 \& 2

GENMUS 3026 A/B Perspectives in Music Technology III Part 1 \& 2
or
PERF 3600 A/B Practical Study III:
Performance Part 1 \& 2
or
JAZZ 3600 A/B Practical Study III: Jazz Part 1 \& 2
or
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 Educational Psychology A (UG)
EDUC4702 Teaching Practice I (UG) 3
EDUC4703 Teaching Practice II (UG) 3
EDUC4704 Curriculum Frameworks (UG) 2
EDUC4705 Curriculum Perspectives (UG) 2
EDUC 4706 Educational Psychology B (UG) 2
EDUC 4707 Culture, Education and Society (UG) 2
MUSED 4001 A/B Music Education IV Part 1 \& 2
and an elective selected from clause 6.1.2.3 or
MUSED 4002 A/B Music Education Project IV Part 1 \& 23
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 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 2006) 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.

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:
(1) 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.
$4 \quad$ 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 Practical Study 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.

### 6.3.2.1 Practical Study: Composition

Candidates shall satisfactorily complete the following courses:

## Level I

COMP 1500 A/B Composition I Part 1 \& 2
GENMUS 1003 Musics of the World I 3
MUSCORE 1007 Introduction to Theory \& Analysis of Music I

MUSCORE 1008 Contrapuntal Analysis \& Composition IB 3
MUSCORE 1009 Foundations of Music History IA
MUSCORE 1010 Foundations of Music History IB
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

## Level II

COMP 2500 A/B Composition II Part 1 \& 26
MUSCORE 2001 Music in Context IIA:
Polyphony \& Harmony
MUSCORE 2002 Music in Context IIB:
Nineteenth Century Music
MUSST 2001 Approaches to Music IIA 3
MUSST 2002 Approaches to Music IIB 3
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

## Level III

COMP 3500 A/B Composition III Part 1 \& 2
MUSCORE 3001 Music in Context III: Music Since 1900
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 complete a full load of 24 units.

### 6.3.2.2 Practical Study: Performance

## Level I

GENMUS 1003 Musics of the World I
MUSCORE 1007 Introduction to Theory \& Analysis of Music I
MUSCORE 1008 Contrapuntal Analysis \& Composition IB 3
MUSCORE 1009 Foundations of Music History IA
MUSCORE 1010 Foundations of Music History IB

PERF 1600 A/B Practical Study I:
Performance Part 1 \& 2
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

## Level II

MUSCORE 2001 Music in Context IIA:
Polyphony \& Harmony
MUSCORE 2002 Music in Context IIB:
Nineteenth Century Music
MUSST 2001 Approaches to Music IIA
MUSST 2002 Approaches to Music IIB
PERF 2600 A/B Practical Study II:
Performance Part 1 \& 2
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
MUSCORE 3004 Music \&Music Making
in the Australian Context III
MUSST 3001 Approaches to Music III
PERF 3600 A/B Practical Study III:
Performance Part 1 \& 2
and/or Electives selected from clause 6.1.2.3 to complete a full load of 24 units.

### 6.3.2.3 Practical Study: Music Technology

Candidates shall satisfactorily complete the following courses:

## Level I

GENMUS 1026 A/B Perspectives in Music Technology I Part 1 \& 2

MUSCORE 1007 Introduction to Theory \& Analysis of Music I
MUSCORE 1008 Contrapuntal Analysis \& Composition IB 3
MUSCORE 1009 Foundations of Music History IA
MUSCORE 1010 Foundations of Music History IB
MUSTECH 1003 A/B Music Technology I Part 1 \& 2
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

MUSCORE 2001 Music in Context IIA:
Polyphony \& Harmony
MUSCORE 2002 Music in Context IIB:
Nineteenth Century Music

MUSST 2001 Approaches to Music IIA 3

MUSST 2002 Approaches to Music IIB
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.

## Level III

GENMUS 3026 A/B Perspectives in Music Technology III Part 1 \& 2

MUSCORE 3001 Music in Context III: Music Since 19003
MUSCORE 3004 Music \&Music Making
in the Australian Context III 3

MUSST 3001 Approaches to Music III 3
MUSTECH 3003 A/B Music Technology III Part 1 \& 2
and Electives selected from clause 6.1.2.3 to complete a full load of 24 units.
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)
1 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 2006) 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 ViceChancellor.

## Single studies in music

$5 \quad$ 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 15 weekly 30 or 60 minute lessons per semester or 30 weekly 30 or 60 minutes lessons 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:
(i) 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 15 weekly 30 or 60 minute lessons per semester or 30 weekly 30 or 60 minute lessons per year.

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

- Diploma in Agricultural Production
- Diploma in Natural Resource Management
- Diploma in Wine Marketing
- Degree of Bachelor of Agricultural Science*
- Degree of Bachelor of Agricultural Science (Horticultural Science)*
- Degree of Bachelor of Agricultural Science (Integrated Pest Management)*
- Degree of Bachelor of Agricultural Science (Oenology)*
- Degree of Bachelor of Agricultural Science (Plant Breeding)*
- Degree of Bachelor of Agricultural Science (Viticultural Science)*
- Degree of Bachelor of Agriculture
- Degree of Bachelor of Environmental Science*
- Degree of Bachelor of Food Science and Technology
- Degree of Bachelor of Food Technology and Management*
- Degree of Bachelor of Natural Resource Management
- 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)
- Degree of Bachelor of Science (High Performance Computational Physics)(Honours)
- Degree of Bachelor of Science (Jurisprudence)
- Degree of Bachelor of Science (Molecular and Drug Design)
- Degree of Bachelor of Science (Molecular Biology)
- Degree of Bachelor of Science (Nanoscience and Materials)
- Degree of Bachelor of Science (Natural Resource Management)
- Degree of Bachelor of Science (Optics \& Photonics)
- Degree of Bachelor of Science (Petroleum GeoScience)
- Degree of Bachelor of Science (Space Science \& Astrophysics)
- Degree of Bachelor of Science (Sustainable Environments)
- Degree of Bachelor of Science (Viticulture)
- Degree of Bachelor of Arts and Bachelor of Science
- Degree of Bachelor of Wine Marketing
- Honours degree of Bachelor of Agricultural Science
- 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
* No intake into these programs in 2006.


## 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. The Head of school or centre may approve minor changes to any previously approved syllabus.

## 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 6 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 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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

### 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.

## 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 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 Natural Resource Management 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.

### 2.1.2 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 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 6 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 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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 4 Qualification Requirements

### 4.1 Academic Program

For the award Diploma in Natural Resource Management a student shall complete all courses listed in the program of study for Level I and Level II of the Bachelor of Natural Resource Management 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.

Note: This program is is available in the external mode only.

## 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 for courses of up to 4 units in value, to a maximum of 6 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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 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 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 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 for courses of up to 4 units in value, to a maximum 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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for
the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 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
APP ECOL 1004RW Cell Biology and Genetics 3
PLANT SC 100RW Chemistry
and Introductory Biochemistry A
semester 2
AGRIBUS 1009RW Rural Business Planning A
APP ECOL 1003RW Biology of Plants and Animals 3
SOIL\&WAT 1000RW Soils and Land
Management Systems
STATS 1002RW Data Management and Interpretation
full year
AGRONOMY 1006 ARW/BRW Agricultural Experience I

## Level II

semester 1
AGRIBUS 2033RW Rural Finance and Marketing 4
SOIL\&WAT 2012WT Soil and Water Resources 4
SOIL\&WAT 2013RW Introduction to Engineering
in Agriculture
semester 2
AGRONOMY 2008RW Agricultural Experience II AGRONOMY 2013RW Production Agronomy
ANIMLSC 2030RW Livestock Production Science
PLANTSC 2003RW Microbiology
and Invertebrate Biology

## Level III

## semester 1

AGRIBUS 3012RW Rural Business Management 3
AGRONOMY 3020RW Principles and Practice
of Communications

Plus electives to the value of 6 units chosen from:
AGRONOMY 3005WT Irrigation Science
AGRONOMY 3012RW Advanced Agronomy 3
ANIML SC 3017RW Comparative Animal Physiology
ANIML SC 3045RW Animal Breeding and Genetics ..... 3
APP ECOL 3008WT Integrated Pest Management A ..... 3
HORTICUL 3000WT Production Horticulture ..... 3
HORTICUL 3001WT Horticultural Systems ..... 3
PLANT SC 3007WT Introductory Plant Breeding ..... 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 3016WT Crop and Pasture Ecology ..... 3
ANIML SC 3015RW Animal Nutrition \& Metabolism ..... 3
ANIML SC 3016RW Animal Health and Welfare ..... 3
GEOLOGY 3010 Remote Sensing (S) ..... 3
PLANT SC 3004WT Mineral Nutrition of Plants ..... 3
PLANT SC 3018WT Advanced Plant Breeding ..... 3
SOIL\&WAT 3012WT Soil Water Management ..... 3Alternative electives are listed below:
semester 1 or 2
AGRONOMY 3008RW Individual Studies (Ag)3
full yearAPP ECOL 3022AEX/BEX Integrated WeedManagement
Summer semester/other vacation periods
AGRONOMY 3026RW Ecology and Managementof Rangelands (a)3
ANIML SC 3018RW Pig Production -
Science into Management3

ANIML SC 3019RW Ecology and Management of Vertebrate Pests (c)

ANIML SC 3043RW Biotechnology
in the Animal Industries (c)
3
HORTICUL 3004WT Olive Production and Marketing (a) 3
SOIL\&WAT 3014WT GIS for Agricultural Science (b) 3
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 and Pest 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 or 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, forthe years 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.
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 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 pass classification of Conceded Pass for a course up to 4 units in value 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.
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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 5 Qualifications 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

semester 1
BIOLOGY 1101 Biology 1: Molecules, Genes and Cells A
or
BIOLOGY 1102 Biology 1: Molecules, Genes and Cells B
CHEM 1100 Chemistry 1A
or
CHEM 1101 Foundations of Chemistry 1A
CHEM ENG 1001 Introduction
to Process Engineering
FOODT\&M 1001 Consumer Food and Health
semester 2
BIOLOGY 1202 Biology 1:Organisms
CHEM 1200 Chemistry 1B
or
CHEM 1201 Foundations of Chemistry1B
FOODT\&M 1000RG Introduction to Food Technology 3
STATS 1004 Statistical Practice 1 (Life Sciences) 3

### 5.3.2 Level II

semester 1
BIOCHEM 2106WT Biochemistry II (Ag.) A
FOODT\&M 2001RG Food Engineering Principles 2
FOODT\&M 2105RG Food Preservation and Packaging
PLANT SC 2004WT General Microbiology II
semester 2
FOODT\&M 2002WT Nutrition II
FOODT\&M 2003RG Food Microbiology II 4
FOODT\&M 2205RG Plant Food Processing A

### 5.3.3 Level III

semester 1
FOODT\&M 3011RG Food Chemistry 3
FOODT\&M 3012RG Food Product Development 3
PLANT SC 3002WT Biotechnology in the Food and Wine Industry
WINEMKTG 3014WT Food Marketing 4
semester 2
APP ECOL 3017WT Communication in the Agri-food Industry 3
FOODT\&M 3014RG Food Quality and Regulations 3
FOODT\&M 3025RG Animal Food Processing 3
FOODT\&M 3027RG Sensory Evaluation of Foods 3

### 5.4 The Honours Degree

5.4.1 Candidates completing the Bachelor of Food Science and Technology to a standard which is acceptable to the Faculty may proceed to the Honours degree.
5.4.2 The work of the Honours program must be completed in one year of full-time study, except where, on the recommendation of the Head of School, a candidate may complete the work for the Honours degree over two consecutive years, but no more.
5.4.3 The Honours grade may be awarded in one of the following classifications:
1 First Class
2A Second Class div A
2B Second Class div B
3 Third Class
NAH Not Awarded.

### 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 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 Natural Resource Management

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 Natural Resource Management.

## 2 Duration of program

The program of study for the Bachelor 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
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 Natural Resource Management 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.

### 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.

## 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 Credit, Pass. In addition there shall be a pass classification of Conceded Pass for course of not more than 4 units but a candidate may only present courses for which this result 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.
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) (b) A candidate who has twice failed to obtain a Pass or higher in the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 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 For the degree Bachelor of Natural Resource Management a student shall present passes to the value of 72 units from the courses listed below, including all core courses and between 24 and 30 units of Level I courses and between 18 and 24 units of Level II courses:

### 5.2.1 Level I

semester 1
APP ECOL 1002RW Field Studies IA
APP ECOL 1004RW Cell Biology and Genetics 3
ENV BIOL 1002 Environmental Biology I
PLANT SC 1001RW Chemistry
and Introductory Biochemistry A

## semester 2

APP ECOL 1003RW Biology of Plants and Animals
APP ECOL 1006RW Plant and Animal Diversity 3
SOIL\&WAT 1000RW Soils and Land Management Systems 1
STATS 1002RW Data Management and Interpretation

### 5.2.2 Level II

Core
semester 1
ENV BIOL 2001 Evolutionary Biology EBII
SOIL\&WAT 2011RW Spatial Information and Land Evaluation
Sollqwat 2012WT Soil and Water Resources

## semester 2

ANIML SC 2014RW Wildife Management
ENV BIOL 2003 Ecology EBII
PLANT SC 2003WT Microbiology and Invertebrate Biology
5.2.3 Level III

Core
semester 1
AGRIBUS 3001RW Economics
of Resource Management III
AGRONOMY 3020RW Principles and Practice
of Communications
Electives to the value of 6 units chosen from:
APP ECOL 3008WT Integrated Pest Management A 3
APP ECOL 3016RW Individual Studies A 3
ENV BIOL 3004 Freshwater Ecology III 3
ENV BIOL 3008 Conservation and Restoration 3
ENV BIOL 3011WT Evolution and Diversity of Insects 3
GEST 3009 Introduction to Environmental Impact Assessment 6

PLANT SC 3130WT Plant Pathology 3
SOLL\&WAT 3002WT Soil Management \& Conservation 3
SOIL\&WAT 3016WT Soil Ecology and Nutrient Cycling 3 semester 2
AGRONOMY 3004RW Land Management Systems for the Future
Electives to the value of 9 units chosen from:
AGRONOMY 3000RW Agroforestry
3
AGRONOMY 3016WT Crop and Pasture Ecology 3
APP ECOL 3003RW Individual Studies B 3
GEOLOGY 3010 Remote Sensing (S) 3
Alternative electives are listed below:
full year
APP ECOL 3022 AEX/BEX Integrated
Weed Management
summer semester/other vacation periods
AGRONOMY 3026RW Ecology and Management of Rangelands (July)
ANIMLSC 3019RW Ecology and Management of Vertebrate Pests (s)
ENVBIOL 3012WT Integrated Catchment Management III*
SOLL\&WAT 3004WT Environmental Toxicology
and Remediation (s)

SOIL\&WAT 3007WT GIS for Environmental Management (s)
SOIL\&WAT 3014WT GIS for Agricultural Sciences* 3
SOIL\&WAT 3015WT Ecosystem Modelling for Resource and Environmental Management (s)
(s) $=$ summer semester $\quad *=$ September

Students may apply to take courses from other programs in the Faculty provided prerequisites have been satisfied.

### 5.3 Honours degree of Bachelor of Natural Resource Management

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 A candidate may, subject to the approval of the Head of Discipline concerned, proceed to the Honours degree in one of the following courses:

ANIMAL SC 4003 ARW/BRW
Honours Animal Science (B.NR.Mgt)
APP ECOL 4000 ARW/BRW
Honours Plant and Pest Science (B.NR.Mgt.)
ENVBIOL 4010 A/B
Honours Environmental Biology (B.NR.Mgt.)
SOIL\&WAT 4000 AWT/BWT
Honours Soil and Land Systems (B.NR.Mgt.)
or
with the approval of the Faculty in each case, in a course taught by another Department 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.

## Academic Program Rules

1 General
There shall be a degree of Bachelor of Oenology
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.
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 desire to take a Level III course before completing all compulsory Level I and II courses must obtain the permission of the Faculty.

### 2.3 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.

### 2.3.1 Level III

Pass in the following courses to the value of 24 units: semester 1
CHEM ENG 3007WT Winery Engineering 3
OENOLOGY 3007WT Stabilisation and Clarification 3
OENOLOGY 3016WT Cellar and Winery Waste Management
OENOLOGY 3047WT Winemaking at Vintage

## semester 2

AGRIBUS 3017WT Business Management for Agricultural Sciences
OENOLOGY 3037WT Distillation, Fortified and Sparkling Winemaking

OENOLOGY 3046WT Fermentation Technology 3
VITICULT 3012WT Viticultural Production 3

### 2.3.2 Level IV

Courses to the value of 12 units including:
semester 1
OENOLOGY 3033WT Industry Experience (Oenology) 4
VITICULT 3005WT Grape Industry Practice, Policy and Communication
semester 2
OENOLOGY 3003WT Wine Packaging and Quality Management
OENOLOGY 3045WT Advances in Oenology 3
And a further 12 units of electives chosen from courses 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 and Marketing 3
PLANTSC 3002WT Biotechnology in the Food and
Wine Industries
SOIL\&WAT 3014WT GIS for Agricultural Sciences 3
or
a 12 unit Honours research project 12

### 2.4 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.

## 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.

## 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 determine3 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 7 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 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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 4 Qualifications 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
AGRIBUS 3047RW Organisational Management for Rural Enterprises
AGRIBUS 3048RW Quality Management for Rural Enterprises
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
WINEMKTG 1015EX Data Analysis for Wine and Food Business
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
AGRIBUS 3012RW Rural Business Management 3
AGRIBUS 3044RW Individual Studies
in Rural Enterprise Management
FOODT\&M 3018WT Food Marketing 3
SOIL\&WAT 3014WT GIS for Agricultural Sciences 3
WINEMKTG 3047EX Internet Marketing and E-Commerce

## Production Electives

Agronomy
AGRONOMY 2013RW Production Agronomy 4
AGRONOMY 3000RW Agroforestry 3
AGRONOMY 3004RW Land Management Systems
for the Future
AGRONOMY 3012RW Advanced Agronomy 3
PLANTSC 3007WT Introductory 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
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)*

### 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:
(a) 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 for courses of up to 4 units in value, to a maximum of 7 units or to a maximum of 4 units for the degree of 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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## $5 \quad$ 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, which include:
BIOCHEM 3000 Molecular and Structural Biology III 6
BIOCHEM 3001 Cell and Developmental Biology III

## 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
Chemical - Double Major
Courses offered in Chemistry to the value of at least 18 units, which include:

CHEM 3111 Chemistry III 6

CHEM 3112 Chemistry Applications III 6

## Ecology

Courses to the value of at least 9 units which include:
ENV BIOL 3006 Research Methods in Environmental Biology III 3
and
ENV BIOL 3121 Concepts in Ecology
and at least one of
APPECOL3028WT Insect Ecology 3

ENV BIOL 3004 Freshwater Ecology 3
ENV BIOL 3008 Conservation and Restoration 3
ENV BIOL 3010 Marine Ecology 3

SOIL\&WAT 3016WT Soil Ecology and Nutrient Cycling3

Entomology
APPECOL3028WT Insect Ecology
and
ENV BIOL 3011 Evolution and Diversity of Insects and either

ENV BIOL 3002 Australian Biota:

Past, Present and Future
or
ENV BIOL 3008 Conservation and Restoration

ENV BIOL 3122 Evolution and Palaeobiology III

## Environmental Geoscience

Courses to the value of at least 9 units, which include:
GEOLOGY 3010 Remote Sensing
GEOLOGY 3014 Surficial Geology III 3
GEOLOGY 3015 Surficial Geology III Field Program

## Geology

Courses to the value of at least 9 units, which include:
GEOLOGY 3013 Tectonics III
GEOLOGY 3016 Igneous and Metamorphic Geology III
GEOLOGY 3019 Field Geoscience Program III

## Geophysics

Courses to the value of at least 9 units, which include:
GEOLOGY 3008 Theoretical Geophysics III
GEOLOGY 3017 Petroleum Exploration III 3
GEOLOGY 3018 Mineral Exploration III

## Genetics

Courses to the value of at least 9 units which include:
GENETICS 3000 Molecular Genetics:Genomes and
Gene Expression
GENETICS 3006 Human, Developmental and Evolutionary Genetics

## Marine Biology

Courses to the value of at least 9 units, which include:
ENV BIOL 3006 Research Methods in Environmental Biology III
and
ENV BIOL 3010 Marine Ecology
and either
ENV BIOL 3121 Concepts in Ecology
or
ENV BIOL 3122 Evolution and Palaeobiology III

## Microbiology and Immunology

Courses to the value of 9 units which include:
MICRO 3000 Infection and Immunity A
MICRO 3001 Infection and Immunity B

## Molecular Biomedical Science

Courses to the value of $I 2$ units taken from the courses 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 Pharmacology to the value of at least 9 units.

Physics
Courses offered in Physics to the value of at least 9 units, which include:

PHYSICS 3002 Experimental Physics III
and at least two of
PHYSICS 3001 Electromagnetism \& Optics III
PHYSICS 3004 Quantum Mechanics III
PHYSICS 3009 Statistical Mechanics III

## Theoretical Physics

Courses offered in Physics to the value of at least 9 units, which include:

PHYSICS 3004 Quantum Mechanics III
3
PHYSICS 3006 Advanced Dynamics and Relativity
PHYSICS 3009 Statistical Mechanics III
and at least one of
PHYSICS 3000 Computational Physics III
PHYSICS 3022 Applied Quantum Mechanics III

## Physics and Theoretical Physics

A major in Physics and Theoretical Physics may be obtained by presenting courses offered in Physics to the value of at least 18 units, which include:

PHYSICS 3002 Experimental Physics III
PHYSICS 3004 Quantum Mechanics III
PHYSICS 3006 Advanced Dynamics and Relativity
PHYSICS 3009 Statistical Mechanics III
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.

## Physiology

Courses offered in Physiology to the value of at least 9 units.

## Psychology

Courses offered in Psychology to the value of at least 9 units which include:

PSYCHOL 3000 Psychological Research Methodology III

## Soil Science

Courses to the value of at least 9 units, which include at least two of the following:

## SOIL\&WAT 3002WT Soil Management \& Conservation

SOIL\&WAT 3012WT Soil Water Management
SOIL\&WAT 3016WT Soil Ecology \& Nutrient Cycling
and additional courses if required, from the following:
GEOLOGY 3014 Surficial Geology III
PLANTSC 3004WT Mineral Nutrition of Plants 3
SOILqWAT 3004WT Environmental Toxicology $\&$ Remediation

## Spatial Information

SOIL\&WAT 3007WT GIS for Environmental Management

> or

SOIL\&WAT 3014WT GIS for Agricultural Sciences

GEOLOGY 3010 Remote Sensing
or
SOIL\&WAT 3008WT Remote Sensing for Environmental \& Agricultural Sciences
and
GEOLOGY 3015 Surficial Geology III Field Program
or an additional Level III course from Soil \&Land Systems or Environmental Biology

## Zoology

Courses to the value of at least 9 units, which include:
ENV BIOL 3003 Ecophysiology of Animals III
and
ENV BIOL 3122 Evolution and Palaeobiology
and an additional Level III Environmental Biology course to the value of 3 units.
5.5 Candidates shall complete their program of study for the degree under the current Academic Program Rules except that candidates who commenced their program of study prior to 2004 may qualify for the degree by fuffiling the requirements of the regulations and schedules in force prior to 2004, with such modifications as the Faculty may deem necessary to take account of changes to courses from 2004 onwards.

Alternatively, candidates enrolled prior to 2004 may complete their program 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 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.

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

1 Pattern of study
Commencing students are encouraged to enrol in one of the recommended foundation packages which have been developed to ensure appropriate preparation for Level II and III studies. However, provided that they comply with the prerequisites for each course, students may select their own combinations 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.
2 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.
3 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 $\Varangle$ Management of Rangelands APPECOL 3022AEX/BEX Integrated Weed Management PATHOL 3003 General Pathology IIIHS
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 <br> \section*{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 and Applications 3
PHYSICS 1100 Physics IA 3
PHYSICS 1101 Physics for the Life \& Earth Sciences IA 3
PSYCHOL 1000 Psychology IA 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 4.2.1.1 of the degree of Bachelor of Mathematical and Computer Sciences, excluding COMP SCI 1003 Internet Computing .

## 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 2002 Botany EBII 4
GENETICS 2100 Genetics IIA: 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

PHYSICS 2100 Physics IIA

PHYSIOL 2003 Human Physiology IIA:Heart, Lungs
and Circulation

PSYCHOL 2001 Psychological Research Methodology II 4 PSYCHOL 2002 Psychology IIA
SOIL\&WAT 2011RW Spatial Information and Land Evaluation

SOIL\&WAT 2012 Soil and Water Resources 4
semester 2
ANAT SC 2105 Comparative Anatomy of Body Systems II

BIOCHEM 2200 Biochemistry IIB
CHEM 2200 Chemistry IIB ..... 4
CHEM 2207 Analytical Chemistry ..... 4
ENV BIOL 2000 Zoology EBII ..... 4
ENV BIOL 2003 Ecology EBII ..... 4
GENETICS 2200 Genetics IIB:Function and Diversity of Genomes ..... 4
GEOLOGY 2006 Igneous \& Metamorphic Geology II ..... 4
GEOLOGY 2008 Surficial Geology ..... 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 2211 Electromagnetism II ..... 2
PHYSIOL 2004 Human Physiology IIB:Homeostasis and Nervous System ..... 4
PSYCHOL 2003 Psychology IIB ..... 4
5.6.4 Mathematical and Computer Sciences semester 1
APP MTH 2000 Differential Equations \& Fourier Series ..... 2
APP MTH 2002 Vector Analysis \& Complex Analysis * ..... 2* also offered in semester 2semester 2
APP MTH 2002 Vector Analysis \& Complex Analysis ..... 2
APP MTH 2009 Numerical Analysis and Probability and Statistics ..... 2
STATS 2004 Laplace Transforms and Probability and Statistical Methods ..... 2

All Level II Mathematical and Computer Sciences courses, listed under Academic Program Rule 4.2.2.1 of the degree of Bachelor of Mathematical and Computer Sciences. The course MATHS 2004 Mathematics IIM may be presented only as four units at Level I except that candidates may not present both MATHS 1101

Mathematics IA with MATHS 1012 Mathematics IB and MATHS 2004 Mathematics IIM for the degree.

## Level III

### 5.6.5 Agronomy

semester 2

AGRONOMY 3000RW Agroforestry
Anatomical Sciences
semester 1
ANAT SC 3102 Comparative Reproductive Biology of Mammals

ANAT SC 3103 Integrative and Comparative Neuroanatomy

## semester 2

ANAT SC 3101 Biological Anthropology
ANAT SC 3104 Structural Cell Biology
Chemistry
semester 1
CHEM 3111 Chemistry III 6
CHEM 3112 Chemistry Applications 6
semester 2
CHEM 3211 Heterocyclic Chemistry and Molecular
Devices III
CHEM 3212 Materials Chemistry III 6
CHEM 3213 Advanced Synthetic Methods III 6
CHEM 3214 Medicinal and Biological Chemistry 6
Clinical and Experimental Pharmacology
semester 1
PHARM 3010 Pharmacology A III
semester 2
PHARM 3011 Pharmacology B III
Environmental Biology
semester 1
ENV BIOL 3002 Australian Biota: Past, Present \& Futur e 3
ENV BIOL 3003 Ecophysiology of Animals III 3
ENV BIOL 3004 Freshwater Ecology III 3
ENV BIOL 3006 Research Methods in Environmental
Biology III
ENV BIOL 3011WT Evolution and Diversity of Insects 3
ENV BIOI 3121 Concepts in Ecology 3
ENV BIOL 3122 Evolution and Palaeobiology 3
semester 2
ENV BIOL 3008 Conservation and Restoration 3
ENV BIOL 3009 Ecophysiology of Plants III 3

ENV BIOL 3010 Marine Ecology III 3
ENV BIOL 3012WT Integrated Catchment Management III

Geology and Geophysics
semester 1
GEOLOGY 3013 Tectonics III 3
GEOLOGY 3016 Igneous \& Metamorphic Geology III 3
GEOLOGY 3017 Petroleum Exploration III 3
GEOLOGY 3018 Mineral Exploration III 3
semester 2
GEOLOGY 3008 Theoretical Geophysics III 3
GEOLOGY 3010 Remote Sensing (S) 3
GEOLOGY 3014 Surficial Geology III 3
GEOLOGY 3015 Surficial Geology III Field Program 3
GEOLOGY 3019 Field Geoscience Program III 3
Molecular Biosciences
semester 1
BIOCHEM 3000 Molecular and Structural Biology III 6
GENETICS 3000 Molecular Genetics: Genomes
and Gene Expression
MICRO 3000 Infection and Immunity A 6
semester 2
BIOCHEM 3001 Cell and Developmental Biology III 6
GENETICS 3006 Human, Developmental and
Evolutionary Genetics
MICRO 3001 Infection and Immunity B 6
Physics
semester 1
PHYSICS 3000 Computational Physics 2
PHYSICS 3001 Electromagnetism \& Optics III 3
PHYSICS 3004 Quantum Mechanics IIIA 3
PHYSICS 3009 Statistical Mechanics 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 Environment III 2
PHYSICS 3020 Photonics III 2
PHYSICS 3022 Applied Quantum Mechanics IIIB 2
Physiology
semester 1
PHYSIOL 3001 Neurobiology III ..... 6
semester 2
PHYSIOL 3000 Advanced Systems Physiology6
Plant and Pest Science ..... semester 2
APP ECOL 3028WT Insect Ecology ..... 3
PLANT SC 3004WT Mineral Nutrition of Plants ..... 3
PLANT SC 3009WT Plant Molecular Biology ..... 6
Psychology
semester 1
PSYCHOL 3000 Psychological Research Methodology III ..... 4
PSYCHOL 3010 Social Psychology II ..... 2
PSYCHOL 3013 Learning and Behaviour III ..... 2
PSYCHOL 3016 Language Processes III ..... 2
PSYCHOL 3017 Health Psychology III ..... 2
semester 2
PSYCHOL 3003 Developmental Psychology III ..... 2
PSYCHOL 3005 Perception and Cognition III ..... 2
PSYCHOL 3006 Psychology: Physiology \& Behaviour III ..... 2
PSYCHOL 3009 Metapsychology: Psychology, Sciences and Society III ..... 2
PSYCHOL 3014 Individual Differences III ..... 2
PSYCHOL 3015 Human Relations III ..... 2
Soil and Land Systems
summer semester
SOIL\&WAT 3004WT Environmental Toxicology and Remediation ..... 3
SOIL\&WAT 3007WT GIS for Environmental Management ..... 3
SOIL\&WAT 3008WT Remote Sensing for Environmental and Agricultural Sciences ..... 3
semester 1
SOIL\&WAT 3015 WT Ecosystem Modelling for Resourceand Environmental Management3
SOIL\&WAT 3016WT Soil Ecology and Nutrient Cycling ..... 3
SOIL\&WAT 3022WT Soil Management \& Conservation ..... 3
semester 2
SOIL\&WAT 3012WT Soil Water Management ..... 3
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 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 (BSc) 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 (B.Sc.)
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 4012W Honours Plant and Pest Science (B.Sc.)
SOIL\&WAT 4001WT Honours Soil and Land Systems (B.Sc.)
VITICULT 4005WT Honours Wine \& Horticulture (B.Sc.)
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

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 (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।

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 1A or

CHEM 1100 Chemistry IA
semester 2
BIOLOGY 1202 Biology 1:Organisms
CHEM 1201 Foundations of Chemistry 1B 3 or

CHEM 1200 Chemistry IB
GEOLOGY 1100 Earth's Interior ..... 3
STATS 1004 Statistical Practice 1 (Life Sciences)* ..... 3
together with an additional Level I course to the value of 3points chosen from:
AGRIBUS 1009RW Rural Business Planning A ..... 3
CHEM ENG 1001 Introduction to Process Engineering ..... 3
FOODT\&M 1000RG Introduction to Food Technology ..... 3
FOODT\&M 1001 Consumer Food and Health ..... 3
MATHS 1013 Mathematics 1MA ..... 3
PHYSICS 1101 Physics for Life and Earth Sciences 1A ..... 3
WINEMKTG 1013WT 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
ENVBIOL 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 \& Invertebrate Biology ..... 4

### 2.3.3 Level III

Passes in Level III courses selected as follows:

## Group 1

(a) passes (not conceded passes) in:

APP ECOL 3017WT Communication in the Agrifood Industries3
BIOMET 3000WT Agricultural Experimentation ..... 3

## Group 2

(b) passes in Level III courses to the value of 9 units in one of the following areas:
Crop and Pasture Science
AGRONOMY 2013RW Production Agronomy ..... 3
AGRONOMY 3012RW Advanced Agronomy ..... 3
AGRONOMY 3016WT Crop and Pasture Ecology ..... 3
PLANT SC 3004WT Mineral Nutrition of Plants ..... 3
PLANT SC 3007WT Introductory Plant Breeding ..... 3
PLANT SC 3009WT Plant Molecular Biology ..... 3
PLANT SC 3018WT Advanced Plant Breeding ..... 3
Horticulture Science
HORTICUL 3000WT Production Horticulture ..... 3
HORTICUL 3001WT Horticulture Systems ..... 3
HORTICUL 3004WT Olive Production ..... 3
Land Management and Soil Conservation
AGRONOMY 3026RW Ecology and Management of Rangelands ..... 3
GEOLOGY 3010 Remote Sensing (S) ..... 3
SOIL\&WAT 3002WT Soil Management \& Conservation ..... 3
SOIL\&WAT 3012WT Soil Water Management ..... 3
SOIL\&WAT 3014WT GIS for Agricultural Science ..... 3
SOIL\&WAT 3016WT Soil Ecology \& Nutrient Cycling ..... 3
Livestock Science
ANIML SC 3015RW Animal Nutrition and Metabolism ..... 3
ANIML SC 3016RW Animal Health ..... 3
ANIML SC 3017RW Comparative Animal Physiology ..... 3
ANIML SC 3018RW Pig Production - Science into Management ..... 3
ANIML SC 3043RW Biotechnology in the Animal Industries ..... 3
ANIML SC 3045RW Animal Breeding and Genetics ..... 3
Pest ScienceANIML SC 3019RW Ecology and Managementof Vertebrate Pests3
APP ECOL 3008WT Integrated Pest Management ..... 3
APP ECOL 3022AEX/BEX Integrated WeedManagement3
APP ECOL 3028WT Insect Ecology ..... 3
PLANT SC 3130WT Plant Pathology ..... 3

## Group 3

(c) passes in a further Level II courses to the value of 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 Agricultural Science |  |
| AGRONOMY 3005WT Irrigation Science | 3 |
| VITICULT 3020WT Table and Drying Grape | 3 |
| Production | 3 |

### 2.4 The Honours Degree

Refer to Academic Program Rule 5.7 of 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 (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 1: Molecules, Genes and Cells A 3
or
BIOLOGY 1102 Biology 1: Molecules, Genes and Cells B 3
CHEM 1100 Chemistry IA 3
or
CHEM 1101 Foundations of Chemistry 1A 3
PHYSICS 1101 Physics for the Life and Earth
Sciences IA
or
PHYSICS 1008 Physics Principles and Applications
or
ENV BIOL 1002 Environmental Biology I
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 1B
PHYSICS 1201 Physics for the Life and Earth Sciences 1B
or
STATS 1004 Statistical Practice 1 (Life Sciences)
2.3.2 Level II

Passes in Level II courses which shall include:
semester 1
ANIML SC 2031RW Companion Animal \& Equine Studies

BIOCHEM 2106WT Biochemistry II (Agriculture) A
ENV BIOL 2001 Evolutionary Biology EBII
semester 2
ANIML SC 2029WT Genes and Inheritance
ANIML SC 2030RW Livestock Production Science 4
PLANT SC 2003RW Microbiology and Invertebrate Biology
2.3.3 Level III

Passes in Level III courses which shall include: semester 1

ANIML SC 3017RW Comparative Animal Physiology
ANIML SC 3045RW Animal Breeding \& Genetics
semester 2
ANIML SC 3015RW Animal Nutrition \& Metabolism
ANIML SC 3016RW Animal Health \& Welfare
ANIML SC 3230RW Animal Behaviour, Welfare \& Ethics
and electives to the value of 9 units chosen from:
AGRONOMY 3026RW Ecology and Management
of Rangelands
ANIML SC 3018RW Pig Production - Science
into Management
ANIML SC 3019RW Ecology and Management of Vertebrate Pests

ANIML SC 3043RW Biotechnology in the Animal Industries

ENVBIOL 3008 Conservation and Restoration 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.

## 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 (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

1 General
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:
BIOLOGY 1101 Biology 1: Molecules,Genes and Cells A 3 or

BIOLOGY 1102 Biology 1: Molecules, Genes and Cells B 3 and

BIOLOGY 1201 Biology 1: Human Perspectives 3
CHEM 1100 Chemistry IA 3
and
CHEM 1200 Chemistry IB
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
GENETICS 2106 Genetics IIA (Biomedical Science)

GENETICS 2206 Genetics IIB (Biomedical Science)

MICRO 2101 Microbiology II (Biomedical Science)
and
MICRO 2201 Immunology and Virology II (Biomedical Science)
or
PHYSIOL 2101 Human Physiology IIA
(Biomedical Science)
and
PHYSIOL 2201 Human Physiology IIB (Biomedical Science)

## Group 2

(i) Level II courses to the value of not less than 8 units from the following:
ANAT SC 2104 Cells and Tissues II
and
ANAT SC 2105 Comparative Anatomy of Body Systems II

BIOCHEM 2100 Biochemistry IIA
and
BIOCHEM 2200 Biochemistry IIB
GENETICS 2100 Genetics IIA:
Foundations of Genetics
and
GENETICS 2200 Genetics IIB:
Function and Diversity of Genomes
MICRO 2004 Microbiology II
and
MICRO 2005 Immunology and Virology II

PHYSIOL 2003 Human Physiology IIA:
Heart, Lungs and Circulation
and
PHYSIOL 2004 Human Physiology IIB:
Homeostasis and Nervous System
(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 approval of the program coordinator

### 2.3.3 Level III

Passes in Level III courses to the value of not less than 24 units selected as follows:
(i) 12 units from the following which shall constitute a major in Biomedical Science:

GENETICS 3000 Molecular Genetics:
Genome and Gene Expression
and
GENETICS 3005 Developmental and Medical Genetics (Biomedical Science)
MICRO 3102 Infection and Immunity A (Biomedical Science)
and
MICRO 3202 Infection and Immunity B (Biomedical Sclence)
PHYSIOL 3102 Human Physiology IIIA
(Biomedical Science)
and
PHYSIOL 3202 Human Physiology IIIB (Biomedical Science)
(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 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.

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 (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

BIOLOGY 1202 Biology I: Organisms
BIOTECH 1000 Introduction to Biotechnology 3
CHEM 1100 Chemistry IA
and
CHEM 1200 Chemistry IB
CHEM ENG 1004 Introduction to Bio-processing
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
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:

BIOCHEM 2105 Biochemistry II(Biotech) A
MICRO2203 Immunology and Virology II (Biotechnology)
or in accordance with 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.
2.3.3 Level III
(a) passes in the compulsory courses:

BIOCHEM 3000 Molecular and Structural Biology III 6 BIOTECH 3000 Biotechnology Practice III
(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.

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 (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, 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 1

Passes in Level 1 courses to the value of 18 units which shall include:

BIOLOGY 1101 Biology I: Molecules, Genes and Cells A 3 or
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B
BIOLOGY 1202 Biology 1:Organisms
or
ENV BIOL 1002 Environmental Biology I
CHEM 1100 Chemistry IA
or
CHEM 1101 Foundations of Chemistry 1A 3
CHEM 1200 Chemistry IB 3
or
CHEM 1201 Foundations of Chemistry 1B 3
GEOLOGY 1100 Earth's Interior 13
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 ENVBIOL 1002 Environmental Biology I, but only with prior approval from the Program Coordinator.
2.3.2 Level II

Passes in Level 2 courses which include:
(i) passes in core courses
semester 1
CHEM 2100 Chemistry IIA
CHEM 2003 Environmental Chemistry II 4
semester 2
CHEM 2200 Chemistry IIB
CHEM 2208 Analytical Chemistry II (Ecochemistry) 4
(ii) passes in Level II courses to the value of 8 units from the list below
ENVBIOL 2001 Evolutionary Biology EBII
ENVBIOL 2003 Ecology EBII
GEOLOGY 2007 Sedimentary \&Structural Geology II
GEOLOGY 2008 Surficial Geology II
SOIL\&WAT 2012WT Soil \& Water Resources
or selected in accordance with Academic Program Rule 5.6.3 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 3 courses which shall include:
(i) passes in core courses

CHEM 3111 Chemistry II
CHEM 3112 Chemical Applications III
CHEM 3211 Heterocyclic Chemistry \& Molecular Devices III

CHEM 3212 Materials Chemistry III
(ii) passes in Level III courses to the value of 6 units taken from the list below:
ENV BIOL 3008 Conservation and Restoration ENV BIOL 3010 Marine Ecology III
ENV BIOL 3012WT Integrated CatchmentManagement III3
GEOLOGY 3014 Surficial Geology III ..... 3
GEOLOGY 3015 Surficial Geology Field Program 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, inconsultation with and subject to the approval of theprogram 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

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 (Evolutionary 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 (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 to the value of 16 units at Level II and 18 units at Level 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 18 units which shall include:
semester 1
BIOLOGY 1101 Biology I: Molecules, Genes \& Cells A
or
BIOLOGY 1102 Biology I: Molecules, Genes \& Cells B 3
CHEM 1100 Chemistry IA
or
CHEM 1101 Foundations of Chemistry 1A 3
GEOLOGY 1103 Earth Systems
semester 2
BIOLOGY 1202 Biology 1:Organisms 3
CHEM 1200 Chemistry IB 3
or
CHEM 1201 Foundations of Chemistry 1B 3
GEOLOGY 1100 Earth's Interior 3
together with additional Level I courses, of which at least 3
units must be chosen from:
semester 1
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
semester 2
MATHS 1012 Mathematics IB* 3
PHYSICS 1201 Physics for the Life \& Earth Sciences IB 3
STATS 1004 Statistical Practice 1 (Life Sciences) 3
with any additional course selected from the level I courses available under Academic Program Rules 5.3, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

* 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
or
ENV BIOL 2002 Botany EBII 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
ENV BIOL 2000 Zoology EB II 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*
GEOLOGY 2008 Surficial Geology II 4

* Students wishing to enrol in GENETICS 3006 Human, Developmental \& Evolutionary Genetics 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 EB II
or
ENV BIOL 2001 Evolutionary Biology EBII
ENV BIOL 2002 Botany EBII
GENETICS 2100 Genetics IIA: Foundations of Genetics
GENETICS 2200 Genetics IIB:
Function \& Diversity Genomes
with electives to the value of 8 units chosen from:
CHEM 2003 Environmental Chemistry II
ENV BIOL 2000 Zoology EB II
ENV BIOL 2002 Botany EBII 4
ENV BIOL 2003 Ecology EBII 4
GEOLOGY 2007 Sedimentary and Structural Geology II GEOLOGY 2008 Surficial Geology II

### 2.3.3 Level III

Passes in Level 3 courses as follows:
for a major in Palaeontology:
semester 1
ENV BIOL 3122 Evolution and Palaeobiology

## semester 2

ENV BIOL 3002 Australian Biota: Past, Present \& Future
ENV BIOL 3123 Issues in Evolutionary Biology
with electives to the value of 6 units chosen from:
GEOLOGY 3014 Surficial Geology III
plus elective courses to the value of 12 units taken from courses listed in Program Rule 2.3.3 for this degree, in addition to courses listed under Academic Program Rule 5.6.5 for the degree of Bachelor of Science. Suggested offerings include:

ENV BIOL 3006 Research Methods in Environmental Biology
ENV BIOL 3011WT Evolution and Diversity of Insects 3
ENV BIOL 3121 Concepts in Ecology 3
GENETICS 3000 Molecular Genetics: Genome and Gene Expression3
GEOLOGY 3010 Remote Sensing (S) ..... 3
GEOLOGY 3013 Tectonics III ..... 3
GEOLOGY 3015 Surficial Geology III Field Program ..... 3

For a major in Systematics and Molecular Evolution:
semester 1
ENV BIOL 3122 Evolution and Palaeobiology
semester 2
ENV BIOL 3002 Australian Biota: Past, Present \& Future
ENV BIOL 3123 Issues in Evolutionary Biology 3
GENETICS 3006 Human, Developmental and Evolutionary Genetics
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. Suggested electives include:
semester 1
ENV BIOL 3006 Research Methods
in Environmental Biology
ENV BIOL 3011WT Evolution and Diversity of Insects 3
ENV BIOL 3121 Concepts in Ecology 3
GENETICS 3000 Molecular Genetics:
Genomes \& Gene Expression 6

GEOLOGY 3013 Tectonics III 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

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

## 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 (High Performance Computational Physics) (Honours)

## 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 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.

### 2.3 Academic program

### 2.3.1 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 I A 3
CHEM 1200 Chemistry IB 3
ELEC ENG 1006 Electrical Engineering I 3

### 2.3.2 Level II

Passes in Level Il courses to the value of not less than 24 units which shall include :
semester 1
APP MATH 2000 Differential Equations
and Fourier Series
APP MATH 2002 Vector Analysis \& Complex Analysis * 2
PHYSICS 2001 Classical Mechanics II 2
PHYSICS 2100 Physics II A 4
semester 2
PHYSICS 2002 Classical Fields and Mathematical Methods
PHYSICS 2200 Physics II B
and at least one of
APP MTH 2003 Modelling with Differential Equations II
COMP SCl 2003 Numerical Methods 3
together with additional level II courses, selected in consultation with the program coordinator from:
COMP SCI 2000 Computer Systems 2
PURE MATH 2002 Algebra II 2
PURE MATH 2005 Multivariable Calculus II 2
and other Level II courses in Computer Science, and
Applied and Pure Mathematics.

* also available in semester 2


### 2.3.3 Level III

Passes in Level III courses to the value of at least 24 units which shall include:

PHYSICS 3000 Computational Physics 2
PHYSICS 3004 Quantum Mechanics III 3
PHYSICS 3006 Advanced Dynamics and Relativity 3
PHYSICS 3009 Statistical Mechanics 2
PHYSICS 3022 Quantum Mechanics IIIB 2
together with 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 and Optics III 3
and other level III courses in Computer Science, Physics, and Applied and Pure Mathematics.

### 2.3.4 Level IV

An acceptable standard, in accordance with the Academic Program Rule 5.7 for the Bachelor of Science for Honours degrees, in

PHYSICS 4000 A/B Honours Physics
or
PHYSICS 4001 A/B Honours Mathematical Physics (including some lecture content from COMP SCI 4999 A/B Honours Computer Science)
2.4 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.

## 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.

## 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 $2.4(\mathrm{~b})$ 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.)

1 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

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 Il 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.

## 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 nonLaw 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.
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

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 (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) 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
BIOLOGY 1101 Biology 1: Molecules, Genes \& Cells A

BIOLOGY 1102 Biology 1: Molecules, Genes \& Cells B
CHEM 1100 Chemistry IA
semester 2
BIOLOGY 1201 Biology 1: Human Perspectives 3
CHEM 1200 Chemistry 1B 3
STATS 1000 Statistical Practice I* 3
or
STATS 1004 Statistical Practice I (Life Sciences)
together with additional level I courses to the value of 9 units selected in accordance with the Academic Program Rules 5.3 and 5.6 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:
Group I
(i) passes in core courses:
semester 1
BIOCHEM 2100 Biochemistry IIA
CHEM 2106 Chemistry IIA (Mol. Drug Des.)
semester 2
BIOCHEM 2200 Biochemistry IIB
CHEM 2206 Chemistry IIB (Mol. Drug Des.)

## Group II

(ii) passes in Level II courses to the value of 8 units selected in accordance with Academic Program Rule 5.6 for the degree of Bachelor of Science.
(iii) 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 which shall include:
Group I
(i) passes in the core courses:
semester 1
BIOCHEM 3000 Molecular \& Structural Biology III
CHEM 3111 Chemistry III
semester 2
CHEM 3213 Advanced Synthetic Methods III 3

CHEM 3214 Medicinal \& Biological Chemistry III

## Group II

(ii) passes in level III courses to the value of 6 units selected in accordance with Academic Program Rule 5.6 for the degree of Bachelor of Science.
(iii) Group II courses shall be selected 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 courses 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

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

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 candidate shall present passes in courses to the value of 24 units at each of Levels I, II and III.

### 2.3 Academic program

### 2.3.1 Level I

Passes in Level I courses which shall include:
BIOLOGY 1101 Biology 1 :
Genes, Cells and Molecules A
or
BIOLOGY 1102 Biology 1 :
Genes, Cells and Molecules B
BIOLOGY 1201 Biology 1: 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 Il courses to the value of 24 units selected as follows:

Group I
(i) a pass in the core courses BIOCHEM 2102 Advanced Molecular Biology A
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
and
BIOCHEM 2201 Biochemistry II
(Molecular Biology) B
CHEM 2101 Chemistry IIA (Mol. Biol.)
and
CHEM 2201 Chemistry IIB (Mol. Biol.) 3
GENETICS 2102 Genetics IIA (Molecular Biology) 3
and
GENETICS 2202 Genetics IIB (Molecular Biology)

## Group II

(iii) passes in Level Il 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
(i) Core course BIOCHEM 3002 Advanced Molecular Biology III
(ii) one of the following Level III Molecular Biology courses:
BIOCHEM 3003 Genes and Proteins III (Molecular Biology)
GENETICS 3002 Molecular Genetics III (Molecular Biology)

Group II
(iii) passes in courses to the value of not less than 18 units chosen from those listed in 5.6.5 Sciences courses, or level III courses offered by the School of Mathematical and Computer Sciences
(iv) Group II courses shall be selected in consultation with and subject to the approval of the program coordinator.
2.3.4 A candidate shall complete a major as follows:
(a) a major in Molecular Biology, comprising passes (not conceded passes) in any courses to the value of 9 units selected from Level III courses taught by Chemistry and Molecular Biosciences, and the course PLANT SC 3009WT Plant Molecular Biology or
(b) a major in a Science discipline 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

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 (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 1

Passes in Level 1 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 semester 2

CHEM 1200 Chemistry IB
PHYSICS 1200 Physics IB ** 3
or
PHYSICS 1201 Physics for the Life \& Earth Sciences IB3
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

CHEM 2100 Chemistry IIA semester 2

CHEM 2200 Chemistry IIB
CHEM2209 Analytical Chemistry II (Nanoscience \& Materials)
(ii) passes in Level II courses to the value of 12 units selected in accordance with Academic Program Rules in 5.6.3 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
CHEM 3211 Heterocyclic Chemistry \& Molecular Devices III
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 for the degree of Bachelor of Science, 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.

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

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

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 1

Passes in Level 1 courses to the value of 24 units which shall include:
semester 1
BIOLOGY 1101 Biology 1: Molecules, Genes \& Cells A 3
or
BIOLOGY 1102 Biology 1: Molecules, Genes \& Cells B
or
CHEM 1101 Foundations of Chemistry 1A 3
PHYSICS 1101 Physics for the Life \& Earth Sciences IA 3 or
PHYSICS 1008 Physics Principles and Applications I 3
SOIL\&WAT 1102WT Land and Environmental
Management
semester 2
BIOLOGY 1202 Biology I: Organisms 3
CHEM 1200 Chemistry 1B 3
or
CHEM 1201 Foundations of Chemistry 1B 3
GEOLOGY 1100 Earth's Interior 3
STATS 1004 Statistical Practice I (Life Sciences) 3
or
STATS 1002RW Data Management \& Interpretation

### 2.3.2 Level II

Passes in Level II courses to the value of 24 units which must include:
semester 1
SOIL\&WAT 2011 Spatial Information \& Land Evaluation
SOIL\&WAT 2012WT Soil and Water Resources
plus an additional course in Plant \& Animal Evolutionary Diversity.
semester 2
ANIML SC 2014RW Wildlife Management or

PLANT SC 2003 WT Microbiology \& Invertebrate Biology 4 or
GEOLOGY 2008 Surficial Geology II 4
ENV BIOL 2003 Ecology EBII 4
ENVT 2009 Introduction to Environmental Impact Assessment
or
GEOG 2011 Environmental and Regional Planning

### 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
AGRONOMY 3020RW Principles and Practice of Communication

3
3

3

## semester 2

Core course in Natural Resource Management
Plus elective courses selected from at least two thematic groupings:

## Soil and Water Management

GEOLOGY 3014 Surficial Geology III 3
GEOLOGY 3015 Surficial Geology III Field Program 3
PLANT SC 3004WT Mineral Nutrition of Plants 3
SOIL\&WAT 3002WT Soil Management
and Conservation
SOIL\&WAT 3004WT Environmental Toxicology
\& Remediation
SOIL\&WAT 3012WT Soil Water Management 3
Pest, Animal and Plant Management
AGRONOMY 3016WT Crop Pasture Ecology
APP ECOL 3008WT Integrated Pest Management A 3
APP ECOL 3014RW Ecology \& Management of
Vertebrate Pests
APP ECOL 3022AEX/BEX Integrated Weed Management 3
APP ECOL 3028WT Insect Ecology 3
Spatial Information and Research Methodology
ENV BIOL 3006 Research Methods in Environmental Biology III3
SOIL\&WAT 3007WT GIS for Environmental Management ..... 3
or
SOIL\&WAT 3014WT GIS for Agricultural Sciences 3
SOIL\&WAT 3008WT Remote Sensing for Environmental and Agricultural Sciences
or
GEOLOGY 3010 Remote Sensing (S) 3
Biodiversity and Ecology
AGRONOMY 3004RW Agroforestry 3
AGRONOMY 3026RW Ecology \& Management
of Rangelands
ENV BIOL 3004 Freshwater Ecology III 3
ENV BIOL 3008 Conservation and Restoration 3
ENV BIOL 3010 Marine Ecology III 3
SOIL\&WAT 3016WT Soil Ecology \& Nutrient Cycling 3
Students may apply to take up to 6 units of courses from other programs in the Faculty, chosen in consultation with the program coordinator.

### 2.4 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 (Optics and Photonics)

## 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 \&f 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 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:
semester 1
MATHS 1011 Mathematics IA
PHYSICS 1100 Physics IA
semester 2
MATHS 1012 Mathematics IB
PHYSICS 1200 Physics IB
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 1
APP MTH 1000 Scientific Computing I 3
CHEM 1100 Chemistry IA 3
COMP SCI 1008 Computer Science IA 3
ELEC ENG 1006 Electrical Engineering I 3
semester 2
COMP SCI 1009 Computer Science IB
CHEM 1200 Chemistry IB 3
2.3.2 Level II

Passes in Level II courses which shall include:
(i) APP MTH 2000 Differential Equations and Fourier Series
and
APP MTH 2002 Vector Analysis and Complex
Analysis
PHYSICS 2009 Photonics II 2
PHYSICS 2100 Physics IIA
and
PHYSICS 2200 Physics IIB
(ii) at least 4 units from the following:

APPMTH 2003 Modelling with Differential
Equations II
COMPSCI 2003 Numerical Methods 3
ELEC ENG 2007 Signals and Systems 3
ELEC ENG 2008 Electronics II 3
ELEC ENG 2010 A/B Practical Electronic Design 3
PHYSICS 2001 Classical Mechanics II 2
PUREMTH 2002 Algebra II 2
STATS 2002 Introduction to Mathematical Statistics II

STATS 2004 Laplace Transforms and Probability and Statistical Methods
(iii) additional courses offered by any Faculty of the University, chosen in consultation with the Program Coordinator.

### 2.3.3 Level III

Passes (not conceded passes) in Level III courses to the value of not less than 24 units which shall include:
(i) PHYSICS 3001 Electromagnetism \& Optics III 3

PHYSICS 3002 Experimental Physics III 3
PHYSICS 3004 Quantum Mechanics III 3
PHYSICS 3022 Quantum Mechanics IIIB 2
PHYSICS 3230 Photonics IIIP 3
(ii) At least 6 units from the following:

APPMTH 3013 Differential Equations 3
APPMTH 3016 Telecommunications Systems
Modelling III
APPMTH 3017 Waves 3
COMPSCI 3002 Programming Techniques 3
ELEC ENG 3015 Communications, Signals
and Systems
ELEC ENG 3016 Control III 3
ELECENG 3019 A/B Practical Electrical
and Electronic Design III
MECHENG 3028 Dynamics and Control II 3
PHYSICS 3000 Computational Physics III 2
PHYSICS 3009 Statistical Mechanics III 2
STATS 3005 Time Series III 3
and passes in additional Level III courses, selected in consultation with the program coordinator and in accordance with Academic Program Rule 5.6.5 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

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 (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 I
GEOLOGY 1103 Earth Systems 3
MATHS 1011 Mathematics IA 3
semester 2
GEOLOGY 1100 Earth's Interior
MATHS 1012 Mathematics IB
Together with additional courses to the value of 12 units, chosen from the following:
semester I
CHEM 1100 Chemistry IA
or
CHEM 1101 Foundations of Chemistry IA
ENV BIOL1002 Environmental Biology I 3
PHYSICS 1100 Physics IA 3
or
PHYSICS 1101Physics for the Life \& Earth Sciences IA
semester 2
CHEM 1200 Chemistry IB
or
CHEM 1102 Foundations of Chemistry IB 3
PHYSICS 1200 Physics IB 3
or
PHYSICS 1102 Physics for the Life \& Earth Sciences IB
STATS 1000 Statistical Practice I
2.3.2 Level II

Passes to the value of 24 units, which shall include:
semester I
GEOLOGY 2007 Sedimentary \& Structural Geology II
PETROENG 1000 Introduction to the Petroleum Industry
PETROENG 2009 Formation Evaluation, Petrophysics \& Rock Properties
semester 2
GEOLOGY 2006 Igneous \& Metamorphic Geology II
GEOLOGY 2008 Surficial Geology II
PETROENG 2008 Fundamentals of Reservoir Engineering
together with additional courses to the value of 4 units, chosen from the following:
semester I
APP MTH 2000 Differential Equations \& Fourier Series
APP MTH 2002 Vector Analysis \& Complex Analysis 2
CHEM 2003 Environmental Chemistry
CHEM 2100 Chemistry IIA

## semester 2

PETROENG 3012 Engineering Communication ESL (P) *

* Available only to students whose native language is not English, for whom it is compulsory


### 2.3.3 Level III

Passes to the value of 24 units, which shall include:
semester I
GEOLOGY 3013 Tectonics III 3
GEOLOGY 3017 Petroleum Exploration III 3
PETROENG 3005 Reservoir Characterisation
\& Modelling
An additional Reservoir Geoscience Project course 3
semester 2
GEOLOGY 3010 Remote Sensing III 3
GEOLOGY 3019 Field Geoscience Program III 3
PETROENG 3019 Structural Geology
\& Seismic Methods
An additional Reservoir Geoscience Project course 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.

## 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 (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 <br> 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 Il courses selected as follows:
(i) passes in the following core courses:
semester 1
APP MTH 2000 Differential Equations and Fourier Series

APP MTH 2002 Vector Analysis and Complex Analysis *
PHYSICS 2100 Physics IIA

* also available in semester 2
semester 2
PHYSICS 2200 Physics IIB
PHYSICS 2010 Space Science and Astrophysics II
(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
PHYSICS 2002 Classical Fields
and Mathematical Methods II

### 2.3.3 Level III

Passes (not conceded passes) in Level III courses to the value of not less than 24 units selected as follows:
(i) PHYSICS 3001 Electromagnetism and Optics III 3

PHYSICS 3002 Experimental Physics III 3

PHYSICS 3004 Quantum Mechanics III 3
PHYSICS 3009 Statistical Mechanics III 2
PHYSICS 3013 Astrophysics III 2
PHYSICS 3014 Atmospheric \& Environmental Physics III
(ii) passes in additional level III courses selected in consultation with the program coordinator and in accordance with the Academic Program Rules 5.6.5 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

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 (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
(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 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
or
BIOLOGY 1102 Biology I: Molecules, Genes and Cells B
CHEM 1100 Chemistry IA
or
CHEM 1101 Foundations of Chemistry 1A 3
GEOLOGY 1103 Earth Systems
together with one of the following courses:
ENV BIOL 1002 Environmental Biology I
PHYSICS 1101 Physics for the Life \& Earth Sciences IA
semester 2
BIOLOGY 1202 Biology !: Organisms 3
CHEM 1200 Chemistry IB 3
or
CHEM 1201 Foundations of Chemistry 1B 3
GEOLOGY 1100 Earth's Interior 3
together with one of the following courses:
MATHS 1011 Mathematics IA 3
STATS 1000 Statistical Practice I 3
STATS 1004 Statistical Practice 1 (Life Sciences) 3
2.3.2 Level II

Passes in Level 2 courses as follows:
Conservation \& Wildlife Ecology major
ENV BIOL 2000 Zoology EB II
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
plus elective courses to the value of 8 units taken from all courses listed in Program Rule 2.3.2 for this degree, in addition to courses listed under Specific Academic
Program Rule 5.6.3 for the degree of Bachelor of Science, and up to 4 units chosen from any Level II Environmental Studies/Geography course.

Land \& Water Management major CHEM 2003 Environmental Chemistry II
SOIL\&WAT 2012WT Soil \& Water Resources 4 with additional courses to the value of 8 units chosen from:
CHEM 2100 Chemistry IIA
CHEM 2200 Chemistry IIB
CHEM 2207 Analytical Chemistry II
GEOLOGY 2008 Surficial Geology
SOIL\&WAT 2011RW Spatial Information and Land Evaluation
plus elective courses to the value of 8 units taken from all courses listed in Program Rule 2.3.2 for this degree, in addition to courses listed under Specific Academic Program Rule 5.6.3 for the degree of Bachelor of Science, and up to 4 units chosen from any Level II Environmental Studies/Geography course.
Deep Earth Resources major
GEOL 2006 Igneous \& Metamorphic Geology II
GEOL 2007 Sedimentary \& Structural Geology II
with additional courses to the value of 8 units chosen from:
CHEM 2003 Environmental Chemistry II
CHEM 2007 Analytical Chemistry II
CHEM 2100 Chemistry IIA 4
CHEM 2200 Chemistry IIB 4
GEOL 2008 Surficial Geology II 4
plus elective courses to the value of 8 units taken from all courses listed in Program Rule 2.3.2 for this degree, in addition to courses listed under Specific Academic Program Rule 5.6.3 for the degree of Bachelor of Science, and up to 4 units chosen from any Level II Environmental Studies/Geography course.
Passes in Level 3 courses as follows:
Conservation \& Wildlife Ecology major
ENV BIOL 3008 Conservation and Restoration
ENVBIOL 3220 Issues in Sustainable Environments
with additional courses to the value of 6 units chosen from:
ENV BIOL 3004 Freshwater Ecology III
ENV BIOL 3006 Research Methods in Environmental
Biology III
ENV BIOL 3010 Marine Ecology III
ENV BIOL 3015 Ecosystem Modeling for
Environmental Management 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 in Program Rule 2.3.3 for this degree, in

### 2.3.3 Level III

addition to courses listed under Specific Academic Program Rule 5.6.5 for the degree of Bachelor of Science, and up to 6 units chosen from any Level III Environmental Studies/Geography course.
Land \& Water Management major
ENVBIOL 3220 Issues in Sustainable Environments 3
SOIL\&WAT 3002WT Soil Management \& Conservation 3
SOIL\&WAT 3012WT Soil Water Management 3
with additional courses to the value of 3 units chosen from:
ENV BIOL 3009 Ecophysiology of Plants III 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 Integrated Catchment Management 3
SOIL\&WAT 3016WT Soil Ecology \& Nutrient Cycling 3
plus elective courses to the value of 12 units taken from all courses listed in Program Rule 2.3.3 for this degree, in addition to courses listed under Specific Academic Program Rule 5.6.5 for the degree of Bachelor of Science, and up to 6 units chosen from any Level IIII Environmental Studies/Geography course.
Deep Earth Resources major
ENVBIOL 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 9 units taken from all courses listed in Program Rule 2.3.3 for this degree, in addition to courses listed under Academic Program Rule 5.6.5 for the degree of Bachelor of Science, and up to 6 units chosen from any Level III Environmental
Studies/Geography 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 desire 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 1: Molecules, Genes and Cells A or
BIOLOGY 1102 Biology 1:Molecules, Genes and Cells B 3
CHEM 1100 Chemistry IA 3
or
CHEM 1101 Foundations of Chemistry A 3
CHEM ENG 1001 Introduction to Process Engineering 3
OENOLOGY 1018NW Foundations in Wine Science 3
semester 2
BIOLOGY 1202 Biology 1: Organisms 3
CHEM 1200 Chemistry 1B 3
or
CHEM 1201 Foundations of Chemistry B 3
GEOLOGY 1100 Earth's Interior 3
STATS 1004 Statistical Practice 1 (Life Sciences) 3
2.4.2 Level II

Passes in level II courses which shall include:
semester 1
BIOCHEM 2106WT Biochemistry II(Ag.) A
OENOLOGY 20025WT Microbiology for Viticulture
and Oenology
VITICULT 2002WT Viticultural Science 4
semester 2
ANIMLSC 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
APP ECOL 3008WT Integrated Pest Management A 3
SOIL\&WAT 3012RW Soil and Water Resources 4
semester 2
AGRIBUS 3017WT Business Management
for Agricultural 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, chosen from the following recommended courses:

APP ECOL 3022AEX/BEX Integrated Weed Management
APP ECOL 3130WT Plant Pathology 3
ENV BIOL 3009 Ecophysiology of Plants III 3
FREN 3103WT Technical French (Oenology) 3
HORTICUL 3004WT Olive Production \& Marketing ..... 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
SOIL\&WAT 3002WT Soil Management \& Conservation ..... 3
SOIL\&WAT 3012WT Soil Water Management ..... 3
SOIL\&WAT 3014WT GIS for Agricultural Science ..... 3
SOIL\&WAT 3016WT Soil Ecology \& 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.) programcoordinator.
2.5 The Honours degreeRefer to Academic Program Rule 5.7 for the degree ofBachelor of Science.
2.6 GraduationSubject to Chapter 89 of the Statutes, candidates whohave satisfied the requirements for any award of theUniversity shall be admitted to that award at a graduationceremony 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.

## 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.

## 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.

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 Credit, Pass. In addition there shall be a classification of Conceded Pass for courses of up to 4 units in value, to a maximum of 7 units, provided such courses shall not satisfy prerequisite requirements
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 the examination 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 examination. A candidate who obtains a Pass only after being granted permission to enrol for the third time shall not take a course for which that Pass is a prerequisite, save in exceptional circumstances and with the permission of the Faculty.

## 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
or
WINEMKTG 1026EX Microeconomic Principles
ECON 1008 Business Data Analysis I
or
WINEMKTG 1015EX Data Analysis for Food and Wine Business

OENOLOGY 1000NW/1000EX Introductory Grape
and Wine Knowledge
WINEMKTG 1013WT/1013EX Wine and Food
Marketing Principles

## semester 2

ACCTING 1002 Accounting for Decision Makers or

WINEMKTG 1008EX Introduction to Managerial and Financial Accounting
COMMLAW 1004 Commercial Law I(S) ..... 3

or

WINEMKTG 1003EX Legal Issues in Wine Marketing
or
WINEMKTG 1063WT Macroeconomic Essentials for Wine and Food Business
OENOLOGY 1001NW/1001EX Vineyard and Winery Operations I
5.2.2 Level II

Core courses
semester 1
AGRIBUS 2016EX Introduction to Business Management
or
WINEMKTG 2037WT Applied Management Science
OENOLOGY 20004NW Vineyard and Winery Operations II
semester 2
WINEMKTG 2011WT/2011EX Applied Marketing Research

WINEMKTG 2014WT/2014EX International Marketing of Wine and Agricultural Products
plus electives chosen in consultation with the Program Coordinator.

### 5.2.3 Level III

## Core courses

semester 1
WINEMKTG 3006WT/3000EX Global Market for Wine
semester 2
WINEMKTG 3028WT/3028EX Winery Business
Management III
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 4
AGRIBUS 3041WT International Agribusiness
Environment III
4
WINEMKTG 2002WT/2002EX Wine and Society II 4
WINEMKTG 2003WT/2003EX International Wine Law 4
WINEMKTG 2010WT/2010EX Strategic Marketing Management
WINEMKTG 3014WT/3014EX Food Marketing 4
WINEMKTG 3040WT/3040EX Wine Retail and Distribution Management
WINEMKTG 3047WT/3047EX Internet Marketing and E-Commerce

WINEMKTG 3049EX Wine \& Food Tourism \& Festivals WINEMKTG 3065WT/3065EX Database Marketing for Food and Wine Business

It is recommended that students wishing to specialise in marketing include the following courses amongst their electives:

MARKETNG 2011 Consumer Behaviour II
or
WINEMKTG 2033EX Consumer Behavioural Analysis
WINEMKTG 3034WT/3034EX Advertising and Promotion III

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
ECON 2009 Consumers, Firms and Markets II
ECON 3021 International Trade III 4
Note: students without SACE Stage 2 Mathematical Studies 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 of Agriculture and Wine, the candidate will proceed to the Honours degree in the following course:

WINEMKTG 4007AWT/BWT Honours Wine Marketing 24
or
WINEMKTG 4008AWT/BWT Honours Wine Marketing
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 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.
$\square$


## 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 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.


## Syllabuses

Courses are listed in alphabetical order under the following disciplines:
Aboriginal Studies in Music ..... 337
Accounting ..... 342
Agricultural Business ..... 343
Agriculture ..... 346
Agronomy ..... 346
Anatomical Science. ..... 349
Ancient Greek ..... 353
Animal Science ..... 355
Anthropology. ..... 359
Applied Ecology. ..... 365
Architecture ..... 369
Asian Studies ..... 371
Biochemistry. ..... 375
Biology ..... 378
Biometry ..... 379
Biotechnology. ..... 380
Chemistry ..... 380
Chinese. ..... 386
Classical Studies. ..... 390
Commerce ..... 393
Commercial Law. ..... 393
Computer Science. ..... 394
Corporate Finance. ..... 399
Dentistry. ..... 401
Design Studies ..... 407
Economics ..... 418
Education. ..... 424
Engineering:
Engineering:
Chemical. ..... 427
Civil ..... 437
Electrical \& Electronic. ..... 448
Mechanical. ..... 456
Petroleum ..... 467
English ..... 472
Environmental Biology. ..... 479
European Studies ..... 485
Food Science \& Technology ..... 486
French Studies ..... 489
Gender, work \& Social Inquiry ..... 493
General Practice. ..... 496
Genetics. ..... 497
Geographical \& Environmental Studies ..... 500
Geology ..... 506
German Studies. ..... 512
History ..... 516
Horticulture ..... 522
Indonesian. ..... 523
Information Systems ..... 525
International Studies ..... 526
Italian ..... 526
Japanese ..... 528
Landscape Architecture. ..... 530
Latin. ..... 531
Law ..... 533
Linguistics ..... 553
Management ..... 556
Marketing ..... 557
Mathematics ..... 559
Media. ..... 573
Medicine ..... 576
Microbiology. ..... 583
Modern Greek ..... 587
Music. ..... 588
Music -VET ..... 616
Nursing Science ..... 624
Oenology ..... 625
Oral Health ..... 628
Pathology. ..... 631
Pharmacology ..... 632
Philosophy ..... 633
Physics ..... 638
Physiology ..... 646
Plant Science ..... 649
Politics ..... 652
Psychiatry ..... 663
Psychology. ..... 663
Public Health. ..... 668
Social Sciences ..... 672
Soil \& Water. ..... 672
Spanish ..... 677
Statistics ..... 678
Viticulture ..... 683
Wine Marketing ..... 685

## ABORIGINAL STUDIES <br> IN MUSIC

## Level I

## MUSIC 1001A/B

## Style Studies I

- 2 units - full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Assessment: continuous 60\%, semester major assignments 40\%

Historical, theoretical and practical approach to the following musical styles: African--American music (blues, soul, reggae etc), folk, country, rock.

## MUSIC 1002A/B

## Practical Music Study I CM

- 4 units - full year
- 1 hour individual lesson per week
- Eligibility: Aboriginal and 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 and Torres Strait Islander students only
- Assessment: attendance, participation $10 \%$, assignments $50 \%$, end of semester exams $30 \%$, field studies workbook $10 \%$

An exploration of the arts in society drawing on examples from a variety of indigenous and non-indigenous 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.

## MUSIC 1009A/B

## Practical Music Study I MS

-4 units - full year

- 1 hour individual lesson per week
- Eligibility: Aboriginal and 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 (or voice).

## MUSIC 1010A/B

## Theory of Music I MS

- 3 units - full year
- $2 \times 1$ 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 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 and Torres Strait Islander students only
- Assessment: attendance, participation 5\%, assignments 20\%, exam $15 \%$, research journal $15 \%$, written research proposal $30 \%$, field studies $15 \%$

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 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
- $2 \times 2$ hour rehearsals per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Assessment: attendance, participation 20\%, rehearsals 30\%, inhouse 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 musical literacy as appropriate.

## MUSIC 1014A/B

## Performance ICM

- 4 units - full year
- $2 \times 2$ hour rehearsals per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Assessment: attendance, participation $20 \%$, rehearsals $30 \%$, inhouse 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 musical 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 and 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 CM

- 3 units - full year
- 1.5 hour lecture per week
- Eligibility: Aboriginal and 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 and 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
- $3 \times 1$ hour lectures or equivalent per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Assessment: continuous 60\%, semester exams 40\%

Consolidation and extension of 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 and Torres Strait Islander students only
- Assessment: continuous 60\%, end of semester major assignments 40\%

Historical, theoretical and practical approach to the following musical styles: African-American music (blues, soul, reggae etc), folk, country, rock.

## MUSIC 1024A/B

## Aural Development (New) I

- 1 unit - full year
- 1 hour lecture per week
- Eligibility: Aboriginal and Torres Strait Islander students only
- Assessment: attendance, participation 20\%, continuous 40\%, 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
- $3 \times 1$ hour lectures or equivalent per week
- Eligibility: Aboriginal and 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-continuous $30 \%$, major assignments $20 \%$; topic II - lecture workbook $10 \%$, assignments $40 \%$

Topic I - historical, theoretical and practical approach to Jazz. Topic II - a survey of the main stylistic characteristics of Western art music in historical and cultural context, including particular reference to contemporary and new Australian music.

## 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 - continuous 30\%, major assignments 20\%; topic II - lecture workbook 10\%, assignments 40\%

Topic I - historical, theoretical and practical approach to Jazz. Topic II - a survey of the main stylistic characteristics of Western art music in historical and cultural context, including particular reference to contemporary and new Australian music.

## MUSIC 2003A/B

## Theory of Music II MS

-4 units - full year

- $3 \times 1$ 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
- $2 \times 2$ 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 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 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 musical 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
- Prerequisite: MUSIC 1002 A/B Practical Music 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

- $2 \times 2$ 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 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 musical 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\%, 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 5\% verbal research-inprogress presentation $15 \%$, final written research report $30 \%$, assignments $20 \%$, field studies workbook $15 \%$, research journal 15\%

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 <br> Level I

## ACCTING 1002

## Accounting for Decision Makers I

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial 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-volumeprofit 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 per week
- Eligibility: B.Com. students only
- 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 per week
- Available for Non-Award Study
- Prerequisite: ACCTING 1002 Accounting for Decision Makers I
- Assessment: exam worth between 50-80\%, assignment and tutorial work as agreed in the 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 tutorial per week
- Available for Non-Award Study
- Prerequisite: ACCTING 1005 Accounting Method I (at least 45\%)
- Assessment: exam, assignments as determined at preliminary lecture

This course examines measurement and disclosure issues in financial reporting. Topics include disclosure in financial statements, leases, non-current asset valuation and impairment, income tax, intangibles, superannuation, earnings per share, foreign currency translation, public sector financial reporting and ethics in accounting.

## Level III

## ACCTING 3006

## Accounting Theory III

- 4 units - semester 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: principles of financial accounting as taught in 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, behavioural accounting, and social and environmental accounting issues.

## ACCTING 3011

## Corporate Accounting III

- 4 units - semester 1
- 2 lectures, 1 hour tutorial/workshop per week
- Available for Non-Award Study
- Prerequisite: ACCTING 1005 Accounting Method I
- Assumed Knowledge: ECOMMRCE 1000 Information Systems I and ACCTING 2010 Financial Accounting II
- Assessment: 3 hour exam, work completed during course, as determined at preliminary lecture

Topics may include company reconstructions, accounts of liquidators and receivers; amalgamations and takeovers; intercorporate investments and consolidated accounts; and joint ventures.

## ACCTING 3012

## Auditing III

- 4 units - semester 2
- 2 lectures, 1 hour tutorial 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

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 $15 \%$, case study $35 \%$, exam 50\%

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 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.

## Level II

## 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 offering 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 50\%, assignments 50\%

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 3001 RW

## 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 of lectures/tutorial per week
- Assumed Knowledge: AGRIBUS 2033RW Rural Finance and Marketing
- Assessment: case studies 65\%, tutorial exercises 15\%, exam 20\%

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 Agricultural Science

- 3 units - semester 2
- 5 lectures/student centred learning per week
- Assessment: assignments, tutorial exercises $35 \%$, business plan 25\%, 3 hour exam 40\%

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 3043RW

## Human Resource Management (REM)

- 3 units
- Assessment: assignments, written reports, exam

Human resource planning in relation to the organisation's objectives; recruitment; selection; induction/socialisation; training and development; career development; motivation; performance appraisal; benefits and services; OH\&S: union relationships.

## AGRIBUS 3044RW

## Individual Studies 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 3046RW

## Leadership in Agri-Industries

- 3 units -
- Assumed Knowledge: general management principles
- Assessment: assignments, exam

Leadership in theories, Karpin Report, contemporary issues in leadership, interpersonal skills and leadership development, innovation and creativity, development and communication of proposals, agri-politics and primary producer and associated professional organisations.

## 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.

## AGRIBUS 3048RW

## Quality Management for Rural Enterprises

- 3 units - semester 1
- Assessment: assignments, exam

Concepts of quality, quality attributes of agri-food, factors affecting product quality, quality management, quality design and improvement, quality assurance, HACCP, TQM, policy development.

## AGRIBUS 3049RW

## Marketing of Rural Commodities

- 3 units - semester 1
- Assessment: written report, seminar

Identify the market potential for products, including needs analysis of target markets: understand the mechanisms and processes required including institutional processes, support programs, cultural and legal issues and financial and logistical processes. Monitoring price movements in the market place and evaluating the relative importance of price changes, currency movement and government policies. Preparation of a marketing plan.

## AGRIBUS 3050WT

## Grape and Wine Business Management

- 3 units - semester 2
- 3 lectures, 1 tutorial per week
- Assumed Knowledge: AGRIBUS 3017WT Business Management for Agricultural Science
- Assessment: 3 exams 60\%, assignments, tutorial exercises 40\%

The course will develop concepts of the strategic management of viticultural enterprises: business planning, particularly developing a marketing plan in the light of domestic and international markets, and financial planning including annual and development budgets, investment analysis and taxation planning. Monitoring will be covered with an emphasis on accounting systems.

## AGRICULTURE

## Level I

## AGRIC 1000RW

## Perspectives on Modern Agriculture

- 3 units - semester 1
- Restriction: PLANT SC 1000 Environment and Society, PLANT SC 1000RW Environment and Society, AGRON 1010RW Agricultural Production Systems
- Assessment: assignments 50\%, written exam 50\%

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 presentday 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.

## AGRONOMY

Level I

## AGRONOMY 1006ARW/BRW

Agricultural Experience I Part 1

- 3 units - full year
- 40 days practical agricultural experience, 5 days agricultural business experience, $12 \times 3$ hour demonstrations
- Assessment: assignments $30 \%$, practical experience $45 \%$, theory exam 25\%

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 60\%, practical experience 40\%

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 offcampus work experience on an approved farm, which will provide them with the opportunity to evaluate forms of agricultural productivity and management practices.

## AGRONOMY 2012RW

## Engineering Principles

- 3 units - semester 1
- 6 hours lectures, tutorials, practicals per week
- Assumed Knowledge: SACE Stage 2 Mathematics 1
- Restriction: AGRONOMY 1001RW Engineering in Agriculture; AGRONOMY 2012RW Engineering Science; CHEM ENG 1001 Engineering Physics
- Assessment: practicals, assignments, project, exam

Engineering has made modern agriculture possible and knowledge of some aspects of the discipline may be used in the improved management of many enterprises.

This course uses practical applications of engineering to illustrate engineering principles and assists managers. Topics in the course include tractor safety and performance, water supply systems, building materials, electrical equipment and tension and electric fencing to illustrate the basic principles of machinery and fluids and elementary concepts of structures and electricity.

## AGRONOMY 2013RW

## Production Agronomy

- 4 units - semester 2
- 3 lectures, 3 hour practical per week
- Assumed Knowledge: AGRONOMY 1000RW Perspectives in 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.
assessment: exam 60\%, practical reports 40\%

## Level III

## AGRONOMY 3000RW

## Agroforestry

- 3 units - semester 2
- 2 hours lectures; 4 hours associated practical work excursions per week - option to take course online with attendance at 2-3 full day field trips
- Assessment: written exam 50\%, planning assignment 30q, practical 20\%

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: AGRONOMY 1010RW Agricultural Production Systems or PLANT SC 1000 Environment and Society
- 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 3005WT

## Irrigation Science

- 3 units - semester 1
- 6 hours per week
- Prerequisite: AGRONOMY 2012RW Engineering Science or AGRONOMY 1001RW Engineering in Agriculture or CHEM ENG 1001 Engineering Physics or AGRONOMY 2012RW Engineering Principles
- Assessment: practicals, assignments, written exams

Irrigation principles: evapotranspiration and soil moisture budget, crop requirements (peak rate and crop factor), adjustments for salinity (leaching fraction), sprinkler and dripper characteristics, sprinkler and dripper layout, hydraulics of pressure irrigation systems, irrigation scheduling, levelling, automatic controllers.

## AGRONOMY 3008RW

## Individual Studies (Ag)

- 3 units - semester 1 or 2
- Formal contact between student \& supervisor during project by mutual agreement
- Assumed Knowledge: AGRONOMY 1006ARW 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, well-presented 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
- 3 Lectures, 3 hour practical per week
- Assumed Knowledge: AGRONOMY 2013RW Production Agronomy or PLANT SC 2001WT Agricultural Botany or ENV BIOL 2006 Botany II
- Assessment: exam 50\%, essays/practical report 50\%

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 3016WT

## Crop and Pasture Ecology

- 3 units - semester 2
- 2 lectures, 4 hour practical per week
- Assumed Knowledge: PLANT SCI 2001WT Agricultural Botany or ENV BIOL 2006 Botany II or AGRONOMY 2004 Land Management System or AGRONOMY 2013RW Production Agronomy
- Assessment: exam 50\%, assignments $50 \%$

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
- 5 hours lectures, practical sessions per week
- Assessment: exam $25 \%$, assignments, practical exercises $75 \%$

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 3025RW

## Indigenous Australians \& Environmental Management

- 3 units - not offered in 2006
- Equivalent of 5 hours per week (includes vacation field camp)
- Available for Non-Award Study
- Assessment: practicals/assignments

Contemporary land and resource use and management by Aboriginal people, and its relationship to sustainable development. Theoretical frameworks drawing on development studies, emphasising concepts of empowerment and indigenous self determination, and participatory approaches to resource management. Exploration of the positive and negative impacts of Australian resource management on indigenous people. Aboriginal world views, social organisation and relationships to country. Skills in communicating and negotiating with Aboriginal people. Specific topics covered include Aboriginal ecologies; subsistence economies; land and sea rights including native title; co-management regimes; heritage management; the role of Aboriginal organisations in environmental management.

## AGRONOMY 3026RW

## Ecology and Management of Rangelands

- 3 units - semester 2
- Part semester, winter vacation - includes 10-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
- 2 hour lecture, 1 hour tutorial, 3 hour practical, some 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 and examination

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 4001ARW/BRW

## Honours Agronomy \& Farming Systems (B.Ag.)

- 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 50\% 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 the Discipline and potential academic supervisors during the final year of their degree.

## AGRONOMY 4003ARW/BRW

## Honours Agronomy \& Farming Systems (B.NR.Mgt.)

- 24 units - full year
- Prerequisite: at least credit standard in appropriate level II/II 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 descriptions

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 4-unit 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 by 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 by 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.HIth.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 this 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
- 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 and Biology 1201 Biology 1: Human Perspectives or Biology 1202 Biology 1: Organisms, or equivalent
- 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 the 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 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 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, extraretinal 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 2103 Functional Human Anatomy II or ANAT SC 2102 Cells Tissues \& Development or equivalent
- 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 3 students only
- Assessment: $2 \times 30$ 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 Il 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.

## Honours

## ANAT SC 4000A/B

## 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 $\&$ 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 (Pass Div. 1) or equivalent
- Restriction: not available to students with satisfactory level of achievement in SACE Stage 2 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 SACE Stage 2 Latin and Ancient Greek or equivalents - 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 (Pass Div 1) (or equiv) or satisfactory achievement in SACE Stage 2 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 (Pass Div 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: 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 (Pass Div 1) or equivalent
- Restriction: not available to students with a satisfactory level of achievement in SACE Stage 2 Ancient Greek or equivalent
- 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 SACE Stage 2 Latin and 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 (Pass Div 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: 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 (Pass Div 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: 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 (Pass Div 1) or equivalent
- Assessment: semester tests 40\%, 3 hour exam on translation, grammar and 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 (Pass Div 1) 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 4401A/B

Honours Ancient Greek

- 24 units - full year
- Prerequisite: Bachelors degree, credit average in courses contributing to major in Ancient Greek or equiv. approved by Head, Classical Studies
- Assessment: texts assessed by exams and/or 6000 words of essay writing $33 \%$; contrib. to common course, 3000 word seminar paper $12 \%$; sem. 1 - proses, exam on unseen \& prose translation 13\%; sem.2-12500-15000 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.

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
- Restriction: ANIML SC 2014RW Wildlife Management
- Assessment: theory (online) 20\%, assignments 70\%, online discussion group 10\%

The course deals with the management of captive and wild populations. Topics covered include: the reasons for management; conflicts between humans and wildlife; the philosophical rationale for maintaining captive collections; management of diseases; development of ecologically based management strategies for the purpose of conservation, commercial harvesting and pest control; management of captive collections; legal and administrative framework

## Level II

## ANIML SC 2014RW <br> Wildlife Management

- 4 units - semester 2
- Presented online
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms or APP ECOL 1003RW Biology of Plants and Animals
- Restriction: ANIML SC 1014RW Fauna Management
- Assessment: contributions to discussion groups, 2 essays, final exam

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 man and wildlife; the philosophical rationale for maintaining captive collections;
management of diseases; development of ecologically based management strategies for the purpose of conservation, commercial harvesting and pest control; management of captive collections; case histories of management of endangered species; legal and administrative framework

## ANIML SC 2029WT

## Genes and Inheritance

-4 units - semester 2

- Prerequisite: BIOLOGY 1101 /1102 Biology 1: Molecules, Genes and Cells A/B, BIOLOGY 1202 Biology I: Organisms
- Assessment: mix of practical reports, 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
- 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
- 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.

## Level III

## ANIML SC 3015RW

Animal Nutrition and Metabolism

- 3 units - semester 2
- 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 leastcost ration formulation is discussed. The course includes lectures and practicals, including hands-on animal trials.

## ANIML SC 3016RW

## Animal Health

- 3 units - semester 2
- 3 lectures, 3 hours practical per week
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science, ANIML SC 3017RW Comparative Animal Physiology
- Restriction: ANIML SC 3010RW Diseases and Nutrition of Livestock, ANIML SC 3016RW Animal Health and Welfare
- Assessment: examination $60 \%$, essay $30 \%$, practical reports $10 \%$

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
- 6 hours per week
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science
- Restriction: ANIML SC 2015RW Physiology of Farm Animals
- Assessment: exam 30\%, practicals 40\%, assignments 30\%

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

- 4 units - summer semester
- Assumed Knowledge: ANIML SC 2030RW Livestock Production Science
- Restriction: ANIML SC 3001RW Intensive Livestock Management

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: examination, 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

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
- 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

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 3230RW

## Animal Behaviour, Welfare and Ethics

- 3 units - semester 2
- 3 lectures, 1 tutorial, 3 hour practical per week
- Eligibility: B.Sc. (Animal Science) students only
- Assessment: exam $60 \%$, assignments \& practical reports $20 \%$

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

## ANIML SC 4000ARW/BRW

## Honours Animal Science (B.Ag.)

- 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 50\% 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 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 4001ARW/BRW

## Honours Animal Science (B.Ag.Sc.)

- 12 units - full year
- 10 hours $\mathrm{p} / \mathrm{w}, 30$ hours $\mathrm{p} / \mathrm{w}, 4$ wks during Feb. or other vacations on project work, relevant discussions, reading or prep.of thesis
- Prerequisite: pass in all Level I/Il courses of B.Sc.(Ag.Sc.), credit in at least two Level II courses offered by Discipline, or equivalent
- Assessment: to be advised

Students must consult Head of Discipline preferably before beginning third or fourth year - students cannot enrol in this course and ANIML SC 3000RW Research Project

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 department.

Interested candidates should consult with the Head of Discipline of 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 4002AWT/BWT

## Honours Animal Science (B.Ag.)

- 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 50\% 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 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 4003ARW/BRW

## Honours Animal Science (B.NR.Mgt.)

- 24 units - full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by the Head of the Discipline

This course comprises a substantial research project of the students choosing on a topic acceptable to the Discipline of 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 4004ARW/BRW

## Honours Animal Science (B.Sc.)

- 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 50\% 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 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 4005ARW/BRW

Honours Environmental Science (Animal Science)

- 12 units - full year
- Prerequisite: Credit or higher standard in at least 2 Level III courses approved by the 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 60\%, average of specified 4 Level III courses $40 \%$

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 1101

## Inside Out: An Anthropology of University Life

- 3 units - semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Restriction: Ethnographic Research: The Making of Anthropology, Documenting the Everyday: The Making of Anthropology I
- Assessment: class participation, research portfolio

This course introduces anthropology's main research-learning strategies: an ensemble of social research skills and techniques referred to as ethnographic research. We seek to activate your research-learning potential and to facilitate your transition to university by inviting you to develop an 'ethnographer's eye' on academic cultures. We are passionate about ethnographic research and its capacity to provide insight into social life and cultures. We want you to understand why. Classes and readings introduce relevant anthropological questions, skills and approaches. Subject to ethical and practical limits, you will undertake a research project focusing on some aspect of university life this semester. A staged set of assignments helps manage and pace research-learning achievements.

## ANTH 1102

## Introducing Social Anthropology

- 3 units - semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Restriction: Introduction to Social Anthropology
- Assessment: portfolio of skill development exercises, essay

Anthropology explores what it is to be human. The full range of things that people do, think and feel as social beings are subjects in Social Anthropology. This discipline sets out to gain deep and particular insight into social and cultural diversity in our 'global' world. It provides ways of understanding how, despite the variety of social and cultural systems in the world, people with vastly different outlooks live meaningfully in the world. In a period in which some kinds of human actions are being labelled 'inhuman' we ignore at our peril the importance of understanding more deeply the humanity, politics, social life and cultures of others. Social Anthropology has much to offer this critical contemporary challenge. It responds no less to the challenge of understanding our own culture and social lives. This course introduces how Social Anthropology has developed analytic perspectives which examine the particularities and differences of human societies and cultures. It introduces a range of theoretical tools that Social Anthropologists use to understand people in culture in more than taken for granted ways.

## 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 Sciences
- 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 'rreated' in a range of social and cultural settings.

## ANTH 2004

Anthropology of Ritual, Performance and Art

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: seminar papers/participation, essays

This course focuses on ritual, cultural performance and art in a broad range of regional settings and religious traditions. It locates anthropological approaches to ritual, performance and art within both indigenous and non-indigenous traditions and will consider the ways in which their particular cultural elements hold an ongoing fascination for spectators, listeners and participants. The celebration of bodies in and through societies will be examined through ritual processes of masking, making and moulding people, objects and performances. Paradigm shifts in the anthropological analyses of ritual, performance and art will be examined through various sites of ritual and artistic production, including contemporary sites of performance such as art galleries, museums and ethnographic films.

## ANTH 2012

## Media and Culture

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: workshop participation/papers, essays

This course analyses the complex processes through which media are socially constructed, both as part of everyday practice and in academic studies of media. The course takes the social and cultural sites, the places in which these acts of construction are located, as its main object of study, and its concern is less with the semiotic content of media genres than with analysing the institutional arrangements and social contexts within which meanings are made. The course looks at the consumption and production of media through the concepts of audiences, individuality, family and domesticity, the nation and globalisation, and explores how anthropology's theoretical and methodological perspective can inform this study. It critically examines how the discipline of media studies has analysed commercial and public production of different media forms. The course provides students with an appreciation of media studies, whilst also showing how anthropology's comparative sociological perspective and the use of holistic ethnographic methodologies can contribute to both 'public' and 'academic' understanding of media.

## ANTH 2013

## Media Analysis

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: workshop participation/papers, essays

Studies of media make an increasingly significant contribution to the development of anthropology because modern communication technologies and media are used in almost all societies in the contemporary world. Another, more profound reason for the
importance of studying media is that the creation of mediated cultural forms challenges anthropologists to reconsider many of the fundamental concepts and theories that have constituted the discipline. This course looks at how the development of media has both affected the users and those who have come (often literally in the case of anthropologists) to understand this use. Although the essential readings for this course relate directly to the anthropological study of media, the course's organisation around thematic areas that are common to many anthropologists' concerns (such as distinctions between space and time, nature and culture, self and other, body and spirit, and life and death) encourages students to ground their studies in this course in the knowledge they have developed in other courses. The content of both the lectures and the seminars will reinforce this interconnection. The aim is to build a reflexive understanding of how media practices and the special concerns of anthropology can be combined, both theoretically and methodologically.

## ANTH 2017

## Culture and Society: Contemporary Debates

-4 units - semester 2

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: seminar participation/papers, essays

Are we agents of our own destiny or cyphers of 'the system', destined to act according to social structures and cultural norms? This tension between agency and structure is one of the abiding issues that confront anthropologists and social scientists in their explanations of social life: what role or emphasis should be given to the consciousness and intentions of the individual in understanding social life? How much precedence should be given to the structures that we attribute to society in shaping our thoughts and actions? In this course we will be looking at the works of Claude Levi-Strauss, Michel Foucault, Pierre Bourdieu and major phenomenologists. All have exercised, and continue to exercise a profound influence on contemporary social anthropology, and each has taken up this debate between structure and agency. Our aims for this course are to understand these different approaches to the issue of structure and agency in social life and to examine them critically through the way they have been deployed in ethnographic studies by anthropologists.

## ANTH 2018

## Anthropology and the Environment

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Environmentalism: An Introduction to Anthropological Perspectives on Environmental Issues II/III
- Assessment: seminar papers/participation, essays

This course looks at what anthropology has to say about contemporary environmental issues. Because of systematic media bias, most of the information we consume on a daily basis is driven by elementary economic or scientific considerations. Anthropologists are more concerned to detail the cultural dimensions of human impacts on the contemporary environment, which in this course will refer primarily to advanced or modernised societies. Thus with reference to Australian material, we will examine pressing issues like debates over the meaning of landscape and the use of land, interpretations of climate change and agricultural decline, and conflicts over tourist developments in environmentally sensitive areas. An important feature of this course will be the changing nature of animal-human relationships (our relations with dingoes, koalas, whales, etc.) which are presently the source of considerable debate and dispute. We will also look at the cultural aspects of local level resistance movements, the ways in which ordinary citizens organise themselves against the modern state, transnational corporations, and global organisations like the World Bank.

## ANTH 2021

## Anthropology of Development

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Applied Anthropology: Strategies and Partnerships, Poverty and Development: Conditions and Experience
- Assessment: seminar participation/papers, 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 place-based experiences in the context of macro-economic, 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 community-based development; use of various participatory methods concerned with generating shared information, elucidating local views and ensuring community empowerment.

## ANTH 2022

## Popular Culture: Sex, Drugs and Rock ' $n$ ' Roll

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: The Sexual Body II/III, Popular Culture: Passion, Style, Tribe II/III
- Assessment: workshop papers/participation, essays

Sexual, drug 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 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: workshop participation/papers, 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 2025

## Southeast Asian Buddhist Social Worlds

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: workshop participation/papers, essays

The course examines the association between renunciation and power, religion and politics in the Theravada Buddhist societies of Southeast Asia. It considers the way in which the worldly dimensions of religion are grounded in the day-to-day concerns of the societies in which it is practiced. The course focuses on a variety of examples in which the contemporary world-view of the people from Southeast Asia, and the way in which their worldview is expressed, is shaped through the language of religion and, in turn, influences religiosity. Specifically we will look at the historical sources of the Theravada Buddhist tradition and the ways in which it was transformed into a popular religion in these societies and the relationship of the Theravada tradition to the political, economic and social lives of peoples in these societies today.

We will discuss current anthropological research in Theravada Buddhist countries: Buddhist activists and new social movements, political-ecology and Buddhism, reclusive monasticism, civic religion, modernity and Buddhism in the post-metropolis.

## ANTH 2026

## Anthropology of Food and Drink

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: seminar participation/papers, 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.

## Level III

## ANTH 3003

## Anthropology of Health and Medicine

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- 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 3004

## Anthropology of Ritual, Performance and Art

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: seminar papers/participation, essays

This course focuses on ritual, cultural performance and art in a broad range of regional settings and religious traditions. It locates anthropological approaches to ritual, performance and art within both indigenous and non-indigenous traditions and will consider the ways in which their particular cultural elements hold an ongoing fascination for spectators, listeners and participants. The celebration of bodies in and through societies will be examined through ritual processes of masking, making and moulding people, objects and performances. Paradigm shifts in the anthropological analyses of ritual, performance and art will be examined through various sites of ritual and artistic production, including contemporary sites of performance such as art galleries, museums and ethnographic films.

## ANTH 3012

## Media and Culture

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: workshop participation/papers, essays

This course analyses the complex processes through which media are socially constructed, both as part of everyday practice and in academic studies of media. The course takes the social and cultural sites, the places in which these acts of construction are located, as its main object of study, and its concern is less with the semiotic content of media genres than with analysing the institutional arrangements and social contexts within which meanings are made. The course looks at the consumption and production of media through the concepts of audiences, individuality, family and domesticity, the nation and globalisation. The course explores how anthropology's theoretical and methodological perspective can inform this study. It critically examines how the discipline of media studies has analysed commercial and public production of different media forms. The course provides students with an appreciation of media studies, whilst also showing how anthropology's comparative sociological perspective and the use of holistic ethnographic methodologies can contribute to both 'public' and 'academic' understanding of media.

## ANTH 3013

## Media Analysis

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: workshop participation/papers, essays

Studies of media make an increasingly significant contribution to the development of anthropology because modern communication technologies and media are used in almost all societies in the contemporary world. Another, more profound reason for the importance of studying media is that the creation of mediated cultural forms challenges anthropologists to reconsider many of the fundamental concepts and theories that have constituted the discipline. This course looks at how the development of media has both affected the users and those who have come (often literally in the case of anthropologists) to understand this use. Although the essential readings for this course relate directly to the anthropological study of media, the course's organisation around thematic areas that are common to many anthropologists' concerns (such as distinctions between space and time, nature and culture, self and other, body and spirit, and life and death) encourages students to ground their studies in this course in the knowledge they have developed in other courses. The content of both the lectures and the seminars will reinforce this interconnection. The aim is to build a reflexive understanding of how media practices and the special concerns of anthropology can be combined, both theoretically and methodologically.

## ANTH 3017

## Culture and Society: Contemporary Debates

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: seminar participation/presentation, major essay

Are we agents of our own destiny or cyphers of 'the system', destined to act according to social structures and cultural norms? This tension between agency and structure is one of the abiding issues that confront anthropologists and social scientists in their explanations of social life: what role or emphasis should be given to the consciousness and intentions of the individual in understanding social life? How much precedence should be given to the structures that we attribute to society in shaping our thoughts and actions? In this course we will be looking at the works of Claude Levi-Strauss, Michel Foucault, Pierre Bourdieu and major phenomenologists. All have exercised, and continue to exercise a profound influence on contemporary social anthropology; and each has taken up this debate between structure and agency. Our aims for this course are to understand these different approaches to the issue of structure and agency in social life and to examine them critically through the way they have been deployed in ethnographic studies by anthropologists.

## ANTH 3018

## Anthropology and the Environment

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Environmentalism: an introduction to anthropological perspectives on environmental issues $I / / I I$
- Assessment: seminar papers/participation, essays

This course looks at what anthropology has to say about contemporary environmental issues. Because of systematic media bias, most of the information we consume on a daily basis is driven by elementary economic or scientific considerations. Anthropologists are more concerned to detail the cultural dimensions of human impacts on the contemporary environment, which in this course will refer primarily to advanced or modernised societies. Thus with reference to Australian material, we will examine pressing issues like debates over the meaning of landscape and the use of land, interpretations of climate change and agricultural decline, and conflicts over tourist developments in environmentally sensitive areas. An important feature of this course will be the changing nature of animal-human relationships (our relations with dingoes, koalas, whales, etc.) which are presently the source of considerable debate and dispute. We will also look at the cultural aspects of local level resistance
movements, the ways in which ordinary citizens organise themselves against the modern state, transnational corporations, and global organisations like the World Bank.

## ANTH 3021

## Anthropology of Development

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Applied Anthropology: Strategies and Partnerships, Poverty and Development: Conditions and Experience
- Assessment: seminar participation/papers, 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 place-based experiences in the context of macro-economic, historical and sociopolitical 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 community-based development; use of various participatory methods concerned with generating shared information, elucidating local views and ensuring community empowerment.

## ANTH 3022

## Popular Culture: Sex, Drugs and Rock 'n' Roll

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: The Sexual Body II/III, Popular Culture: Passion, Style, Tribe II/III
- Assessment: workshop participation/papers, essay

Sexual, drug 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 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: workshop participation/papers, 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 3025

## Southeast Asian Buddhist Social Worlds

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: workshop papers, essays

The course examines the association between renunciation and power, religion and politics in the Theravada Buddhist societies of Southeast Asia. It considers the way in which the worldly dimensions of religion are grounded in the day-to-day concerns of the societies in which it is practiced. The course focuses on a variety of examples in which the contemporary world-view of the people from Southeast Asia, and the way in which their worldview is expressed, is shaped through the language of religion and, in turn, influences religiosity. Specifically we will look at the historical sources of the Theravada Buddhist tradition and the ways
in which it was transformed into a popular religion in these societies and the relationship of the Theravada tradition to the political, economic and social lives of peoples in these societies today.

We will discuss current anthropological research in Theravada Buddhist countries: Buddhist activists and new social movements, political-ecology and Buddhism, reclusive monasticism, civic religion, modernity and Buddhism in the post-metropolis.

## ANTH 3026

## Anthropology of Food and Drink

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: seminar participation/papers, 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.

## Honours

## ANTH 4401A/B

## Honours Anthropology

- 24 units - full year
- Prerequisite: UG degree \& distinction average in courses contributing to major in Anthropology or equivalent 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 1003RW

## Biology of Plants and Animals

- 3 units - semester 2
- 2 lectures, 1 tutorial, 3 hours practical work per week
- Assumed Knowledge: APP ECOL 1004RW Cell Biology and Genetics or equivalent
- Restriction: Biology of Organisms, Biology 1
- Assessment: exam 50\%, tutorial exercises, practical reports 50\%

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.

## APP ECOL 1004RW

## Cell Biology and Genetics

- 3 units - semester 1
- 2 lectures, tutorial, 3 hours practical work per week.
- Restriction: Biology A, Biology INR, Biology 1

Assessment: practical reports, tutorial exercises 30\%, exam 70\%
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.

## 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.

## Level II

## APP ECOL 2015RW

## Field Studies IIA

- 3 units - not offered 2006
- 6 hours per week
- Assumed Knowledge: APP ECOL 1002RW Field Studies IA
- Restriction: APP ECOL 2016RW Field Studies IIB
- Assessment: progress report, oral presentation, group project report

Students work on group projects that involve environmental survey work. Each project will be supervised by a member of academic staff. Students will have flexibility in the project they choose. Possible topics include plant and animal surveys, environmental rehabilitation, and water monitoring. A link with an industry or a community group is encouraged.

## APP ECOL 2016RW

## Field Studies IIB

- 3 units - not offered 2006
- Assumed Knowledge: APP ECOL 1002RW Field Studies IA
- Restriction: APP ECOL 2016RW Field Studies IIA
- Assessment: progress report, oral presentation, group project report

Students work on group projects that involve environmental survey work. Each project will be supervised by a member of academic staff. Students will have flexibility in the project they choose. Possible topics include plant and animal surveys, environmental rehabilitation, and water monitoring. A link with an industry or a community group is encouraged

## Level III

## APP ECOL 3000WT <br> IPM Internship

- 3 units - semester 1 or 2
- 6 hours per week
- Prerequisite: APP ECOL 3008WT Integrated Pest Management A

Candidates for the major in Integrated Pest Management must complete an internship of at least thirteen weeks in one or more approved workplaces where management of pests is a primary focus of the employer. A minimum of five weeks must be spent with any one sponsor. Students should consult the Internship Coordinator (Integrated Pest Management major) one semester in advance of the intended internship period for allocation of suitable placements, which may be taken up at any time including vacation periods. The internship will normally include elements of the following: evaluation of pest biology and ecology in the field, sampling and decision-making in the management of pest populations, record keeping, client-adviser interactions such as the delivery of information and advice, and the economics of pest management enterprises. A diary of activities must be kept at each placement, and a written report on the activities, history, status and future of the property, business or enterprise presented at the end of the internship

## APP ECOL 3003RW

## Individual Studies B

- 3 units - not offered in 2006
- Individual/small group contact with supervisor each week
- Prerequisite: credit in at least one relevant Level II course; approval by senior program adviser
- Restriction: only one Individual Studies course can be credited towards Bachelor of Natural Resource Management
- Assessment: final project report

This course is to enable students as individuals or small teams to undertake a laboratory or field based research project, a literature review, and/or essays relevant to natural resource management. The objectives and nature of the program will be determined in consultation with the senior program adviser as course coordinator.

## APP ECOL 3008WT

## Integrated Pest Management A

- 3 units - semester 1
- 2 lectures; four/five hour practicals/computer exercises per week
- Assessment: exam 50\%, practical exercises, assignments 50\%

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.

## APP ECOL 3013EX

## Individual Studies C

- 6 units - not offered in 2006
- External offering - Individual/small group contact with supervisor each week
- Prerequisite: credit in at least one relevant Level II course; approval by senior program adviser
- Restriction: only one Individual Studies course can be credited towards B.NR.Mgt.

Assessment: final project report
This course is to enable students as individuals to undertake a major laboratory or field based research project, a literature review, and/or essays relevant to natural resource management. The objectives and nature of the program will be determined through consultation with the senior program adviser as course coordinator.

## APP ECOL 3013RW

## Individual Studies C

- 6 units - not offered in 2006
- Individual/small group contact with supervisor each week
- Prerequisite: credit in at least one relevant Level II course; approval by senior program adviser
- Restriction: only one Individual Studies course can be credited towards B.NR.Mgt.
- B.NR.Mgt.Assessment: final project report

This course is to enable students as individuals to undertake a major laboratory or field based research project, a literature review, and/or essays relevant to natural resource management. The objectives and nature of the program will be determined through consultation with the senior program adviser as course coordinator.

## APP ECOL 3016RW

## Individual Studies A

- 3 units - Not offered in 2006
- Individual/small group contact with supervisor each week
- Prerequisite: credit in at least one relevant Level Il course, approval by senior program adviser
- Restriction: only one Individual Studies course can be credited towards B.NR.Mgt.
- Assessment: final project report

This course is to enable students as individuals or small teams to undertake a laboratory or field based research project, a literature review, and/or essays relevant to natural resource management. The objectives and nature of the program will be determined through consultation with the Senior Program Adviser as Course Coordinator.

## APP ECOL 3017WT

## Communication in the Agri-Food Industry

- 3 units - semester 2
- 6 hours per week
- Assumed Knowledge: Level I/II of B.Ag.Sc or B.Sc.(Ag.Sc)
- 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.

## APP ECOL 3022AEX

## Integrated Weed Management Part 1

- 1.5 units - semester 1
- 2-day residency in first mid-semester break - modules at students' pace
- Assumed Knowledge: completion of Level II Plant Biology course
- Assessment: 5 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.

## APP ECOL 3022BEX

## Integrated Weed Management Part 2

- 3 units - full year
- modules at students' pace
- Prerequisite: APP ECOL 3022AEX Integrated Weed Management Part 1
- Assessment: part of APP ECOL 3022AEX - 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.


## APP ECOL 3028WT

## Insect Ecology

- 3 units - semester 2
- Assumed Knowledge: ANIML SC 2005WT Agricultural Zoology II or APP ECOL 3018WT Agricultural Zoology (Invertebrates) or ENV BIOL 2900B Zoology II (Part 2) or APP ECOL 2013RW
Microorganisms and Invertebrates
- Assessment: reports, assignments 50\%, exam 50\%

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.

## Honours

## APP ECOL 4000ARW/BRW

## Honours Plant and Pest Science (B.NR.Mgt.)

- 24 units - full year
- Prerequisite: credit or better in at least 2 Level III courses or by permission of the 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 4003AWT/BWT

## Honours Environmental Science (Plant \& Pest Science)

- 12 units - full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by the Head of Discipline
- Assessment: seminars, thesis on research project 60\%, average of specified Level III courses
- Requirement: research project of student's choosing (on a topic acceptable to Discipline) normally undertaken at the same time as coursework (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 department/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.

## APP ECOL 4006AWT/BWT

## Honours Integrated Pest Management (B.Ag.Sc.)

- 12 units - full year
- Equivalent to 4 Level III courses
- Prerequisite: pass in all Level I, II and chosen Level III course of B.Ag.Sc; credit in at least 2 Level III courses chosen from list of courses required for Integrated Pest Management degree
- Corequisite: 2 additional Level III courses - relevant to proposed research project, and approved by Head of Discipline - from those required for IPM degree (at discretion of Head of Discipline, a course taught by another discipline may be accepted)
- Assessment: to be advised

Students wishing to undertake honours should consult the Head of Discipline as soon as their intention is known, but no later than the end of semester 2 in the third year of the program. Each candidate will be assigned a research project in an area of entomology, plant pathology, weed science or vertebrate pest management, which will be carried out under the supervision of one or more members of academic staff. Results will be presented in a dissertation and seminar at the end of the course. Candidates will begin studies on 1 February.

## ARCHITECTURE

## Level IV

## 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., and 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 only
- 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. and B.Arch./B.L.Arch. students only
- Restriction: ARCH 4016 Architecture Studio IA or ARCH 4027 Architecture/Landscape Architecture Studio IF
- Assessment: assignments, 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.

## Level V

## ARCH 5002

## Advanced Studies in Architecture II

- 3 units - semester 1
- 2 hour tutorial/seminar per week
- Eligibility: Eligibility: approved Honours B.Arch. students only
- 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 only
- 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. and B.Arch./B.L.Arch. students only
- 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 and 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 <br> 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. and B.Arch./B.L.Arch. students only
- Corequisite: ARCH 5029 Architecture Processes or LARCH 5028 Landscape Arch. Processes; \& 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. and B.Arch./B.L.Arch. students only
- 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. and B.Arch./B.L.Arch. students only
- 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.

## 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: essay, tutorial papers/presentations, hand-outs

From Gods, ghosts, bound lotus feet, peasants, Chineseness, revolution and dictatorship to little emperors, bad girl literature and Chinese hip hop; Introduction to Chinese Society and Culture introduces these and other major issues for anybody interested in China. This course focuses on key social and cultural issues in modern and contemporary China and the influence of traditional society on them. By the end of the semester you will be familiar with some of the central concerns of Chinese culture and key 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, 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, examinations 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 roles 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 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 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 Sciences
- Assessment: participation, tutorial papers, essays, journal/ research exercise - total of 4800-6000 words

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 2003

## Australia and the Asia Pacific

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: essays, presentation, participation

The course will examine Australia's relations with Asia in global and regional perspective. Some of the enduring concerns of Australian and Asian policymakers such as the search for regional order, the resolution of political and trade disputes and management of political and economic interdependence will be addressed throughout the course. While some historical aspects of Australia's links with Asia will be considered to provide a backdrop to the relationship, the major part of the course's focus is placed on contemporary issues. The course will examine selected thematic issues concerning Australia's ties with Asia as well as regional and bilateral relations. While the course is designed to provide students of Asian and international studies with some of the essential conceptual and analytical tools to understand Australia's Asian context, it also serves as an introduction to Australia's relations with Asia which will be of interest to a wide range of students, especially those whose future jobs might be related to a particular Asian country or to the Asia Pacific region.

## ASIA 2005

## Foundations of Chinese Thought

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities or Social Sciences
- Assessment: tutorial presentation, 2 tutorial papers, major essay - total of 4800-6000 words

This is an introductory subject on the formative period in Chinese philosophical and religious thought. It covers the period from early Confucian and Daoist thought to the Chan (Zen) transformation of Buddhism in China. The subject will look at the representative schools, their main thinkers and writings, and the ideas they developed. The contemporary social and philosophical relevance of many of the ideas and debates are emphasised. The importance of this formative period in Chinese thought is reflected in its subsequent influence on Chinese philosophy, religion, politics, law, art, aesthetics and literature. Much of this legacy was also shared by Japan, Korea and Vietnam. An understanding of the foundations of Chinese thought helps us to make explicit and self-conscious some of the radically different assumptions of our own intellectual traditions. It also provides background knowledge crucial to an informed understanding of many developments in modern and contemporary China.

## ASIA 2012

Contemporary Japan: Culture and Identity

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Contemporary Japan: Politics and Society II/II
- Assessment: 2 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 Sciences
- Assessment: tutorial presentation, 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 post-war political system, the party system, electoral politics, policy processes, Parliament and the electoral process, regional politics, defence and security, Japan and the United States, Japan in the Asia Pacific region, Japan and international organisations (GATT, WTO, UN), Japan and Australia and Japan's foreign economic aid policy.

## ASIA 2017

## From Manchus to Mao: The History of Modern China

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level 1 Humanities/Social Sciences
- Assessment: participation, tutorial papers, essays, journal/research exercise - total of 4800-6000 words

Knowledge of modern Chinese history is fundamental to understanding contemporary China. This course introduces students to a selection of key events and themes in modern Chinese history from the late imperial period to the present. Collectively, these events and themes have defined the course of modern Chinese history. The course also provides an understanding of how those events have been interpreted. Particular emphasis is placed on comparing the interpretations of Chinese, Japanese and Western historians, and to introducing their various historiographical approaches to those events. The course assumes no prior understanding of the history of modern China. The organisation of the course is chronological and consists of 11
major events and themes, each of which is introduced in a lecture. Workshop discussion and tutorial presentations will address historical and contemporary approaches to interpreting aspects of these events and themes. In secondary studies of these historical events, students' attention will be drawn to the assumptions and theories underlying the choices that individual authors/scholars make in selecting evidence and providing supporting data.

## Level III

## ASIA 3003

## Australia and the Asia Pacific

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: essays, presentation, participation

The course will examine Australia's relations with Asia in global and regional perspective. Some of the enduring concerns of Australian and Asian policymakers such as the search for regional order, the resolution of political and trade disputes and management of political and economic interdependence will be addressed throughout the course. While some historical aspects of Australia's links with Asia will be considered to provide a backdrop to the relationship, the major part of the course's focus is placed on contemporary issues. The course will examine selected thematic issues concerning Australia's ties with Asia as well as regional and bilateral relations. While the course is designed to provide students of Asian and international studies with some of the essential conceptual and analytical tools to understand Australia's Asian context, it also serves as an introduction to Australia's relations with Asia which will be of interest to a wide range of students, especially those whose future jobs might be related to a particular Asian country or to the Asia Pacific region.

## ASIA 3005

## Foundations of Chinese Thought

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: tutorial presentation, 2 tutorial papers, major essay - total of 7200-9000 words

This is an introductory subject on the formative period in Chinese philosophical and religious thought. It covers the period from early Confucian and Daoist thought to the Chan (Zen) transformation of Buddhism in China. The subject will look at the representative schools, their main thinkers and writings, and the ideas they developed. The contemporary social and philosophical relevance of many of the ideas and debates are emphasised. The importance of
this formative period in Chinese thought is reflected in its subsequent influence on Chinese philosophy, religion, politics, law, art, aesthetics and literature. Much of this legacy was also shared by Japan, Korea and Vietnam. An understanding of the foundations of Chinese thought helps us to make explicit and self-conscious some of the radically different assumptions of our own intellectual traditions. It also provides background knowledge crucial to an informed understanding of many developments in modern and contemporary China.

## ASIA 3012

## Contemporary Japan: Culture and Identity

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Contemporary Japan: Politics and Society II/III
- Assessment: 2 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 Sciences
- Assessment: tutorial presentation, 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 post-war political system, the party system, electoral politics, policy processes, Parliament and the electoral process, regional politics, defence and security, Japan and the United States, Japan in the Asia Pacific region, Japan and international organisations (GATT, WTO, UN), Japan and Australia and Japan's foreign economic aid policy.

ASIA 3017
From Manchus to Mao: The History of Modern China

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: tutorial presentation, 2 tutorial papers, major essay, - total of 7200-9000 words

Knowledge of modern Chinese history is fundamental to understanding contemporary China. This course introduces students to a selection of key events and themes in modern Chinese history from the late imperial period to the present. Collectively, these events and themes have defined the course of modern Chinese history. The course also provides an understanding of how those events have been interpreted. Particular emphasis is placed on comparing the interpretations of Chinese, Japanese and Western historians, and to introducing their various historiographical approaches to those events. The course assumes no prior understanding of the history of modern China. The organisation of the course is chronological and consists of 11 major events and themes, each of which is introduced in a lecture. Workshop discussion and tutorial presentations will address historical and contemporary approaches to interpreting aspects of these events and themes. In secondary studies of these historical events, students' attention will be drawn to the assumptions and theories underlying the choices that individual authors/scholars make in selecting evidence and providing supporting data.

## Honours

## ASIA 4401A/B

## Honours Asian Studies

## 24 units - full year

- Prerequisite: UG degree, credit average in courses contributing to major in an Asian language or Asian Studies or equivalent approved by Head of Discipline
- Assessment: thesis $50 \%$, theory and 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 parttime 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 either CHEM 1000B Chem I, CHEM 1200 Chem IB and BIOLOGY 1101 Mol, Genes \& Cells A or BIOLOGY 1102 Mol, Genes \& Cells B and BIOLOGY 1201 Human Persp or BIOLOGY 1202 Organisms-other prerequisites may be accepted at discretion of Head of Discipline
- Restriction: BIOCHEM 2000A/B Biochem II, BIOCHEM 2100 Biochem IIA, BIOCHEM 2200 Biochem IIB, BIOCHEM 2001A/B, BIOCHEM 2101, BIOCHEM 2201 Biochem II(MolBiol), BIOCHEM 2005A/B BIOCHEM 2105, BIOCHEM 2205Biochem 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: for B.Sc. (Molecular Biology) students only
- Prerequisite: pass in CHEM 1000A/B or CHEM 1100 and CHEM 1200 and BIOLOGY 1101 or BIOLOGY 1102 and 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: for B.Sc. (Molecular Biology) students only
- Prerequisite: pass in either CHEM 1000A/B or CHEM 1100 and CHEM 1200 AND pass in BIOLOGY 1101 or BIOLOGY 1102 and 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

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 of molecular biology and molecular biological techniques and the conceptual basis for the molecular approach to biological understanding. The course material will be presented by staff from the Schools of Molecular and Biomedical Science, Physics and Chemistry and Agriculture and Wine. Invited speakers 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: B.Sc. (Biotech) students only
- Prerequisite: specified courses for B.Biotech.incl. pass in either CHEM 1000A/B, CHEM 1200 and BIOLOGY 1101 or BIOLOGY 1102 and BIOLOGY 1201 or BIOLOGY 1202
- Corequisite: other courses required for the B.Biotechnology
- Assumed Knowledge: Level 1 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
- 3 lectures, tutorial , 4 hour practical per week
- Assumed Knowledge: CHEM 1000A/B Chemistry I Parts 1 \& 2 or CHEM 1001A/B Foundations of Chemistry Parts 1 \& 2
- Restriction: PLANT SC 2002 WT Chemistry of Biopolymers, BIOCHEM 2100 Biochemistry IIA

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 either CHEM 1000B or CHEM 1200 AND pass in BIOLOGY 1101 or BIOLOGY 1102 and BIOLOGY 1201 or BIOLOGY 1202-other prerequisites may be accepted at discretion of Head of Discipline
- 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 work per week
- Eligibility: for B.Sc. (Molecular Biology) students only
- Prerequisite: Pass in either CHEM 1000A/B or CHEM 1100 and CHEM 1200 AND pass in BIOLOGY 1101 or BIOLOGY 1102 and BIOLOGY 1201 or BIOLOGY 1202 - other prerequisites may occasionally 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: for B.Sc. (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 1 Biology
- Assessment: practical component, tutorials, written reports

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 of molecular biology and molecular biological techniques and the conceptual basis for the molecular approach to biological understanding. The course material will be presented by staff from the Schools of Molecular and Biomedical Sciences, Physics and Chemistry and Agriculture and Wine. Invited speakers 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 B.Sc. (Biotech) students only
- Prerequisite: specified courses for B.Biotech.incl. pass in either CHEM 1000A/B CHEM 1201 or Chemistry IANR and pass in BIOLOGY 1101 or BIOLOGY 1102 and BIOLOGY 1201or BIOLOGY 1202
- Corequisite: other courses required for B.Biotechnology
- Assumed Knowledge: BIOCHEM 2105 Biochemistry II (Biotechn.)
- 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: either 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 (Biotechnology) A and BIOCHEM 2205 Biochemistry II (Biotechnology) 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 3002

## Advanced Molecular Biology III

- 2 units - semester 1
- 12 hours tutorials, 50 hours practicals
- Eligibility: B.Sc. (Molecular Biology) students only
- Prerequisite: Level 2 prerequisites required for B.Science (Molecular Biology) students only
- Assessment: practical component, written reports

The course will consist of practical sessions and specialised tutorials. The practical component will be a mixture of sessions from existing courses (BIOCHEM 3000 Molecular and Structural Biology and GENETICS 3000 Molecular Genetics: Genomes and Gene Expression) and projects conducted within individual laboratories from the Departments of Molecular Biosciences and Chemistry. The practical component for individual students will vary according to their selection of other Level III courses. This is necessary to avoid duplication of practical sessions (eg those enrolled in BIOCHEM 3000 Molecular and Structural Biology III will not have the practical component of BIOCHEM 3000 Molecular and Structural Biology III included in Advanced Molecular Biology III). All students will take the specialised tutorials, which will highlight recent advances in molecular biology. The core of these tutorials will be provided by the Departments of Molecular Biosciences and Chemistry. Experts from other science departments and the Waite Campus will also be invited to participate in problem solving sessions that relate to their field of study.

## BIOCHEM 3003

## Genes and Proteins III (Molecular Biology)

- 4 units - semester 1
- 3 lectures, 1 tutorial per week
- Eligibility: B.Sc. (Molecular Biology) students only
- Prerequisite: either Pass in BIOCHEM 2001A/B Biochemistry II (Molecular Biology) or Pass in both BIOCHEM 2101 Biochemistry II (Molecular Biology) A and BIOCHEM 2201 Biochemistry II (Molecular Biology) B
- Corequisite: BIOCHEM 3002 Advanced Molecular Biology III
- Assessment: end of semester exam on lecture material

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.

## Honours

## BIOCHEM 4000A/B

## Honours Biochemistry

- 24 units - full year
- Prerequisite: satisfactory performance in Level III courses offered by Department. - 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 B.Sc..

## 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

This is a first semester course for students who have not attained an achievement score of 13 in SACE Stage 2 Biology. It prepares students for further studies in either of the second semester biology courses. The course introduces five major themes that are the basis for understanding how all organisms function. These are: Molecules in Biology; Cell biology; Cellular energetics; Cell division and inheritance; How genes work - DNA to protein.

## 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 equivalent
- Assessment: exams, practical work/tutorial assessment

This course runs parallel to BIOLOGY 1101 Biology I: Molecules, Genes and Cells A but takes into account the fact that students have been introduced to some of the topics in SACE Stage 2 Biology. It prepares students for further studies in either of the second semester biology courses. This course covers five major themes that are the basis for understanding how all organisms function. These are: Molecules in biology; Cell biology; Cellular energetics; Cell division and inheritance; How genes work - DNA to protein.

## BIOLOGY 1201

## Biology I: Human Perspectives

- 3 units - semester 2
- Available for Non-Award Study
- Assumed Knowledge: either of BIOLOGY 1101 Biology I: Molecules, Genes and Cells IA or BIOLOGY 1102 Biology I: Molecules, Genes and 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 defense 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
- Assumed Knowledge: either BIOLOGY 1101 Biology I: Molecules, Genes and Cells IA or BIOLOGY 1102 Biology I: Molecules, Genes and Cells IB
- 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 and 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

## BIOMETRY

## Level III

## BIOMET 3000WT

## Agricultural Experimentation

- 3 units - semester 1
- 2 lectures, 2 hour tutorial a week
- Prerequisite: STATS 1004 Statistical Practice I (Life Sciences) or STATS 1000 Statistical Practice I
- Assessment: individual assignment $30 \%$, written assignments $10 \%$, final exam $60 \%$

The philosophy of science and the experimental method. Topics covered include: Latin squares, factorial designs, split-plot designs, analysis of covariance, multiple comparisons, linear contrasts, orthogonal polynomials, generalised linear models, probit analysis, transformation of data. The statistical package Genstat for Windows will be used for the analysis of data sets.

## BIOTECHNOLOGY

## Level I

## BIOTECH 1000

## Introduction to Biotechnology

- 3 units - semester 1
- Up to 2 lectures, 4 hours practicals or equivalent per week
- Eligibility: B.Sc.(Biotech) students only
- Assessment: exam 60\%, assignments/group projects 40\%

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, 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 hours 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, cellculture 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 hours project work per week
- Eligibility: B.Sc. (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, $6 \times 3$ 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 equivalent - in exceptional circumstances, consult the Head of Department
- 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, $6 \times 3$ hour practical sessions (or equiv.), interactive computer assessed tutorials \& practicals
- Eligibility: only 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 equivalent
- 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-, $p$ - and d-block elements.

## CHEM 1200

## Chemistry IB

- 3 units - semester 2
- 3 lectures, 1 tutorial per week, $6 \times 3$ 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 equivalent) - in exceptional circumstances, consult the Head of Department
- Assumed Knowledge: CHEM 1100 Chemistry IA
- Restriction: Restriction: CHEM 1101 Foundations of Chemistry IA, CHEM 1201 Foundations of Chemistry 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; $6 \times 3$ hour practical sessions (or equiv.), interactive computer assessed tutorials \& practicals
- Eligibility: only 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 A
- Restriction: CHEM 1100 Chemistry IA, CHEM 1200 Chemistry 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 1000A/B Chemistry I or CHEM 1100 Chemistry IA \& CHEM 1200 Chemistry IB, CHEM 1001A/B Foundations of Chemistry I or CHEM 1101 Foundations of Chemistry A \& CHEM 1200 Foundations of Chemistry B 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 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, CHEM 1001A/B Foundations of Chemistry (Credit) or CHEM 1101 Foundations of Chemistry A (Credit) \& CHEM 1201 Foundations of Chemistry B (Credit) or equivalent
- 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: B.Sc.(Molecular Biology) students only
- Prerequisite: CHEM 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, CHEM 1001A/B Foundations of Chemistry (Credit) or CHEM 1101 Foundations of Chemistry A (Credit) \& CHEM 1201 Foundations of Chemistry B (Credit) or equivalent
- Corequisite: BIOCHEM 2102 Advanced Molecular Biology A
- 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 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, CHEM 1001A/B Foundations of Chemistry (Credit) or CHEM 1101 Foundations of Chemistry A (Credit) \& CHEM 1201 Foundations of Chemistry B (Credit) or equivalent
- Assumed Knowledge: basic mathematical proficiency equivalent to Level I Mathematical Sciences course
- 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 2106

## Chemistry IIA (Molecular \& Drug Design)

-4 units - semester 1

- 3 lectures, 1 tutorial, 6 hours practical work (or equiv.) per week
- Eligibility: B.Sc.(Molecular and Drug Design) students only
- Prerequisite: either CHEM 1000A/B Chemistry I or CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB
- Assessment: exam 65\%, practical work $25 \%$, tutorial papers $10 \%$

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 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 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, CHEM 1001A/B Foundations of Chemistry (Credit) or CHEM 1101 Foundations of Chemistry A (Credit) \& CHEM 1201 Foundations of Chemistry B (Credit) or equivalent
- 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: B.Sc. (Molecular Biology) students only
- Prerequisite: CHEM 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, CHEM 1001A/B Foundations of Chemistry (Credit) or CHEM 1101 Foundations of Chemistry A (Credit) \& CHEM 1201 Foundations of Chemistry B (Credit) or equivalent
- Corequisite: BIOCHEM 2202 Advanced Molecular Biology B
- Assumed Knowledge: CHEM 2101 Chemistry IIA (Mol. Biol.)
- 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 $\times 6$ hour practical sessions (or equiv.), tutorials
- Eligibility: Chemical Engineering students only
- Prerequisite: CHEM 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, CHEM 1001A/B Foundations of Chemistry (Credit) or CHEM 1101 Foundations of Chemistry A (Credit) \& CHEM 1201 Foundations of Chemistry B (Credit) or equivalent
- Assumed Knowledge: HEM 2104 Chemistry IIAE, basic mathematical proficiency equivalent to Level I Mathematical Sciences course
- 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 2206

## Chemistry IIB (Molecular and Drug Design)

- 4 units - semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv.) per week
- Eligibility: B.Sc. (Molecular and Drug Design) students only
- Prerequisite: Either CHEM 1000A/B Chemistry I or CHEM 1100 Chemistry IA \& CHEM 1200 Chemistry IB
- Assumed Knowledge: CHEM 2106 Chemistry IIA (Mol.Drug Des.)
- Assessment: Exam 65\%, practical work 25\%, tutorial papers 10\%

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: either CHEM 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, or either CHEM 1001A/B Foundations of Chemistry I or CHEM 1101 Foundations of Chemistry IA and CHEM 1200 Foundations of Chemistry IB or equivalent
- 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 (including GLC, HPLC, HPIC, ion exchange), electrochemical and optical spectroscopic methods (including metal analysis), advanced instrumental techniques and statistical analysis of data.

## CHEM 2208

## Analytical Chemistry II (Ecochemistry)

- 4 units - semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv.) per week
- Eligibility: B.Sc.(EcoChemistry) students only
- Prerequisite: either CHEM 1000A/B Chemistry I or CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB, or either CHEM 1001 A/B Foundations of Chemistry I or CHEM 1101 Foundations of Chemistry IA and CHEM 1200 Foundations of Chemistry 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 (including GLC, HPLC, HPIC, ion exchange), 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.

## CHEM 2209

## Analytical Chemistry II (Nanoscience \& Materials)

- 4 units - semester 2
- 3 lectures, 1 tutorial, 6 hours practical work (or equiv.) per week
- Eligibility: B.Sc.(Nanoscience \& Materials) students only
- Prerequisite: either CHEM 1000A/B Chemistry I or CHEM 1100 \& 1200 Chemistry IA/B, or either CHEM 1001A/B Foundations of Chemistry I or CHEM 1101 Foundations of Chemistry IA and CHEM 1200 Foundations of Chemistry IB or acceptable equivalent
- 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 (including GLC, HPLC, HPIC, ion exchange), 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.

## 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 2000A/B Chemistry II or CHEM 2100 Chemistry IIA \& CHEM 2200 Chemistry IIB

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 2000A/B Chemistry II or CHEM 2100 Chemistry IIA \& CHEM 2200 Chemistry IIB

Course content by arrangement with the Head of Chemistry

## CHEM 3111

Chemistry III

- 6 units - semester 1
- 4 lectures, 1 tutorial, 12 hours practical (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA and CHEM 2200 Chemistry IIB or equivalent
- 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 (or equiv.) per week
- Available for Non-Award Study
- Prerequisite: CHEM 2100 Chemistry IIA, CHEM 2200 Chemistry IIB
- Corequisite: CHEM 3111 Chemistry IIIB
- 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 supercritical 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-to-noise 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 and 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 IIIB or equivalent
- 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 equivalent
- 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 Synthetics 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 equivalent
- 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 equivalent
- 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 specied capable of controlled $\mathrm{N}_{2}$, $\mathrm{CO}_{2}, \mathrm{CO}$ and $\mathrm{CH}_{4}$ activation.

## Honours

## CHEM 4000A/B

## Honours Chemistry

- 24 units - full year
- Prerequisite: major in Chemistry, Organic Chemistry Chemistry, Physical \& Inorganic Chemistry, Chemical Synthesis, Chemistry of Materials or other 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 Department 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 4001A/B

Honours Bachelor of Environmental Science (Chem.)

- 12 units - full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by Head of Department. Intending candidates should consult Head of Chemistry and potential supervisors during third year and be prepared to begin studies at the start of Feb or Aug
- Assessment: research proposal, seminars, thesis, viva voce 60\%, average of Level III courses referred to above 40\%

Research project of the student's choosing (on topic acceptable to Head of Department) normally taken at same time as coursework (12 units of Level III courses relevant to student's Honours project).

## CHINESE

## Level I

## CHIN 1001

Chinese IA

- 3 units - semester 1
- 5 contact hours per week, incl. 1 hour language lab (unsupervised)
- Available for Non-Award Study
- Assumed Knowledge: no previous knowledge of Chinese required
- Assessment: continuous assignments \& tests, oral tests, midterm \& final exam

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 per week, incl. 1 hour in language lab (unsupervised)
- Available for Non-Award Study
- Prerequisite: CHIN 1001 Chinese IA (Pass Div 1) or equivalent
- Assessment: assignments, tests, oral tests, mid-term, final exam

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.

## CHIN 1011

## Chinese ISA

- 3 units - semester 1
- 5 contact hours per week
- Available for Non-Award Study
- Prerequisite: Continuers level Chinese (at 16 or better) or equiv
- Assessment: weekly assignments, tests, mid-term \& 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 courses 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 (Pass Div 1) or equivalent
- Assessment: weekly assignments, tests, mid-term \& 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 (Pass Div 1) or equivalent
- Assessment: weekly assignments, tests, mid-term \& 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 courses 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 (Pass Div 1) or equivalent
- Assessment: weekly assignments, tests, mid-term \& 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 overseas 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 (Pass Div. 1) or equivalent
- Assessment: continuous assessment, tests, exam

The course assumes knowledge and linguistic skills equivalent to Chinese for Chinese Speakers IIA (Pass Div 1). 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 (Pass Div 1) or equivalent
- Assessment: oral \& written tests, translations, composition, short essays, exam

This course aims to consolidate and extend the language skills developed at Chinese IS 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 original 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 (Pass Div 1) or equivalent
- Assessment: oral tests, translations. exams, composition \& short essays on background to materials studied

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 (Pass Div 1) or equivalent
- Assessment: oral and written tests, translations, composition short essays, exam

This course aims to consolidate and extend the language skills developed at second year 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 original 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 (Pass Div 1) or equivalent
- Assessment: oral tests, translations, composition \& short essays on background to materials studied and exam

This course is a continuation of CHIN 3001 Chinese IIIA. This course aims to consolidate and extend the language skills developed in Chinese IIIA 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 (Pass Div. 1) or equivalent
- 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 (Pass Div. 1) or equivalent
- 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

## Advanced Chinese A

- 6 units - semester 1
- 3 contact hours per week (plus 2 hours unsupervised)
- Prerequisite: CHIN 2012 Chinese IISB (Pass Div 1) or equivalent
- 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

## Advanced Chinese B

- 6 units - semester 2
- 3 contact hours per week (plus 2 hours unsupervised)
- Prerequisite: CHIN 3011 Advanced Chinese IIIA (Pass Div 1) or equivalent
- Assessment: continuous, final exam

This course is a continuation of CHIN 3011 Advanced Chinese A.
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 4401A/B

## 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 subjects in one discipline (eg History, Politics, Economics, etc).

Entry to the Honours course 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.

## CLASSICS

## Level I

## CLAS 1001

## Classics: From Egypt to Ancient Greece

- 3 units - semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Restriction: Classics: From Egypt to Rome
- Assessment: $2 \times 1200$ 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. The lectures will deal with Egypt, Mesopotamia, SyroPalestine, 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
- Restriction: Classics: From Egypt to Rome
- Assessment: $2 \times 1200$ 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.

## Level II

## CLAS 2004

## Classical Mythology

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 2 tutorial papers 42\%, tutorial summaries 18\%, 2 hour exam or academic journal 40\%

This course examines some of the functions of myth in Greek and Roman society. For illustrative purposes, some attention is paid to myths in other cultures, but the course is mainly concerned with the Greek and Roman material that deals with the Olympian
goddesses, Apollo, Dionysus, Creation, the Golden Age, the Heroes and the Underworld. The relationship between myth and early philosophy and historiography will be considered, as will the role of myth today.

## CLAS 2009

## Greek History to Alexander the Great

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 3 tutorial papers 20\% each, two hour exam 40\%

This course covers a period when the self-governing political systems of Ancient Greece yielded to the domination of Macedonia, and when Alexander the Great spread Hellenistic culture over the eastern world from Ionia to Afghanistan and from Russia to Egypt. The course covers the period 404 BC to 323 BC.

## CLAS 2010

## Greek History: Archaic and Classical

-4 units - semester 1

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 3 tutorial papers 20\% each, 2 hour exam 40\%

This course covers a period of Ancient Greek history when the citystate developed and reached its culmination in the civilisation of classical Athens, from 750 BC to 404 BC.

## CLAS 2013

## Later Roman Archaeology

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: three 1000 word tutorial papers $45 \%, 2$ hour exam $35 \%$, slide test $20 \%$

This course contains the survey of the contribution of archaeology to the modern understanding of Roman material culture in the later Empire. Use will be made of material in the Museum of Classical Archaeology. Emphasis in lectures will be upon the provinces, especially the great urban centres of the Eastern Mediterranean region, where Byzantine culture has its roots. The course is designed as separate but complementary to Early Roman Archaeology, and a certain basic knowledge of the earlier period will be assumed. Students who have not taken the first semester course Early Roman Archaeology are therefore strongly advised to read the relevant chapters of D. Strong, Roman Art.

## CLAS 2015

## Media and Communications: From Papyrus to Print

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 2 tutorial papers 37\%, tutorial summaries 18\%, film test 5\%, 2 hour exam or academic journal 40\%

This course is concerned with how people communicated in Europe before print: what methods and materials were available to them? The chronological focus is on Greece and Rome, with some attention paid to post-classical developments, and terminates with a major event, the invention of the printing press in the 15th century. The thematic focus is on how the introduction of certain media influenced thinking and behaviour. Major issues here are the invention of the alphabet and the transition from orality to literacy. Other topics include the role of oratory and rhetoric, government and religious propaganda and the nature and purposes of travel. Types of media studied include books, inscriptions, coins, sculpture and stained glass, as well as clothing and non-verbal bodily communication.

## 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 dig-house on a Romano-Byzantine archaeological site in the Hashemite Kingdom of Jordan, students will gain firsthand experience of the range of material culture within this formerly wealthy and culturally diverse Roman province, and will visit well-preserved cities such as Jerash and Gadara.

## CLAS 3004

## Classical Mythology

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 3 tutorial papers 44\%, tutorial summaries 16\%, 2 hour exam or academic journal 40\%

This course examines some of the functions of myth in Greek and Roman society. For illustrative purposes, some attention is paid to myths in other cultures, but the course is mainly concerned with the Greek and Roman material that deals with the Olympian goddesses, Apollo, Dionysus, Creation, the Golden Age, the Heroes and the Underworld. The relationship between myth and early philosophy and historiography will be considered, as will the role of myth today.

## CLAS 3009

## Greek History to Alexander the Great

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2 tutorial papers 15\% each, long essay 30\%, 2 hour exam 40\%

This course covers a period when the self-governing political systems of Ancient Greece yielded to the domination of Macedonia, and when Alexander the Great spread Hellenistic culture over the eastern world from lonia to Afghanistan and from Russia to Egypt. The course covers the period 404 BC to 323 BC.

## CLAS 3010

## Greek History: Archaic and Classical

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2 tutorial papers $15 \%$ each, long essay 30\%, 2 hour exam 40\%

This course covers a period of Ancient Greek history when the citystate developed and reached its culmination in the civilisation of classical Athens, from 750 BC to 404 BC .

## CLAS 3013

## Later Roman Archaeology

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: slide test $15 \%, 2 \times 1300$ word seminar papers $30 \%$, 3000 word essay $25 \%$, 2 hour exam $30 \%$

This course contains the survey of the contribution of archaeology to the modern understanding of Roman material culture in the later Empire. Use will be made of material in the Museum of Classical Archaeology. Emphasis in lectures will be upon the provinces, especially the great urban centres of the Eastern Mediterranean region, where Byzantine culture has its roots. The course is designed as separate but complementary to Early Roman Archaeology, and a certain basic knowledge of the earlier period will be assumed. Students who have not taken the first semester course Early Roman Archaeology are therefore strongly advised to read the relevant chapters of D. Strong, Roman Art.

## CLAS 3015

## Media and Communications:From Papyrus to Print

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 3000 word essay $30 \%, 2 \times 1250$ tutorial papers $30 \%$, 2 hour exam or academic journal $40 \%$

This course is concerned with how people communicated in Europe before print: what methods and materials were available to them? The chronological focus is on Greece and Rome, with some attention paid to post-classical developments, and terminates with a major event, the invention of the printing press in the 15th century. The thematic focus is on how the introduction of certain media influenced thinking and behaviour. Major issues here are the invention of the alphabet and the transition form orality to literacy. Other topics include the role of oratory and rhetoric, government and religious propaganda and the nature and purposes of travel. Types of media studies include books, inscriptions, coins, sculpture and stained glass, as well as clothing and non-verbal bodily communication.

## CLAS 3021

## Eastern Mediterranean Archaeological Field School

- 6 units - summer semester
- Quota will apply
- Prerequisite: 8 units level II Humanities/Social Sciences including Level II Classical 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 dig-house on a Romano-Byzantine archaeological site in the Hashemite Kingdom of Jordan, students will gain firsthand experience of the range of material culture within this formerly wealthy and culturally diverse Roman province, and will visit well-preserved cities such as Jerash and Gadara.

## Honours

## CLAS 4401A/B

## Honours Classical Studies

- 24 units - full year
- Prerequisite: UG degree with credit average or better in courses in major in Classical Studies or equivalent, 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 12000 words, a 20000 word thesis in second semester

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 the 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 4000A/B

Honours Commerce

- 24 units - full year
- Eligibility: approved Commerce Honours students only
- Assessment: research project, presentation of (approx.) 10000 word thesis $50 \%$ - thesis will form part of Honours examination

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
Management and Organisation Theory
Strategic Marketing
Management Accounting Theory
Issues in Tax and Commercial Law

## COMMERCIAL LAW

## Level I1

## COMMLAW 1004

## Commercial Law I(S)

[^3]- 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 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 per week
- Available for Non-Award Study
- Assumed Knowledge: 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; antiavoidance; 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 Human-readable 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 - summer semester or winter semester
- 8 lectures, 6 hours practical work per week
- Eligibility: bridging course to 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 data-structures.

## COMP SCI 1009

## Computer Science IB

- 3 units - semester 1 or 2
- 3lectures, 3 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1008 Computer Science IA (Pass Div 1)
- 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: A knowledge of Mathematics such as can be acquired through studies in MATHS 1011/1012 Mathematics IA/B 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, Input-output 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and ELEC

ENG 1004 Logic Design or, for B.Inf.Sc. students only, 1073 Programming and Application

- Assumed Knowledge: knowledge of Mathematics such as can be acquired through studies 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 SOL 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 (Pass Div I), or 7780 Computational Methods I (Pass Div I), or Pass in COMP SCI 1007 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and 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 (Pass Div I) or Pass in COMP SCI 1007 Computer Science Concepts; or Pass in both COMP SCl 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design
- Assumed Knowledge: Mathematics such as can be acquired through studies 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 $\mathbf{C}$ and $\mathbf{C + +}$

- 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 (Pass Div I) or Pass in COMP SCI 1007 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and 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 $\mathrm{C}++$ 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 (Pass Div I), or Pass in COMP SCI 1007 Computer Science Concepts, or Pass in 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/B 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 object-oriented projects, ethics, professional practice.

## Level III

## COMP SCI 3001

## Computer Networks and Applications

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div I) or Pass in COMP SCI 1007 Computer Science Concepts or pass in both COMP SCI 1000 Engineering Programming IE, 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 (Pass Div.1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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 3003

## Knowledge Representation

- 3 units - not offered 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div.1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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

Intelligent Agents: agents that reason logically, knowledge acquisition, agents that use statistics, Bayesian networks, fuzzy logic; Expert Systems: rule-based systems, conflict resolution, explanations; Knowledge Representation: frames, predicate logic, inheritance, semantic nets, belief maintenance.

## 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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
- 2lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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; pipelining, 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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 alphabeta pruning. Learning: Winston's methods, neural networks. Rule based systems; forward and backward chaining methods. AI systems: ANALOGY, MYCIN, GPS, Xcon. Fuzzy systems. Computer vision, Evolutionary computation: genetic algorithms, evolution strategies, genetic programming.

## COMP SCI 3008

## Systems Analysis and Project

- 3 units - not offered 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures \& Algorithms
- Restriction: cannot be counted with 1116 Systems Analysis
- Assessment: written exam, compulsory project

Systems Analysis concerns designing computer systems that are useful and productive and satisfy the needs of users who are not computer literate. The course covers the following topics: applying psychological principles to the design of user interfaces, menus and dialogs; using discounted cash flow techniques to test whether a project is financially viable; designing databases that best model real world situations; modelling real world events as database transactions and histories; using design methodologies to decompose large systems into simple parts; techniques for making design decisions that optimise system performance.

The course includes a project, which is to build a prototype database and user interface, starting from informal specification by a client

## 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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 3010

## Numerical Analysis

- 3 units - not offered 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2003 Numerical Methods
- Assessment: written exam, compulsory projects

This course deals with practical numerical computing techniques for solving problems that typically arise in computer applications, science and engineering. The emphasis is on practical methods and the issues that arise from them with reference to the principles for the engineering of numerical software. Students will learn to use the package Matlab which is used extensively in the course. The symbolic package Maple may also be used, but to a lesser extent. Topics include: condition and stability, analysis of algorithms, solution of linear systems of equations, the singular value decomposition in least squares data fitting and image compression, solution of systems of non-linear equations. Students will be required to undertake a programming project which develops a suite of methods applicable to the numerical solution of scientific problems.

## COMP SCI 3011

## Compiler Construction and Project

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems, COMP SCI 2004 Data Structures and Algorithms, COMP SCI 3002 Programming Technique
- Assessment: written exam, compulsory project

The structure of compilers: lexical analysis, syntax analysis (topdown 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 3012

## Distributed 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 (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems, COMP SCI 2004 Data Structures and Algorithms, COMP SCI 3001 Computer Networks and Applications; exposure to SOL programming - eg, COMP SCI 2002 Database and 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, tutorial per three weeks
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 1007 Computer Science Concepts or Pass in 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 GUls in Java with the Swing library. Contrast with other GUI toolkits. Ease of use and HCl 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 (Pass Div 1) or Pass in COMP SCI 1007Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: PURE MTH 2000 Discrete Mathematics II or MATHS 1012 Mathematics IB, COMP SCI 2005 Systems Programming in C and $\mathrm{C}++$
- 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.

## Honours

## COMP SCI 4999A/B

## 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 six 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 per week
- Available for Non-Award Study
- Prerequisite: 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
- 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 per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical 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 considers the theoretical controversies surrounding corporate finance policies and how they lead to the formulation of financing strategies. It looks at competing capital structure theories including financial distress and agency costs, dividend policy and taxation and how each affects the corporate financing policy. Issues in IPOs, in both debt and equity markets as well as motives for convertibles and warrants are analysed. This includes signalling roles in relation to capital markets. Real options are valued and rationales for corporate diversification including internal capital markets and agency theory are reviewed.

## CORPFIN 3009

## Portfolio Theory and Management III

- 4 units - semester 1
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and 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 per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies, Business Finance II and 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 per week
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies, ACCTING 1002 Accounting for Decision Makers, CORPFIN 2006 Business Finance II and ECON 2008 Financial Economics II
- Assessment: exam, tests, assignments as determined at preliminary lecture
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 1000HO

## 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: trial test, assignments, short tests, practica 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 problembased 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 <br> Dental Clinical Practice

- 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; plaque; dental instruments and handpieces; preventive dentistry: oral hygiene instructions and oral hygiene products; fluoride, action and application; prophylaxis,; mouthguards 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 1004AHO/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 2001AHO/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 2004AHO/BHO General Studies IID
- Assessment: tests, written exam, performance in tutorials $\mathcal{G}$ 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 2002AHO/BHO

## Dental Clinical Practice II

- 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 2004AHO/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 intraoral 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 2003AHO/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 problem-based 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 2004HO

## General Studies IID

- 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 3000HO

## Third Annual B.D.S. Examination

## DENT 3001AHO/BHO

## Dental and Health Science II

- 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 problem-based 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 3002AHO/BHO

## Dental Clinical Practice III

- 12 units - full year
- 14 hours per week, 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: assessment portfolio assessed each half semester

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 and in cast gold restorations. Topics include: patient assessment for local anaesthesia, pharmacological aspects of local anaesthesia, basic principles of local anaesthesia; aspects of 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.

## DENT 3003AHO/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: two written exams plus 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 4001AHO/BHO

## Dental and Health Science IV

- 8 units - full year
- contact hours to be determined
- Eligibility: BDS students only
- Prerequisite: DENT 3001AHO/BHO Dental and 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 4002AHO/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 4003AHO/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 4100AHO/BHO

## Honours Dentistry

- 24 units - full year
- Eligibility: Eligibility: available to 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 half-time 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 the 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

## Level V

## DENT 5000HO

Fifth Annual (Final) B.D.S. Examination

## DENT 5001AHO/BHO

## Dental and Health Science V

- 8 units - full year
- 6 hours per week (approx)
- Eligibility: available to BDS students only
- Prerequisite: DENT 4001AHO/BHO Dental and Health Science IV, DENT 4000HO Fourth Annual BDS Exam
- Corequisite: DENT 5002 AHO/BHO Dental Clinical Practice V, DENT 5003 AHO/BHO Dental Selectives V
- Assessment: written assignment, seminar presentation, seminar participation, may include written exam

This stream builds upon Dental and Health Science IV. A population perspective on oral health and access to dental care is presented as a context for the consideration of a number of problem-based learning packages on the organisation and delivery of dental care, particularly to disadvantaged groups. These problem-based learning packages are supported by guided reading, seminars and resource talks. Clinical applications of oral pathology and oral medicine are covered including the principles of diagnosis of systemic and local diseases affecting the oral cavity. Instruction is given in the use of clinical and laboratory diagnostic procedures. Methods of treatment of oral disease are considered and emphasis is placed on interactions between dental treatment and medical conditions.

Topics related to community dentistry, practice management, working with auxiliaries, legal and ethical issues, as well as updates in a variety of clinical disciplines are discussed in a series of interdisciplinary seminars during the second semester.

## DENT 5002AHO/BHO

## Dental Clinical Practice V

- 12 units - full year
- Hours to be determined
- Eligibility: BDS students only
- Prerequisite: DENT 4002A/BHO Dental Clinical Practice IV, DENT 4000HO Fourth Annual BDS Exam
- Corequisite: DENT 5001AHO/BHO Dental and Health Science V, DENT 5003 AHO/BHO Dental Selectives V
- Assessment: self assessment, tutor assessment, written clinical assessments - minimum standards required in each discipline to satisfactorily complete stream requirements

This stream builds upon previous years with regard to the acquisition and consolidation of dental clinical skills in different disciplines including general dental practice, oral diagnosis, dental radiology, oral surgery, paediatric dentistry and orthodontics, pain control and removable prosthodontics. Students gain clinical experience of the comprehensive management of patients, based on the coordination of skills from individual disciplines. Seminars and clinical tutorials explore a wide range of topics relating to general practice. Emphasis is placed on treatment planning, reviews of completed treatments and prognosis. Oral diagnosis and Dental Radiology components continue on, with increasing emphasis on the development of treatment planning and communication skills. Rural placements are available for final year students. Lectures on oral surgery presented during the fourth year
are followed and expanded in class meetings and clinical sessions. Major aspects of oral surgery including dento-alveolar surgery, maxillo-facial injuries, pre-prosthetic surgery, orthognathic surgery, temporomandibular joint surgery and aspects of cleft surgery and head and neck oncology are covered.

Clinical practice in oral surgery includes patient assessment, diagnosis, selection of appropriate analgesia/anaesthesia, routine exodontia, minor oral surgery and elective oral surgery on outpatients at the Royal Adelaide Hospital. Students gain further knowledge in the management of apprehension and pain, including general anaesthesia.

## DENT 5003AHO/BHO

## Dental Selectives V

- 4 units - full year
- semester I -3 hours, semester II - 6 hours per week: aspects of Dental Selectives may be undertaken during semester breaks
- Eligibility: BDS students only
- Prerequisite: DENT 4000H Fourth Annual Examination; for some clinical selectives, students must have satisfactorily completed the prerequisite level of knowledge
- Corequisite: DENT 5001AHO/BHO Dental and Health Science V, DENT 5002 AHO/BHO Dental Clinical Practice V
- Assessment: will include clinical assessment, written reports, oral presentations; satisfactory completion of requirements of other approved educational institutions, seminar participation \& participation, essays, case reports

This stream follows on from Dental Selectives IV with the intention of allowing students to customise aspects of their dental program by exploring selected aspects of dentistry in more detail, gaining additional experience in certain areas, or taking part in activities not included in the core component of the undergraduate dental program. This might include additional experience in advanced aspects of dental clinical practice, dental and health sciences, or human biology, coursework from other appropriate educational institutions, supervised research projects, or exchange visits to other institutions or dental schools. In Semester I, students undertake one clinical Selective and in Semester II, undertake one clinical Selective and one non clinical Selective. See Dental Selectives IV.

## 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: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 - semester 1
- Up to 3 hours lectures/tutorials/seminars per week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 1
- Up to 2 lectures, 1 tutorial per week; occasional excursions
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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, postimpressionism, 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 2006
- Up to 2 lectures, 1 tutorial per week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 builtenvironment in contemporary Arab societies. The central focus will be upon cross-cultural 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 1019

## Art History and Theories IB

- 3 units - semester 2
- Up to 2 lectures, 1 tutorial per week; occasional excursions
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- Quota will apply
- Restriction: DESST 2032 Art History and Theories IIB
- Assessment: slide test $40 \%$, essays $35 \%$, 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 1026

## Special Topic in Design Studies IC

- 3 units - semester 2
- Up to 3 hours lectures/tutorials/seminars per week
- Eligibility: B.Des.St. students - other students should check the Academic Program Rules for their program to
- 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: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Restriction: Both of DESST 1023 Computer-Aided Design I and DESST 1024 Drawing Architecture and 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: B.Des.St. students - other student should check the Academic Program Rules
- 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 and 3 hours studio/tutorial per week
- Eligibility: B.Des.St. students - other student should check the Academic Program Rules
- 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 and tutorials per week
- Eligibility: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Restriction: DESST 1018 Image/Text/Architecture I
- Assessment: assignments, quizzes

This course introduces the historical and socio-cultural 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: B.Des.St.students. Other student should check the Academic Program Rules for their program to determine 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
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: B.Des.St.students. Other student should check the Academic Program Rules for their program to determine 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 - semester 1
- Up to 2 lectures, 2 tutorials per week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 - semester 2
- Up to 4 hours per week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- Quota will apply
- Assumed Knowledge: DESST 1006 Built Environments I
- 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 Contemp Issues in South Asian Architecture II

- 4 units -
- Up to 2 lectures, 2 tutorials per week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- Quota will apply
- Restriction: Asian Architecture and Landscapes II (1996 only) or Asian Architecture and Landscapes III (1996 only) or DESST 3012 Colonial and Contemporary Issues in South 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
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 4 hours lectures/seminars/studios per week, field study trips
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 - semester 2
- Up to 2 lectures, 1 tutorial hour per week, occasional excursions
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 1
- Up to 2 lectures, 1 tutorial hour per week, occasional excursions
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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, postimpressionism, 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: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Assumed Knowledge: Level I B.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 encourages 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

Culture, History and Designed Environments

- 8 units - semester 2
- up to 8 hours per week including lectures, studios, tutorials
- Eligibility: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Assumed Knowledge: Level I B.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: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Assumed Knowledge: DESST 1023 Computer-Aided Design I or DESST 1027 Human Environments: Design and Representation
- Restriction: DESST 2008 Computer-Aided Design IIB, DESST 2025 Computer-Aided Design IIA
- Assessment: Digital design projects, assignments

The use of computer media in design in architecture and/or urban design and/or landscape architecture. The course explores selected topics through significant project work, including making and using CAD models. The work may include building, urban and landscape modelling, the use of procedures, parametric design, animation, investigating issues of abstraction, accuracy and realism, computational design, the multimedia presentation of designs, and environmental simulation.

## Level III

## DESST 3000

## Conservation in the Built Environment III

- 6 units - semester 2
- Up to 5 hours per week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- Quota will apply
- Assumed Knowledge: DESST 1006 Built Environments I
- 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: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

## DESST 3012

## Colonial and Contemp Issues in South Asian Architecture III

- 6 units
- Up to 2 lectures, 3 tutorials a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 5 hours a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 5 hours a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 5 hours a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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
- Up to 5 hours a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- 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 - semester 1
- Up to 2 lectures, 3 hours of tutorials a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine 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 -
- Up to 5 hours a week
- Eligibility: B.Des.St.students - other student should check the Academic Program Rules for their program to determine eligibility
- Quota will apply
- Assessment: assignments, projects

Course description will be provided by the School when specialist teaching is available.

## DESST 3027

## Urban Design

- 6 units - semester 1
- up to 6 hours lectures/seminar/studios/tutorial per week. A field camp may be required.
- Eligibility: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Assumed Knowledge: Level II B.Des.St. core courses

Restriction: DESST 3011 Issues in Urban and Landscape Sustainability III

- 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: B.Des.St. students - other student should check the Academic Program Rules
- 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: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Assumed Knowledge: Level II B.Des.St. core courses; and DESST 3011 Issues in Urban and Landscape Sustainability III or DESST


## 3027 Urban Design

- 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. A field camp may be required
- Eligibility: B.Des.St. students - other student should check the Academic Program Rules
- Quota will apply
- Assumed Knowledge: Level II B.Des.St. core courses; 3011 Issues in Urban and Landscape Sustainability III or DESST 3027 Urban Design; 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: B.Des.St. students - other student should check the Academic Program Rules
- 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.

## Honours

## DESST 4001A/B

## Honours Design Studies

- 24 units - full year
- Eligibility: approved Honours B.Des.St.students only
- 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.

## DESST 6000

Special Topic (Design) IVA

- 4 units
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Grad.Dip. Des.St. and
G.Cert/G.Dip.Des.St.(Land.) students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6006

## Special Topic (Design) IVB

- 4 units - semester 1
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Grad.Dip. Des.St. students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6010

## Special Topic (Landscape) IVB

- 4 units - semester 2
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Dip. Des.St.(Land.) and Grad.Cert./Dip.Des.St. students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6011

## Special Topic (Landscape) IVA

- 4 units - semester 1
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Grad.Dip. Des.St.(Land.) students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6018

## Technology in Design IV

- 6 units - semester 1
- Up to 8 hours per week including lectures, studios, tutorials
- Eligibility: Grad.Dip.Des.St. students only
- Quota will apply
- Restriction: DESST 6016 Technology in the Built Environments IV
- 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 encourages 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 6019

Culture, History and Designed Environments IV

- 6 units - semester 2
- Up to 8 hours per week including lectures, studios, tutorials
- Eligibility: Grad.Dip.Des.St. \& Grad.Dip.Des.St.(Land.) students only
- Quota will apply
- Restriction: Both of DESST 6015 Twentieth Century Architecture and Landscape IV and DESST 6009 Design and Environments IV
- 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 6020

## Urban Design IV

- 6 units - semester 1
- Up to 6 hours lectures/seminar/studios/tutorials per week, field camp may be required.
- Eligibility: Grad.Dip.Des.St. \& Grad.Dip.Des.St. (Land.) students only
- Quota will apply
- Restriction: DESST 6013 Issues in Urban and Landscape Sustainability IV
- 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 6021

## Natural and Landscape Systems IV

- 6 units - semester 1
- Up to 6 hours lectures/seminar/tutorials per week, field camp may be required
- Eligibility: Grad.Dip.Des.St.(Land.) students only
- Quota will apply
- Restriction: DESST 6017 Natural Systems and Design IV
- Assessment: assignments, presentations, posters, folios, field 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 6022

## Architecture Design Studio IV

- 6 units - semester 2
- Up to 6 hours lectures/digital studio per week
- Eligibility: Grad.Dip.Des.St. students only
- Quota will apply
- Assumed Knowledge: DESST 6018 Technology in Design IV; DESST 6020 Urban Design IV
- Restriction: DESST 6002 Building Design Studio IV
- 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 6023

## Landscape Architecture Design Studio IV

- 6 units - semester 2
- Up to 6 hours lectures/studios/workshops per week. A field camp may be required.
- Eligibility: Grad.Dip.Des.St. (Land.) students only
- Quota will apply
- Assumed Knowledge: DESST 6021 Natural and Landscape Systems IV, DESST 6020 Urban Design IV
- Restriction: DESST 6012 Landscape Design Studio IV
- 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.

## ECONOMICS

## Level I

## ECON 1000

## Principles of Macroeconomics I

- 3 units - 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: class test, final exam - exam carries majority weighting for assessment

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 policy-making. 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 2006
- 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 - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota may apply
- Restriction: not available to students who have already passed ECON 1004 Microeconomics I
- Assessment: class test, final exam - exam carries majority weighting for assessment

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 Mathematics (Mathematics IS or Mathematics I and Mathematics II) or equiv.
- Assessment: tutorials, 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 - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota may apply
- Restriction: ECON 1008 Business Data Analysis I and STATS 1000 Statistical Practice I cannot both be counted toward degree
- Assessment: tutorials, assignments, mid semester test, 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 EXCEL to do the statistical calculations.

## ECON 1009

## International Financial Institutions \& Markets I

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota may apply
- Assessment: tutorials, written assignments, exam

This course provides an introduction to Australia's financial institutions, instruments and the economics of financial markets. Topics covered include money, credit, foreign exchange and capital markets. Instruments include traditional instruments such as equity, bills and bonds. Management of interest rate and foreign exchange risk, including the use of derivatives, is introduced. Elements of financial mathematics are also introduced.

## 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, 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

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 - 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 Microeconomics I and ECON 1000 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: empirical assignments, mid-term test, 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 without requiring rigorous mathematical foundations. The first half of the course involves an introduction to multiple regression analysis, which remains the most commonly used statistical technique in econometrics. In the second half of the course, we will consider aspects of modern time series analysis and forecasting that are commonly employed by practitioners in macroeconomics and finance. Basic computing skills using Excel will also be developed.

## ECON 2007

## Australian Economic History II

-4 units - semester 2

- 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, exams

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: assignments and 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 2
- 2 lectures, 1 tutorial a week
- Available for Non-Award Study
- Prerequisite: ECON 1000 Principles of Macroeconomics I
- Restriction: not available to students who have already passed ECON 2011 Macroeconomics II
- Assessment: tutorial performance, mid-term exam, 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 Macroeconomics II 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 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Quota may apply
- Assumed Knowledge: CORPFIN 2006 Business Finance II
- Restriction: not available to students who have already 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: exam, work completed during course

The course is concerned with the economics of less-developed countries. Topics to be discussed include: the meaning and measurement of development, demographic change, industrialis ation, 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
- Assessment: final exam, tutorial participation, project

Students intending to proceed to Honours degree or Master of Economics will be expected to have successfully completed this course or ECON 3023 Econometrics III.

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. Tutorials will include applications of econometric methods which use packaged programs.

## 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

The objective of this course is to introduce students to Game Theory, a branch of applied mathematics, which deals with interactive decision problems. The primary aim of the course is to show how concepts from game theory can be advisedly used to sharpen our understanding of economics, political science, or any other social science. Some applications to biology will also be
covered. No prior knowledge of economics, political science, etc is assumed. Although there is no formal prerequisite, the main language for this course is mathematics; the more comfortable and familiar a student will be with formal reasoning, the easier the course. A first year of calculus and linear algebra, or an equivalent level, would be a plus. Much of the material covered will be useful to students considering Honours in Economics.

## ECON 3017

## Labour 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: combination of 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 non-competitive 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 \& Environmental 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 2
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Assumed Knowledge: ECON 2009 Microeconomic Theory \& Policy II
- Assessment: mid-term 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 1007A/B Mathematics I or MATHS 1000A/B Mathematics IM or ECON 2005 Mathematical Economics II
- Assessment: project, final exam

Students intending to proceed to the Honours degree or Master of Economics will be expected to have successfully completed this course or ECON 3013 Applied Econometrics III

The objective of this course is to integrate economic models and econometric methods. Particular attention is paid to the relationship between economic and statistical models in selecting the appropriate econometric tools, and on the interpretation of the resulting statistics. Topics covered include single equation estimation under the statisticians ideal conditions, and econometric methods to deal with the violation of these conditions, and estimation of simultaneous equation models.

## 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: assignments, 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 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, 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 main concepts, principles and models in the theory and empirical works in those two key areas of International Finance; to apply the 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: test, exam

This subject presents in 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-term tests, 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).

## Honours

## ECON 4003A/B

## 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, cr.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 the approval of the Head of School
- 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 three or four 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 the School of Economics 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 three or four 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


## ECON 4005A/B

## 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.

## 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 10 half days of observation and experience in a primary school selected for them. In addition, there will be 3 half-day seminars associated with this experience.

## 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 and 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 halfday seminars associated with this experience.

## Level IV

## EDUC 4300

## Teaching Practice UG Part 1

- 3 units - not offered 2006
- Eligibility: B.Teaching students only
- Prerequisite: EDUC 1000, EDUC 2000, EDUC 3000
- Assessment: supervised teaching practice

Students will undertake one block of supervised teaching practice. Students who successfully complete the course are given a nongraded pass.

## EDUC 4301

## Teaching Practice UG Part 2

- 3 units - not offered 2006
- Eligibility: B.Teaching students only
- Prerequisite: EDUC 1000, EDUC 2000, EDUC 3000
- Assessment: supervised teaching practice

Students will undertake one block of supervised teaching practice. Students who successfully complete the course are given a nongraded pass.

## EDUC 4302

## Curriculum and Methodology A

- 3 units - not offered 2006
-6-7 hours per week
- Eligibility: B.Teaching students only
- Prerequisite: pre/corequisites in students' related teaching area see department for details
- Assessment: essays, assignments relating to each teaching area - student must satisfy requirements in each area to pass course

In this course students will be introduced to the curriculum requirements, content and teaching approaches related to the teaching areas for which their previous university studies have qualified them.

## EDUC 4303

## Curriculum and Methodology B

- 3 units - not offered 2006
- 6-7 hours per week
- Eligibility: B.Teaching students only
- Prerequisite: pre/corequisites in students' related teaching area see department for details
- Assumed Knowledge: Curriculum and Methodology A
- Assessment: essays, assignments relating to each teaching area - student must satisfy requirements in each area to pass course

In this course students will further extend their understanding of the curriculum requirements, content and teaching approaches related to the teaching areas for which their previous university studies have qualified them.

## EDUC 4304

## Advanced Educational Studies A

- 3 units - not offered in 2006
- 2-3 hours per week
- Eligibility: B.Teaching students only
- Assessment: essays, assignments

This course involves an analysis of sociological and psychological theories as they relate to student learning.

## EDUC 4305

## Advanced Educational Studies B

- 3 units - not offered in 2006
- 2-3 hours per week
- Eligibility: B.Teaching students only
- Assessment: essays, assignments

This course involves further analysis of sociological and psychological theories as they relate to student learning.

## EDUC 4306

## Curriculum Issues in Australian Schools A

- 3 units - not offered 2006
- 3-4 hours per week
- Eligibility: B.Teaching students only
- Assessment: essays, assignments

This course analyses curriculum theories and curriculum development in relation to Australian classrooms.

## EDUC 4307

## Curriculum Issues in Australian Schools B

- 3 units - not offered 2006
- 3-4 hours per week
- Eligibility: B.Teaching students only
- Assessment: essays, assignments

This course investigates practical examples of curriculum development in relation to South Australian schools.

## EDUC 4700

Families, Schools \& Students' Outcomes (UG)

- 2 units - semester 1
- 2 hours per week
- Eligibility: B.Teaching 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

## Educational Psychology A (UG)

- 2 units - semester 1
- 3 hours per week
- Eligibility: B.Teaching 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
- Eligibility: B.Teaching students only
- Prerequisite: at least one Curriculum and Methodology course
- Corequisite: at least one Curriculum and Methodology course
- Assessment: supervised teaching practice

Students 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 2
- Prerequisite: at least one Curriculum and Methodology course
- Corequisite: at least one Curriculum and Methodology course
- Assessment: supervised teaching practice

Students undertake one block of supervised teaching practice, and upon successful completion, are given a non-graded pass.

## EDUC 4704

## Curriculum Frameworks (UG)

- 2 units - semester 1
- 4 hours per week
- Eligibility: B.Teaching 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 Perspectives (UG)

- 2 units - semester 2
- 3-4 hours per week
- Eligibility: B.Teaching 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

## Educational Psychology B (UG)

- 2 units - semester 2
- 3 hours per week
- Eligibility: B.Teaching 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 2
- 2 hours per week
- Eligibility: B.Teaching 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

## Engineering - Chemical

## Level I

## CHEM ENG 1000

## Process Systems

- 2 units - semester 1 or 2
- 30 hours lectures, tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolled
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and 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 1001

## Introduction to Process Engineering

- 3 units - semester 1
- 6 hours lecture/tutorials, practicals per week
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolled
- Available for Non-Award Study
- Assumed Knowledge: Stage 2 Mathematical Studies
- Assessment: lab. reports, assignments, exams

Fundamental concepts: force, work, power, energy, pressure.
Motion: linear motion, circular motion, momentum, friction. Fluids: principles of hydrostatics, elementary hydrodynamics, properties of fluids, fluid pumping. Stress analysis: stress, strain, deformation and failure in elementary components. Electricity and magnetism: physiology of electric shock, elementary DC and AC circuit, DC and AC motors, introduction to electronics.

## CHEM ENG 1002

## Engineering Computing I

- 2 units - semester 1 or 2
- 32 hours lectures, practical/tutorial classes
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolled
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and Specialist Mathematics, Physics
- Assessment: written exam, tests; performance in computeraided teaching suite; development $\mathcal{\&}$ use of software for solving problems relevant to engineering

Introductory computing: Introductory Programming (ANSI'C'); introduction to engineering applications-oriented software.

## CHEM ENG 1003

## Materials I

- 2 units - semester 2
- 30 hours lectures, laboratory
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolled
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and Specialist Mathematics, Physics
- Assessment: written exam, performance in laboratory classes full 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 non-equilibrium 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and Specialist Mathematics, 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, please check

Academic Rules of the program in which you are enrolling

- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1000 Process Systems
- 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.

## Level II

## CHEM ENG 2000

## Chemical Engineering Thermodynamics

- 2 units - semester 2
- 48 hours lectures, tutorials
- Eligibility: All BE(Chem) students, BE(Chem) admitted to LLB, combined BE (Chem)/BEc, BE (Chem)/BFin, BE (Chem)/BSc, BE(Chem - Energy \& Env), BE(Chem - Process \& Prod), BE(Chem)/BSc (Biotech), BE(Petroleum)/BE(Chem)
- 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
- 60 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/B, CHEM ENG 1000 Process Systems
- Assessment: assignments, final exam, process design report

Chemical process principles: process calculations (material and energy balance calculations); numerical solution of mass and energy balances. Introductory design project based on lecture materials.

## CHEM ENG 2003

## Introductory Process Fluid Mechanics

- 3 units - semester 1
- 48 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
- Assumed Knowledge: MATHS 1011/1012 Mathematics 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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.

## Level III

## CHEM ENG 3001

Materials III(CH)

- 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
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 3004

## Engineering Communication ESL/EAL (H)

- 2 units - semester 1 or 2
- 24 hours lecture-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: students must be enrolled in an Engineering program
- Restriction: not to be counted together with PURE MTH 3016 Communication Skills III (ESL) or MATHS 3015 Communication Skills III
- Assessment: assignments 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 task-based. Tasks and assignments are focussed on academic writing, research and preparing evidence-based papers, reading, informal academic discussion and formal oral presentation.

## CHEM ENG 3005

## Separation Processes

- 2 units - semester 2
- 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
- Assumed Knowledge: CHEM ENG 2001A/B Chemical Process Principles II
- Assessment: assignments, exam

Stage-wise and continuous contact processes; single and multistage 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, please check Academic Rules of the program in which you are enrolling
- 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 3007WT

## Winery Engineering III

- 3 units - semester 1
- 2 lectures, 1 tutorial, 3 hours practical/project exercises per week
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: AGRONOMY 2012RW Engineering Science or CHEM ENG 1001 Engineering Physics, or equiv
- Assessment: final exam, tutorials, project work

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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: exam, assignments

Introduction to the fundamentals of microbiology; proteins and enzymes; kinetics of enzyme-catalysed 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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.

## Level IV

## 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 2006
- 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
- 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 2006
- 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

Specialist management topics, including quality improvement through the application of statistical methods.

## CHEM ENG 4007

## AI Applications in Engineering Design

- 2 units - not offered 2006
- 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 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 2006
- 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 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 2006
- 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

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, please check Academic Rules of the program in which you are enrolling
- 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 2006
- 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
- 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 2006
- 36 hours lectures, practical/tutorial work
- Eligibility: students in specified programs only, please check

Academic Rules of the program in which you are enrolling

- 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 2006
- 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

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, please check

Academic Rules of the program in which you are enrolling

- 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, please check Academic Rules of the program in which you are enrolling
- 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 2006
- 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 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 4023

## Industrial Rheology

- 2 units - not offered 2006
- 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

Characterisation of fluid flow behaviour with particular emphasis on industrial suspensions, polymers and composites. Applications include the design and optimisation of systems for handling, processing and transporting non-Newtonian fluids.

## 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 2006
- 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
- 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 2006
- 184 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only, please check

Academic Rules of the program in which you are enrolling

- 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 environmental 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 2006
- 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

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 2006
- 184 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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.

## Engineering-Civil \& Environmental

## Level I

## C\&ENVENG 1000

## Engineering Planning and Design

- 2 units - semester 1 or 2
- 36 contact hours of lectures, tutorials, project work, interactive computer assessed exercises throughout semester
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and 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 contact hours lectures, tutorials
- Eligibility: for students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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; 2 D and 3 D 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 selfchecking strategies.

## C\&ENVENG 1002

## Civil and Environmental Engineering I

- 2 units - semester 2
- 36 contact hours lectures, tutorials, designs
- Eligibility: For students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 contact hour lectures, tutorials, interactive computer assessed exercises throughout semester
- Available for Non-Award Study
- Assumed Knowledge: Year 12 Mathematics
- Assessment: theory $40 \%$, practical $40 \%$, practicals \& tutorials 20\%

The FORTRAN programming language, Advanced EXCEL spreadsheet operations. The application of MATLAB to civil and environmental engineering. Computer solution techniques in civil and environmental engineering. An introduction to finite difference methods, advanced regression analysis, root finding techniques applied to engineering design, time series analysis.

## Level II

## C\&ENVENG 2001

## Stress Analysis (C)

- 2 units - semester 2
- 32 contact hours lectures, tutorials, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: exam, practical work, quizzes

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, momentcurvature 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 contact hours lectures, tutorials, practicals, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 contact hours of lectures, tutorials, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 contact hours lectures, tutorials, practical work, site visits
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, skyscrapers and domes. Introduction to civil engineering surveying: Linear measurement; Levelling; Theodolite.

## C\&ENVENG 2025

## Strength of Materials IIA

- 3 units - semester 1
- 48 hours lectures, tutorials, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, elastic-plastic; 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: may include assignments and/or exam - further 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, please check Academic Rules of the program in which you are enrolling
- 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 - further details available at beginning of semester

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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: C\&ENVENG 1001 Statics; MATHS 1011/1012 Mathematics IA/B or MATHS 1013/1014
Mathematics IMA/IMB
- Assessment: exam 75\%, assignment 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; 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, please check

Academic Rules of the program in which you are enrolling

- Available for Non-Award Study
- Assumed Knowledge: Pass (not Conceded Pass) in C\&ENVENG 1001 Statics, MATHS 1011/1012 Mathematics IA/B (Pass Div I)
- Assessment: may include 2 major projects, 3 quizzes - further details available 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, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available at beginning of semester

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, please check Academic Rules of the program in which you are enrolling
- 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, elastic-plastic; 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.

## Level III

## C\&ENVENG 3000

## Engineering Communication ESL/EAL (C)

- 2 units - semester 1 or 2
- 24 hours lectures, workshops
- Eligibility: compulsory for 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 ESL in Year 11/12
- Corequisite: students must be enrolled in an Engineering program
- Restriction: not to be counted towards any degree together with C\&ENVENG 3066 Engineering Communication \& Language (ECL) or PURE MTH 3016 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 task-based. Tasks and assignments are focussed on academic writing, research and preparing evidence-based papers, reading, informal academic discussion and formal oral presentation.

## C\&ENVENG 3001

## Structural Mechanics IIIA

- 3 units - semester 1
- 48 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
- 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 moment-area 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 slope-deflection 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 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
- Assumed Knowledge: C\&ENVENG 2033 Water Engineering II S1 and C\&ENVENG 2035 Water Engineering II S2
- Assessment: exams, assignments

Water treatment processes; environmental geotechnics, groundwater contamination.

## C\&ENVENG 3005

## Structural Design III (Concrete)

- 3 units - semester 2
- 48 hours lectures, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 of lectures, tutorials and project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, log-normal, 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 nonlinear 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, please check

Academic Rules of the program in which you are enrolling

- 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 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: may include assignments and/or exam - further details available 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: CধENVENG 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: C\&ENVENG 2033 Water Engineering II S1, APP MTH 2010 Differential Equations \& Statistical Methods (Civil)
- Assessment: may include exams, laboratory reports, design work, quizzes, projects $\&$ assignments - further details available 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, please check Academic Rules of the program in which you are enrolling
- 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\%

Fluid mechanics and 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 3015

## Analysis and Design of Structures (International)

- 2 units - semester 1
- 32 hours lectures, tutorials, practical work
- Eligibility: International BE(Civil) students who have not studied Levels I \& II at the University of Adelaide
- Available for Non-Award Study
- Assumed Knowledge: Diploma or Certificate in Civil Engineering (or related discipline) recognised by the University

This course is intended to provide students with a deeper understanding of the analysis and design of structures. Emphasis is placed on developing the student's ability to solve problems, write reports and give oral presentations. Topics covered include: the development of codes, the analysis, optimisation, construction and testing of a truss, the behaviour of RC beams, and the analysis of multi-storey buildings including load combinations and paths.

## C\&ENVENG 3066

## Engineering Communication and Language (ECL)

- 3 units - semester 1 or 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 (ESL) (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, please check Academic Rules of the program in which you are enrolling
- 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 further details available 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.

## Level IV

## C\&ENVENG 4003A/B

## Civil and Structural Engineering Research Project

- 6 units - full year
- 120 hours directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 4005A/B

## Civil and Environmental Research Project

- 6 units - full year
- 120 hours of directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 and oral presentations

Students work in groups on a research project under the supervision of an academic staff member.

## C\&ENVENG 4034

## Civil Engineering Management IV

- 3 units - semester 1
- 24 hours lectures, workshop sessions, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further 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. Practical application of these skills through the development and presentation of a project proposal is undertaken.

## C\&ENVENG 4037

## Introduction to Environmental Law

- 3 units - semester 2
- 24 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
- 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 - further 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 - semester 1
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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

## Prestressed Concrete Structures

- 3 units - semester 2
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: design, tutorials, exam

This course is intended to provide students with a deeper fundamental understanding of the behaviour of concrete structures, particularly prestressed concrete. Emphasis is also placed on enhancing the student's ability to independently solve problems. Topics covered will be taken from the following: axially loaded and flexural members; shear behaviour of beams; deflections of prestressed concrete members; statically indeterminate structures; and design of disturbed regions using strut and tie modelling.

## C\&ENVENG 4070

## Structural Dynamics due to Wind and Earthquakes

- 3 units - semester 1
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only, please check

Academic Rules of the program in which you are enrolling

- 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 2

- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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, please check Academic Rules of the program in which you are enrolling
- 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 1
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available at beginning of semester

Topics selection from: Optimisation and computer simulation techniques applied to the planning and operations of water
resources systems; multiobjective planning; assessment of risk, uncertainty and reliability; design project.

## C\&ENVENG 4077

## Coastal Engineering and Design

- 3 units - semester 2
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - not offered in 2006
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 shallow and deep foundations, including numerical methods: effect of stiffness of strip and raft foundations on settlement control; design of pile foundations for vertical and/or lateral loading; dewatering of excavations.

## C\&ENVENG 4081

## Expansive Soils and Footing Design

- 3 units - semester 1
- 24 hours lectures, tutorials, project work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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 - semester 1
- 24 hours lectures, assignment, design, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 $\mathcal{\&}$ exam - further details available 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 2
- 24 hours of lectures, tutorials, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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, please check

Academic Rules of the program in which you are enrolling

- 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 - further details available 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 - semester 2
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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 - semester 2
- 24 hours lectures, tutorials, directed study
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 - further details available 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 - semester 2
- 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 2 D and 3 D 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 2
- 24 hours lectures, tutorials, design
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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.

## Engineering - Electrical \& Electronic

## Level I

## 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, please check Academic Rules of the program in which you are enrolling
- 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 minimisation 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, please check Academic Rules of the program in which you are enrolling
- 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 - semester 1
- 42 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: 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.

## Level II

## ELEC ENG 2007

## Signals and Systems

- 3 units - semester 2
- 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
- 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
- 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
- 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, please check Academic Rules of the program in which you are enrolling
- 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 polarisation. Reflection and refraction at an interface. Introduction to electromagnetic radiation.

## ELEC ENG 2010A/B

## Practical Electronic Design II Part 1

- 3 units - full year
- 78 hours lectures, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 minimising noise. Practical circuit design, simulation and prototyping techniques. Practical work: familiarization with laboratory facilities and instrumentation, common procedures and techniques. Experiments to augment Level 2 theoretical courses. Major system design project: Audio system.

## Level III

## ELEC ENG 3012

Engineering Communication ESL/EAL (E)

- 2 units - semester 1 or 2
- 24 hour lecture/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: students must be enrolled in an Engineering program
- Restriction: not to be counted together with PURE MTH 3016 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 task-based. Tasks and assignments are focussed on academic writing, research and preparing evidence-based papers, reading, informal academic discussion and formal oral presentation.

## ELEC ENG 3015

## Communications, Signals \& Systems

- 3 units - semester 1
- 36 hours lectures, tutorials, assignments

Eligibility: students in specified programs only, please check
Academic Rules of the program in which you are enrolling

- 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, please check Academic Rules of the program in which you are enrolling
- 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 steady-state performance; root locus diagrams; Bode and Nyquist plots; cascade compensation using root locus and frequency response techniques; minor-loop 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- Prerequisite: ELEC ENG 2010A/B Practical Electronic Design II
- Corequisite: ELEC ENG 3018 RF Engineering III, ELEC ENG 3016 Control III
- Assessment: practical exercises with informal reports, practical exercises with formal reports, laboratory \& two 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1006 Electrical Engineering I and COMP SCl 2000 Computer Systems
- 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, please check Academic Rules of the program in which you are enrolling
- 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 three-phase 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 three-phase 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, please check Academic Rules of the program in which you are enrolling
- 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.

## Level IV

## ELEC ENG 4004

## Electrical Engineering Research

- 2 units - semester 2
- 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 2006
- 24 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
- 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 non-reciprocal 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, please check Academic Rules of the program in which you are enrolling
- 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 2.5 G solutions.
Orthogonal Frequency Division Multiplexing: principles and implementation including 802.11a OFDM PHY
Ad-hoc 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 4034

## Analog Microelectronics

- 2 units - semester 2
- 25 hours lectures, practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 3017 Digital Electronics and ELEC ENG 3018 RF Engineering III or equiv.
- Assessment: project work, written exam, tests during semester

Introduction: Fabrication processes and design rules (revisited); transistor models (revisited from third year electronics); layout issues; ASIC design flow - especially simulators and performance estimation. Analog Microelectronics: Current sources and references; operational and transconductance amplifiers; current mode circuits; data conversion systems; switched capacitor systems; phase locked loops.
Group project using layout and simulation tools.

## ELEC ENG 4035

## Communications IV

- 2 units - semester 1
- 24 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
- 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, please check Academic Rules of the program in which you are enrolling
- Prerequisite: ELEC ENG 3015 Communications, Signals \& Systems, ELEC ENG 3016 Control III, ELEC ENG 3017 Digital Electronics, ELEC ENG 3018 RF Engineering III, ELEC ENG 3019A/B Practical Electrical \& Electronic Design III, ELEC ENG 3020 Embedded Computer Systems
- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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 4040

## Management and Professional Practice for Engineers

- 2 units - semester 1
- 24 hours lectures
- 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

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 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
- 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 point-to-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, please check Academic Rules of the program in which you are enrolling
- 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, please check

Academic Rules of the program in which you are enrolling

- 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, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- 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, subband 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 3015 Communications, Signals \& Systems, Circuit-switched networks: performance, Signalling System \#7, ISDN
- Assessment: written exam \& assignments

Cellular networks: TDMA/FDMA cellular concepts, GSM mobility and network management, CDMA cellular concepts and IS-95 implementation. Network dimensioning. Packet-switched networks: queuing theory and packet-switched 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 - semester 2
- 24 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
- Assumed Knowledge: as prescribed by the Head of Electrical and Electronic Engineering
- Assessment: may include tests, written exam $\&$ assignment - full details provided at the start of semester

Special topics in Electrical and Electronic Engineering, as determined by the Head of the School.

## Honours

## ELEC ENG 4039A/B <br> Honours Project

- 6 units - full year
- 240 hours practical work
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Prerequisite: ELEC ENG 3015 Communications, Signals \& Systems, ELEC ENG 3016 Control III, ELEC ENG 3017 Digital Electronics, ELEC ENG 3018 RF Engineering III, ELEC ENG 3019A/B Practical Electrical \& Electronic Design III, ELEC ENG 3020 Embedded Computer Systems
- 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.

## Engineering - Mechanical

## Level I

## MECH ENG 1000

## Dynamics

- 2 units - summer semester or semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies, Specialists Maths and Physics
- Assessment: mid-semester test, assignments, exam

Kinematics of particles and rigid bodies; rectilinear, and curvilinear motion; motion relative to moving axis. Kinetics of particles and rigid bodies: application of Newton's Laws, and the principles of work, energy, power, and momentum in mechanical systems. Conservation of energy and momentum.

## MECH ENG 1001

## Design Graphics

- 2 units - semester 2
- 38 hours lectures, practical classes in design suite
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: continuous assessment, final exam - further details at beginning of semester

Design methods and the influence of design and computers in manufacturing; the language of drawing including sketching; instrument drawing; orthogonal and axonometric projection; visualisation; dimensioning; tolerancing; manufacturing methods and an introduction to CAD.

## MECH ENG 1005

## Engineering Planning, Design and Communication M

- 3 units - semester 1
- 44 hours lectures, 18 hours seminar/workshops, 62 hours project work
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, project, exam

Students are introduced to the field of engineering and some tools for tackling real engineering problems, especially those centred on the preliminary stages of the planning and design process. Developing communication skills are integral to the course. Planning and design is taught in lectures and through project work covering topics such as the engineering profession, the design process, creativity, economic concepts, decision theory, environmental assessment, scheduling theory, working in groups, and report writing. Written and oral communication skills are taught in seminar/workshops. Topics include academic and professional language styles, logical cohesion, integrating evidence, the function of a report, and presenting a seminar.

## Level II

## MECH ENG 2002

## Stress Analysis and Design

- 3 units - semester 2
- 48 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 1000 Dynamics, C\&ENVENG 1001 Statics
- Assessment: assignments, quizzes, finite element labs, labs, exam

Analysis of stress and strain, Saint-Venant's principle and principal of superposition, Hooke's Law and nonlinear behaviour, theories of torsion, bending and buckling, introduction to finite element analysis and analysis of statically indeterminate beams, strain energy concept, temperature and stress concentration effects, failure theories and applications, design of springs, shafts, keys, splints, pins, bolted joints and welded joints.

## MECH ENG 2011

## Mechatronics IM

- 2 units - semester 2
- 36 hours lectures, tutorials, 4 hours laboratory classes
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

Introduction to mechatronics; principles of measurement systems; measuring solid-mechanical quantities; measuring temperature;
measuring fluid flow rate; electro-pneumatics; stepper motors; analogue and digital interfacing; programmable logic controllers.

## MECH ENG 2015

## Electronics IIM

- 3 units - semester 1
- 51 hours lectures, tutorials, practicals
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 1008 Electrical Engineering IM
- Assessment: practical work, assignments, tutorials, final exam

Signals, amplifiers ,models and imperfections. 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.

## MECH ENG 2018

## Design Practice

- 4 units - semester 1
- 77 hours lectures, tutorials, 40 hours workshop practice
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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.

## MECH ENG 2019

## Dynamics and Control I

- 3 units - semester 2
- 48 hours lectures, tutorials, 9 hours laboratory experiments
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

Velocity and acceleration in mechanisms/linkages; cam and follower motion; gear trains; force analysis of plane mechanisms; kinematics and dynamics of gears; balancing of reciprocating masses and rotating masses. Overview and history of feedback control; modelling in the frequency domain; laplace transforms; transfer function and block diagram; time response; time domain specifications; feedback control system characteristics, system stability; root locus techniques; compensator design; frequency response methods; stability in the frequency domain.

## MECH ENG 2020

## Materials and Manufacturing

- 3 units - semester 1
- 48 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, non-ferrous 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, tutorials, laboratory experiments
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/B, 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.

## Level III

## MECH ENG 3006

## Engineering Communication ESL/EAL (M)

- 2 units - semester 1 or 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 $\mathrm{Yr} 11 / 12$
- 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 task-based. 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
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

Basic concepts for PLC; ladder logic diagram; internal architecture of PLC; memory addressing system; data types; program flow control; timers/counters and maths; analogue input/output; PID control, PLC network and applications.

## MECH ENG 3016

## Aeronautical Engineering I

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 twobody 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials 1
- 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
- 70 hours lectures, tutorials, design office
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, final exam

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 (in writing and seminar presentations) relevant to their current studies and intended professional careers. Students are required to undertake a research project based on a theme relevant to professional engineers. Design Office - a common group design project which will involve system analysis, concept design, material selection, manufacturing processes, detailed design, drawing and project management, management techniques.

## MECH ENG 3028

## Dynamics and Control II

- 3 units - semester 2
- 48 hours lectures, tutorials, 4 hours laboratory experiments
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

Time domain descriptions of dynamic systems; state-space system models; characteristics of dynamic response (poles, zeros, eigenvalues); specification of controller characteristics, controller design using pole placement; observers; observer design; optimal control (introduction); optimal observers (introduction). Computer aided control system design. Free vibration of single degree of freedom systems; forced vibrations; damped vibrations; vibration isolation; vibration absorbers; multi-degree of freedom systems; determination of natural frequencies and mode shapes; vibrations of continuous systems.

## MECH ENG 3029

## Manufacturing Engineering

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, final exam

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
- 48 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

General laws of mechanics and introduction of stress concepts, bending of curved members, theory of photoelasticity, three dimensional photoelasticity, strain-gauge and rosette analysis, finite element methods, elementary plasticity, fatigue analysis, creep and viscoelasticity, pressure vessels. Working in teams using quality assurance and self learning principles to develop an understanding of the 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
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021 Thermo-Fluids 1, Level II Applied Mathematics courses with an aggregate value of 6 units
- Assessment: assignments, practicals, final exam

Integral analysis of fluid flow, flow of inviscid 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
- 36 hours lectures, tutorials, laboratories
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1002 Engineering Computing 1, MECH ENG 2011 Mechatronics IM
- Assessment: assignments, final exam

The focus of this course is on the programming and use of microcontrollers in mechatronics applications. Assuming basic knowledge of the $C$ programming language, the material is presented in a combination of lectures, tutorials and hands-on 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 microcontroller datasheets. The newly developed skills are then applied in a number of practical case studies covering typical mechatronics applications including servo-mechanisms, sensor interfacing, realtime 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. Smallgroup projects and case studies will be used to provide important hands-on experience with micro-controller based projects.

## MECH ENG 3033

## Automotive Materials and Structures

- 3 units - semester 1
- 48 hours lectures, tutorials, laboratories
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2020 Materials \& Manufacturing, 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 1000 Dynamics
- Assessment: assignment, final exam

This course introduces the student to the variety of CAD/CAM packages currently available and in use by the automotive industry. The concept of 3D parametric modelling is introduced with the subject rapidly progressing to more complex modelling features and time saving methods. Communication methods between CAD, CAE and CAM explored to demonstrate the potential of CIM as a comprehensive engineering and production tool. Guest speakers will provide examples of how this is implemented in the automotive industry (from styling right through to manufacture) and there will be a hands on focus throughout the course.

## MECH ENG 3035

## Automotive Combustion Technology

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2021 Thermo-fluids I
- Assessment: assignment, laboratory experiment, final exam

This course will present the fundamentals of internal combustion engines and cycles. It will emphasise fuel type, mixing process, pollutants and alternative fuels and power sources.

## MECH ENG 3036

## Automotive Power Train and Vehicle Dynamics

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

This course will explore two fundamental areas of automotive engineering, powertrain and vehicle dynamics. The powertrain section will cover all main areas of the powertrain including: engine design and performance parameters, transmission types and analysis, driveline design and hybrid powertrains. The vehicle dynamics section will include: vehicle control/stability and handling, tyre construction, tyre operation and analysis, steady state handling, and steady state vehicle response. Some tutorial work using computational software will also be included.

## Level IV

## MECH ENG 4002

## Combustion Technology and Emissions Control

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 aim of this course is to develop an understanding of the mechanics of fracture of engineering materials. and to develop a broad understanding of the problems related to mechanics of composite materials which is essential for safe design of engineering components. This understanding is necessary to guide a corresponding design, manufacture, or failure analysis. This course will discuss basic concepts in Mechanics of Fracture and a wide range of practical problems relating to the assessment of the nucleation, growth and catastrophic propagation of structural defects. It also will deepen the understanding of Finite Element Modelling techniques and ANSYS software package.

## MECH ENG 4004

## Engineering Acoustics

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

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, reactive and dissipative mufflers.

## MECH ENG 4007A/B

## 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 2019 Dynamics \& Control I, MECH ENG 3028 Dynamics \& Control 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 - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 3020 Heat Transfer
- Assessment: assignments, practical, final exam

Vapour compression cycles; heat transfer in two-phase 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 4019A/B

## 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

Candidates are required to carry out a project in Mechatronics involving both design and research components. The aim of the project is to provide solutions to mechatronic engineering problems related to industry or school research activities, with emphasis on project management and effective communication

## MECH ENG 4020

## Advanced Vibrations

- 2 units - semester 1
- 36 hours lectures, tutorials, 6 hours laboratory experiments
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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 builds on the concepts learned in the core Mechanical Engineering courses and extends these to provide practical interpretive and predictive methods. The syllabus begins with a practical and theoretical overview of modern flow measurement techniques and the methods used to interpret velocity and flow data. These techniques and methods are then applied to
fundamental flow cases such as boundary layers and free shear flows. Specific applications of these flow cases are then given through the study of internal flow systems and external flows around air, ground and sea-going vehicles. These include wind tunnels, race cars, high-performance yachts, aeroplanes and sports balls.

## MECH ENG 4024

## Materials Selection and Failure Analysis

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: CHEM ENG 1003 Materials I
- Assessment: written exam 70\%, assignments 30\%

The course will consider factors in materials selection such as properties, processing, design, cost specifications and codes. The competition between materials and fabrication methods will be illustrated through detailed case studies. Failure analysis is considered in terms of investigative procedures, principal causes of failure (fracture, fatigue, corrosion and wear) and the application of simple fracture mechanics. Several case studies are considered in detail.

## MECH ENG 4025

## Topics in Welded Structures

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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/joint can have a profound effect on the performance of a component depending on the in-service 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.

## MECH ENG 4026

## Environmental and Architectural Acoustics

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MECH ENG 3017 Engineering and the Environment
- Assessment: assignment, project, final exam

Outdoor sound propagation models, Australian and International standards for outdoor noise, transport noise and the use of computer models for outdoor noise prediction. Room acoustics, parameters for architectural acoustics, ray tracing and software models.

## MECH ENG 4027

## Robotics M

- 2 units - semester 1
- 24 hours lectures, 12 tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/B, 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; image processing; industrial robot programming and applications.

## MECH ENG 4028

## Mechatronics IIIM

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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

Project-based course, design and analysis of mechatronic systems; micro-controller and high end processors for mechatronic system control; artificial intelligence algorithms and their applications, digital state-space control design.

## MECH ENG 4033

## Mechanical Signature Analysis

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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; modal analysis

## MECH ENG 4034

## Aerospace Navigation and Guidance

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignment, final exam

The course will comprise two components: Navigation will cover theory, and the principles of operation and performance modelling of navigation technologies with particular emphasis on technologies that are used to support aeronautical applications. Itwill cover inertial navigation technologies, satellite navigation technologies such as GPS and terrestrially based navigation systems such as Loran-C. Technologies which support astronautic applications will also be considered. Guidance: this will cover the principles on which aircraft flight plans and space vehicle orbital manoeuvres are designed and to which a flight vehicle's motion is controlled. This section will cover both open loop flight path generation and closed loop autopilot aspects of the control of flight vehicles.

## MECH ENG 4035A/B

## 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignment, final exam

Fundamentals of rocket and air-breathing (gass turbines, ramjets, turbojets, turboprop) jet propulsion systems. Prediction of thrust, combustion reactions, specific fuel consumption, and operating performance. Aero-thermodynamics of inlets, combustors, nozzles, compressors, turbines and component matching.

## MECH ENG 4038

## Engineering Management and Professional Practice

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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. The course provides students with the theoretical essentials for practical implementation of the main concepts covered.

## MECH ENG 4040

## High-Speed Aerodynamics

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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.

## MECH ENG 4041A/B

## Mechanical Design Project Level IV

- 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 4042

## Fire Engineering

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: project, practical class, assignments, final exam

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. A practical session (circumstances permitting) will involve a site visit to the Brukunga fire training establishment in SA to witness live fire training as provided for fire fighters in the metropolitan and country fire services, and to measure some aspects of fire impact as a laboratory activity.

## MECH ENG 4043

## Automotive NVH and Aerodynamics

- 2 units - semester 1
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: laboratory, assignment, final exam

This course will focus on the basic principles and theories for minimising vehicular noise and vibration sources (including aerodynamics), transmission paths and augmenting aspects at design. It will explore methods for modelling and predicting noise and vibration harshness and will assess various countermeasures for reducing existing noise and vibration. Guest speakers will provide examples of how this is implemented in the automotive industry.

## MECH ENG 4044

## Automotive Safety

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: laboratory, assignment, final exam

This course will cover vehicle safety and society and vehicle crashworthiness. Vehicle safety and society will comprise: Crash and injury statistics and costs; incidence and crash rates; road safety strategy; motorisation and safety; risk factors and roadrelated injury. Vehicle crashworthiness will comprise: general principles of crashworthiness; assessment of Australian design rules; effectiveness of crashworthiness countermeasures and pedestrian protection. Lectures will be complimented by practical workshops.

## MECH ENG 4045

## Advanced Manufacturing and Quality Systems

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignment, final exam

This course will explore various adopted methods, concepts, systems and tools for production, manufacture and quality management in the automotive industry with direct assistance from industry experts. There will also be a focus on the process and critical aspects of advanced product quality planning (APQP) which will be covered in detail. Key aspects of this include: Design Failure and Mode Effect Analysis (DFMEA), Process Failure Mode Effect Analysis (PFMEA) and the Design Verification Plan and Report (DVP\&R).

## MECH ENG 4046

## Computation Technique for Engineering Applications

- 2 units - semester 2
- 36 hours lectures, tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignment, final exam

This course introduces students to computational techniques used in engineering applications. The course focus is on current techniques used in the industry, its capabilities and application. Students will learn about modelling fluids flow using computational fluid dynamics techniques and solid mechanics using finite element techniques. The emphasis will be on practical engineering problems.

## MECH ENG 4047A/B

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 4048A/B

Automotive Design Project Level IV

- 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 4050A/B

## Mechatronics Design Project Level IV

- 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 4051A/B

## Aerospace Design Project Level IV

- 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.

## Engineering - Petroleum

## Level I

## PETROENG 1000

## Introduction to the Petroleum Industry

- 2 units - semester 1
- Lectures, discussion/presentation sessions
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, please check

Academic Rules of the program in which you are enrolling.

- 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Mathematical Studies and 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

## PETROENG 2001

## Reservoir Thermodynamics and Fluid Properties

- 3 units - semester 2
- Lectures, tutorials/practicals/labs
- 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

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, please check Academic Rules of the program in which you are enrolling.
- 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 2008

## Reservoir Engineering

- 3 units - semester 2
- 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 permeablitiy, Capillary pressure, Wettability, Material Balance Equations for Different Types of Reservoirs and Drives, Aquifer Behaviour and Water Influx, Immiscible Displacement, BuckleyLeverett theory, Gravity-Stable Displacement, Water and Gas Injection, Coning and Cusping.

## PETROENG 2009

## Formation Evaluation, Petrophysics \& Rock Properties

- 3 units - semester 1
- Lectures, tutorials/practicals
- 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

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.

## Level III

## PETROENG 3001

## Reservoir Simulation

- 3 units - semester 2
- 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

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

- 3 units - semester 1
- 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

Economic concepts, discounted cash flow, net present value, economic indicators, sensitivity analysis, decision tree analysis, probabilistic methods, options, introduction to different fiscal regimes, 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: for 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

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 3012

## Engineering Communication ESL/EAL (P)

- 2 units - semester 1 or 2
- 4 hours lecture-workshops
- Eligibility: International students from NES backgrounds who present IELTS/TOEFL for admission, or 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: students must be enrolled in an Engineering program
- Restriction: not to be counted towards any degree together with PURE MTH 3016 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 task-based. Tasks and assignments are focussed on academic writing, research and preparing evidence-based papers, reading, informal academic discussion and formal oral presentation.

## PETROENG 3018

Drilling Engineering and Well Completion

- 3 units - semester 2
- 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 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, please check Academic Rules of the program in which you are enrolling
- 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 Optimisation and Project

- 3 units - semester 1
- Project discussions, project work, presentation
- 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, 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 - semester 1
- 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 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.

## Level IV

## PETROENG 4002

## Enhanced Oil Recovery

- 3 units - semester 1
- 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

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, please check

Academic Rules of the program in which you are enrolling

- 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 4004A/B

## Petroleum Engineering Honours Project

- 8 units - full year
- 320 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 4009

## Integrated Reservoir Management

- 3 units - semester 2
- Lectures, tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program is which you are enrolling
- 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

- 8 units - full year
- 320 hours minimum: project work \& discussions, project work presentation
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- 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, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, project (written \& oral presentation)

Field Development Planning, 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
- Lectures, tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program is which you are enrolling
- 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. There are many uncertainties inherent in the oil and gas business, both in assessing current 'states-of-the world/nature' and in predicting future events. This leads to considerable uncertainty in the value that can be realised from many 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 decisionmaking process, multi-objective decision making, decision-tree analysis, decision criteria and Monte Carlo simulation.

## PETROENG 4025

## Gas Fields Optimisation

- 3 units - semester 1
- Intensive short course of lectures, tutorials, seminars
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Assessment: assignments, exam

This course will provide a sound understanding of Reservoir Engineering Principles pertaining to Gas Reservoirs and the ability to apply these to solve practical problems relating to Gas Reservoir Development, Surveillance and Management focusing on how these differ from corresponding processes for Oil Reservoirs.

The course will address individual well and total reservoir performance analysis. Various reserve calculation techniques will be discussed such that the participants will have a good understanding of the applicability of the different methods at different points in the life cycle of the reservoir.

## 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 or 2
- Lecture online, 2 hour workshop per week, provision for individual consultations
- Quota may apply
- Restriction: Not available to students who have undertaken SACE Stage 2 English or equiv, English for Professional Purposes (ESL), English for Professional Purposes
- 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; public speaking; 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
- Assessment: essay, participation, exam

Film Studies 1 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.

## ENGL 1106

## Landmarks in English Literature: Chaucer to Austen

- 3 units - semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: essay $30 \%$, exam 50\%, class participation 10\%, tests on written expression 10\%

This course will look closely at six works from the 14th to the 18th centuries: Chaucer's General Prologue to the Canterbury Tales; Shakespeare's Coriolanus; Milton's Paradise Lost, Books 1 \& 2; Fielding's Joseph Andrews; Swift's Gulliver's Travels; Austen's Northanger Abbey. Although these texts are all seminal works by major authors, they are not currently taught in other courses in the English discipline; they help to provide a sound basis for further study in English literature and to illustrate the historical development of the language. There are fewer texts in this course than is usual in the English Discipline, and students will be expected to show that they know them thoroughly. Besides discussion of literary matters, some time will be given in tutorials to discussion of current problems in English usage. The course is designed to increase students' knowledge of pre-19th century English literature and of the development of the language in the post-medieval period, and their skills in close reading, critical analysis, and effective writing.

## ENGL 2009

## A Festival of Contemporary Writing

- 4 units - semester 1
- 3 contact hours per week (or equiv)
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1000 word report on Writers' Week 20\%, seminar exercises $30 \%$, essay/creative writing piece $50 \%$

This course is designed as an extension of Writers' Week, which, as part of the Adelaide Festival of Arts, brings major writers to Adelaide from all over Australia and elsewhere in the world to read from and discuss their work and to discuss ideas with other writers in a public forum. The course will extend and develop themes and ideas presented in the Writers' Week program. Recent Australian writing will be discussed in relation to recent writing from elsewhere in the world. Students will be introduced to creative writing techniques and will be encouraged to respond to topics through creative writing. Please note: attendance at a selection of Writers' Week sessions is compulsory.

## ENGL 2012

## Medieval English Literature

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: essays, exams

A study of some major English texts, authors, and genres of the period 1350-1450. Texts studied will include a variety of tales from Chaucer's Canterbury Tales; Sir Gawain and the Green Knight, Malory's Morte D'Arthur and a selection of medieval mystery and morality plays.

## ENGL 2015

## Dangerous Liaisons: Writing Out of Africa

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: New Literature in English: Africa
- Assessment: seminar participation, seminar paper, essay

This course will examine a range of African and diasporic African texts that focus on dispossession and dispersal in the aftermath of the colonial period. Topics will include the construction of race, gender and identity in the contexts of homelessness at home, slavery, migration and exile. Texts will include contemporary writing
from Botswana, Ghana, Nigeria, Tanzania, UK, USA, West Indies and Zimbabwe.

## ENGL 2016

## English for Professional Purposes

- 4 units - semester 1
- 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 2021

Women's Writing: The Nineteenth Century
-4 units - semester 1

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: essays, tutorial participation

This course will consider the rise of the woman writer in the nineteenth century and the development of a female literary tradition. It will look at questions which arise out of the adoption of a woman centred perspective for the writer and the critic.

The course is concerned with questions of gender and representation. Texts both central to and outside the British female tradition will be considered, with reference to historical context
and contemporary feminist literary theory. Special attention will be given to the problems of language and subjectivity, the construction of sexuality and sexual differences, and ways in which gender affects writing and reading.

## ENGL 2023

## American Gothic

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Twentieth Century American Literature
- Assessment: essay, exam, class presentation, participation

The Gothic is an important strand in American literary and cinematic culture. This course gives students an opportunity to study American Gothic in historic depth. Covering a period from the early 1830s to the present day, the course introduces students to key nineteenth and twentieth-century authors and a selection of influential films. Students will acquire specific knowledge about literary and cinematic developments in the US over the last two centuries. They will be encouraged to develop critically and theoretically informed approaches to texts, especially in regard to the manner in which the Gothic functions in terms of the American discourse of nation.

## ENGL 2024

## From the Beats to Bongs: The Sixties

-4 units - semester 2

- 3 contact hours per week
- Prerequisite: 6 units level I Humanities/Social Sciences
- Assessment: participation, seminar presentation (including annotated bibliography), essay, take-home exam

This course will examine the 1960 s in the West as a time of social, political and cultural change. It will encompass both 'high' and 'low' cultural forms in an attempt to expose students to some of the prevailing preoccupations of the decade. Topics will include fiction, poetry, film, drama, popular music and television. In addition to specific texts, social and political movements will be discussed. Students will gain an historical overview of significant cultural moments and political movements from the decade through the lens of cultural studies and historical and literary methodologies. They will gain a working understanding of these methodologies, as well as of the intersections between 'modernism', 'postmodernism', 'high' and 'low' culture.

## ENGL 2026

## Self Writing

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units level I Humanities/Social Sciences
- Assessment: participation, seminar presentation, critical essay, take-home exam

In this course students will read a range of life narratives in the context of theories of self-representation. The course will focus on variations in the genre of self-writing, and will examine the evolution of autobiographical texts - and the changing significance attributed to the speaking "ll" - from St Augustine's Confessions of the 4th century to contemporary models of self-writing. Set texts will include not only those conventionally understood as autobiography but also those which deliberately blur the line between biography and autobiography (such as Gertrude Stein's Autobiography of Alice B. Toklas) and those which are
collaboratively produced (such as oral histories). The course will allow students to produce a piece of self-writing or an oral history project as part of their assessment. They will develop their skills in reading texts within the context of cultural and literary history, and have the opportunity to explore intersections between critical and creative writing.

## ENGL 2030

## Passions

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units level I Humanities/Social Sciences
- Assessment: participation, seminar paper, take home exam

The course introduces ideas concerning the social and historical importance of various human passions. Students will explore Western traditions of literary practice in drama, poetry and prose that are used to represent the social and personal effects of these feelings. The course surveys examples from the seventeenth to the twentieth centuries. Students will be introduced to debates concerning the human passions in English Renaissance, Enlightenment, Romantic and Modernist literature. Topics to be introduced may include the representation of anti-social or dangerous emotions of hatred and jealousy, the sentimental, moral and ethical emotions such as empathy and compassion, and the privatised feelings of grief, remorse, anxiety and erotic pleasure.

## ENGL 2032

## Classic Australian Texts: Literature and Film

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: seminar paper, participation, exam

This course examines a range of Australian literary and filmic texts that have come to be regarded as 'classics'. The course aims to set texts in their historical context, exploring the social functions they might have served for their original audiences. In addition, it analyses the construction of literary and filmic canons, and asks why these texts attained a status as Australian 'classics'. There will be an emphasis on how literature and film deals with conflicts and tensions within Australian culture - both for its original and subsequent audiences.

## ENGL 2033

## Shakespeare

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: presentation, essays, final exam

This course is designed for students wishing to become familiar (or more familiar) with Shakespeare's plays. Lectures will focus on the major themes and cultural context of plays of each genre, on the ways in which they were written to be performed on stage, and on the material forms of the surviving texts.

## ENGL 2034

## Representing Truth and Reconciliation

- 4 units - summer semester
- 6 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: weekly report, seminar participation, formal presentation $25 \%$, research essay $75 \%$

The aims of this course are to familiarise students with key issues in post-apartheid South African literature, to introduce students new to literary studies to some major procedures of literary criticism, and to expand on the critical skills of those students experienced in literary analysis. In order to develop an understanding of the contemporary literary climate, we will read four of the most important and widely acclaimed post-apartheid South African literary texts in the context of the Truth and Reconciliation Commission (TRC), by Gillian Slovo, Antjie Krog, Pumla Gobodo-Madikizela and Njabulo Ndebele. For the informing political context, we turn to official reportage, documentary video material and recordings of the TRC process, but also examine the contribution literature makes to the key debates relating to the TRC. A major focus will thus be the aesthetics and ethics of autobiographical, journalistic and fictional approaches to social inequality and social transformation. Central to the course will be the following question: Given the creative drive to represent a range of human desires, including those that turn to unspeakable violence, how may we understand the role of art in relation to current notions of truth, justice, gender and race equality, repentance, forgiveness, and shame?

## ENGL 2104

## Professional English (ESL)

- 4 units - semester 1 or 2
- Lectures online, 2 hour workshop per week, provision for individual consultations
- Quota may apply
- Prerequisite: 6 units Level I in any discipline
- Restriction: may not be counted toward a major in English; not available to SACE Stage 2 English students (or equiv), ENGL 1104 Professional English (ESL) I, ENGL 2104 English for Professional Purposes (ESL) II, ENGL 2016 English for Professional Purposes II
- 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; public speaking; job application packages; informative summaries and analysis; academic writing skills; grammar, tone and fluency.

## Level III

## ENGL 3009

## A Festival of Contemporary Writing

- 6 units - semester 1
- 3 contact hours per week (equivalent)
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 1500 word report on Writers' Week 20\%, seminar exercises $30 \%$, essay/creative writing piece $50 \%$

This course is designed as an extension of Writers' Week, which, as part of the Adelaide Festival of Arts, brings major writers to Adelaide from all over Australian and elsewhere in the world to read from and discuss their work and to discuss ideas with other writers in a public forum. The course will extend and develop themes and ideas presented in the Writers' Week program. Recent Australian writing will be discussed in relation to recent writing from elsewhere in the world. Students will be introduced to creative writing techniques and will be encouraged to respond to topics through creative writing. Please note: attendance at a selection of Writers' Week sessions is compulsory.

## ENGL 3012

## Medieval English Literature

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: essays, exams

A study of some major English texts, authors, and genres of the period 1350-1450. Texts studied will include a variety of tales from Chaucer's Canterbury Tales; Sir Gawain and the Green Knight, Malory's Morte D'Arthur and a selection of medieval mystery and morality plays.

## ENGL 3015

## Dangerous Liaisons: Writing Out of Africa

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: New Literature in English: Africa
- Assessment: seminar participation, seminar paper, essay

This course will examine a range of African and diasporic African texts that focus on dispossession and dispersal in the aftermath of the colonial period. Topics will include the construction of race, gender and identity in the contexts of homelessness at home, slavery, migration and exile. Texts will include contemporary writing from Botswana, Ghana, Nigeria, Tanzania, UK, USA, West Indies and Zimbabwe.

## ENGL 3016

## English for Professional Purposes

- 6 units - semester 1
- 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 3021

## Women's Writing: The Nineteenth Century

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: essays, tutorial participation

This course will consider the rise of the woman writer in the nineteenth century and the development of a female literary tradition. It will look at questions which arise out of the adoption of a woman centred perspective for the writer and the critic.

The course is concerned with questions of gender and representation. Texts both central to and outside the British female tradition will be considered, with reference to historical context and contemporary feminist literary theory. Special attention will be given to the problems of language and subjectivity, the construction of sexuality and sexual differences, and ways in which gender affects writing and reading.

## ENGL 3023

## American Gothic

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Twentieth Century American Literature
- Assessment: essays, exam, class presentation, participation

The Gothic is an important strand in American literary, cinematic and televisual culture. This course gives students an opportunity to study American Gothic in historic depth. Covering a period from the early 1830s to the present day, the course introduces students to key nineteenth and twentieth-century authors, and a selection of influential films. Students will acquire specific knowledge about literary and cinematic developments in the US over the last two centuries. They will be encouraged to develop critically and theoretically informed approaches to texts, especially in regard to the manner in which the Gothic functions in terms of the American discourse of nation.

## ENGL 3024

## From the Beats to Bongs: The Sixties

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units level II Humanities/Social Sciences
- Assessment: participation, seminar presentation (including annotated bibliography), essay, take-home exam

This course will examine the 1960s in the West as a time of social, political and cultural change. It will encompass both 'high' and 'Iow' cultural forms in an attempt to expose students to some of the prevailing preoccupations of the decade. Topics will include fiction, poetry, film, drama, popular music and television. In addition to specific texts, social and political movements will be discussed. Students will gain an historical overview of significant cultural moments and political movements from the decade through the lens of cultural studies and historical and literary methodologies. They will gain a working understanding of these methodologies, as well as of the intersections between 'modernism', 'postmodernism', 'high' and 'low' culture.

## ENGL 3026

## Self Writing

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units level II Humanities/Social Sciences
- Assessment: participation, seminar presentation \& paper, critical essay, take-home exam

In this course students will read a range of life narratives in the context of theories of self-representation. The course will focus on variations in the genre of self-writing, and will examine the evolution of autobiographical texts - and the changing significance attributed to the speaking "l" - from St Augustine's Confessions of the 4th century to contemporary models of self-writing. Set texts will include not only those conventionally understood as autobiography but also those which deliberately blur the line between biography and autobiography (such as Gertrude Stein's Autobiography of Alice B. Toklas) and those which are collaboratively produced (such as oral histories). The course will allow students to produce a piece of self-writing or an oral history project as part of their assessment. They will develop their skills in reading texts within the context of cultural and literary history, and have the opportunity to explore intersections between critical and creative writing .

## ENGL 3030

## Passions

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units level II Humanities/Social Sciences
- Assessment: participation, seminar paper, essay, take home exam

The course introduces ideas concerning the social and historical importance of various human passions. Students will explore Western traditions of literary practice in drama, poetry and prose that are used to represent the social and personal effects of these feelings. The course surveys examples from the seventeenth to the twentieth centuries. Students will be introduced to debates concerning the human passions in English Renaissance,

Enlightenment, Romantic and Modernist literature. Topics to be introduced may include the representation of anti-social or dangerous emotions of hatred and jealousy, the sentimental, moral and ethical emotions such as empathy and compassion, and the privatised feelings of grief, remorse, anxiety and erotic pleasure.

## ENGL 3032

## Classic Australian Texts: Literature and Film

6 units - semester 2

- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: seminar paper, assignments, participation, exam

This course examines a range of Australian literary and filmic texts that have come to be regarded as 'classics'. The course aims to set texts in their historical context, exploring the social functions they might have served for their original audiences. In addition, it analyses the construction of literary and filmic canons, and asks why these texts attained a status as Australian 'classics'. There will be an emphasis on how literature and film deals with conflicts and tensions within Australian culture - both for its original, and for subsequent, audiences.

## ENGL 3033

## Shakespeare

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: presentations, essays, final exam

This course is designed for students wishing to become familiar (or more familiar) with Shakespeare's plays. Lectures will focus on the major themes and cultural context of plays of each genre, on the ways in which they were written to be performed on stage, and on the material forms of the surviving texts.

## ENGL 3034

Representing Truth and Reconciliation

- 6 units - summer semester
- 6 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: weekly report, seminar participation \& formal presentation $25 \%$, research essay $75 \%$

The aims of this course are to familiarise students with key issues in post-apartheid South African literature, to introduce students new to literary studies to some major procedures of literary criticism, and to expand on the critical skills of those students experienced in literary analysis. In order to develop an
understanding of the contemporary literary climate, we will read four of the most important and widely acclaimed post-apartheid South African literary texts in the context of the Truth and Reconciliation Commission (TRC), by Gillian Slovo, Antjie Krog, Pumla Gobodo-Madikizela and Njabulo Ndebele. For the informing political context, we turn to official reportage, documentary video material and recordings of the TRC process, but also examine the contribution literature makes to the key debates relating to the TRC. A major focus will thus be the aesthetics and ethics of autobiographical, journalistic and fictional approaches to social inequality and social transformation. Central to the course will be the following question: Given the creative drive to represent a range of human desires, including those that turn to unspeakable violence, how may we understand the role of art in relation to current notions of truth, justice, gender and race equality, repentance, forgiveness, and shame?

## Honours

## ENGL 4401A/B

## Honours English

- 24 units - full year
- Prerequisite: UG degree, high credit average in courses contributing to major in English, or equivalent 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 2006 will be available from the English Office late in 2005 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 4402A/B

## 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 pre-requisite 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 2005.

In some circumstances Honours Creative Writing can be studied part-time over two years.

## ENVIRONMENTAL BIOLOGY

## Level I

## ENV BIOL 1002

## ENV BIOL 1002RW

## Environmental Biology I

- 3 units - semester 1
- 3 lectures per week, 3 hours practical/tutorial per fortnight, 3 field trips
- Restriction: not available to B.Sc.students
- Assessment: exam, written assignments

This course is an introduction to the physical and biological resources of Australia with an emphasis on ecological processes and resource management. Topics will draw examples and principals from the freshwater, marine and terrestrial environments. Particular attention will be placed upon resource utilisation, ecosystem services, biodiversity, conservation, agricultural practices as well as the impacts of humans on natural ecosystems. The course places emphasis on generic skills such as report writing and the quantitative assessment of data derived from practical work.

## 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

## ENV BIOL 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-prey, plant-herbivore, host-parasite, 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 rangelands, 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

This course provides an introduction to the biology of higher plants. The lecture series has a core component that introduces general principles of plant biology relating to structure and function, systematics, floral biology and the physiology of growth and development. These general principles are then explored further in a series of case studies on topics such as plant nutrition, symbioses, responses to biotic and abiotic stress and photosynthesis

## 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 a 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, 5 hours practical work per week, compulsory 3-4 day field camp (first week of mid-semester break) - students unable to attend should consult course coordinator before enrolment
- 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

This course introduces ideas in freshwater ecology through the work of staff and postgraduate students, with special attention to the ecology of reservoirs, lakes and wetlands and to the ecology of the River Murray and the ways that it has responded to flow regulation. Lectures explore the major freshwater habitats (rivers, reservoirs and wetlands) through studies of plankton, plants, invertebrates and fish and their responses to environmental change. Practical work involves laboratory and field projects in
which students participate in the design, execution, analysis and report writing. The field camp provides more intensive experience of investigations under field conditions.

## 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 environmental 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
- Restriction: Marine Ecology, Marine Ecology Theory, Marine Ecology Practical
- 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 - not offered in 2006
- 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 3013WT

## Ecology \& Management of Freshwater Systems III

- 3 units - not offered 2006
- 2 lectures, 4 hours laboratory/field practicals per week
- Assumed Knowledge: ENV BIOL 2003 Ecology EBII or APP ECOL 2010RW Population Ecology

This course provides students with an understanding of ecological processes, food webs and nutrient cycles governing freshwater lakes, wetlands and streams. The course also introduces concepts for the assessment and management of algal blooms, eutrophication, salinity and environmental flows of freshwater systems. Field practicals will be conducted on water quality monitoring and biological surveys of South Australian drinking water reservoirs and the Urrbrae wetland.

## ENV BIOL 3015

## Ecosystem Modelling for Environmental Management III

- 3 units - not offered in 2006
- Assumed Knowledge: ENV BIOL 2003 Ecology EB II or APP ECOL 2010RW Population Ecology
- Restriction: ENV BIOL 3001 Ecosystem Modelling for Environmental Management
- Assessment: theory 50\%, practicals/assignments 50\%

This course provides students with an understanding and concepts of systems ecology, ecological modelling and ecoinformatics. On completion of the course students will be able to develop models relevant to terrestrial and aquatic ecosystems, and applicable as tools for explanation and informed decisions. Modelling practicals will be conducted to model complex ecological data by means of user-friendly software for statistical regression, ordinary differential equations, artificial neural networks, evolutionary algorithms, and to apply existing simulation models for lakes, wetlands, fisheries, forests and agro-ecosystems.

## ENV BIOL 3121

## Concepts in Ecology EBIII

- 3 units - semester 1
- 2 lectures, 2 hours practical/tutorial per week, 4 day field trip
- 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: B. Sc, B.A, B.Sci.(Evol.Biol.), B.Sc. (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 1
- 2 lectures, 4 hours practical per week, 2 day field camp
- Eligibility: B.Sc.(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 3220

## Issues in Sustainable Environments

- 3 units - semester 2
- 2 hour seminar/discussion, 3-4 hours project/tutorial per week
- Assumed Knowledge: Level I \& || BSc. (Sust.Env.) or equivalent

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

## Honours

## ENV BIOL 4000A/B

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 4001A/B

## 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 4002A/B

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 4003A/B

Honours Rangeland Science and Management S

- 24 units - full year
- Prerequisite: Satisfactory (usually credit) standard in appropriate Level III courses (9 units) including 2179 Terrestrial Ecology III or special permission of program coordinators

Candidates are expected to acquire a more detailed knowledge of rangeland science and management than is required for the Ordinary degree. Candidates are expected to study deeply in one branch of rangelands science and management. Candidates are required to carry out research in this field and to present the results in a written thesis. Approximately two-fifths of the total program is flexible and candidates choose, with approval, between additional project work, essays, and course work.

Candidates should consult a Coordinator of the program and potential supervisors during the final year of the degree. The Honours program commences at the beginning of February or at the beginning of semester 2 .

## ENV BIOL 4010A/B

Honours Environmental Biology (B.NR.Mgt.)

- 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 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1500 word essay $25 \%, 2500$ word essay $45 \%$, participation based on class contribution 10\%, presentation 20\%

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. We will be reading classic works such as Camus' The Outsider, Sartre's Nausea, Flaubert's Madame Bovary, Kafka's The Trial and Louis Ferdinand Celine's Journey to the End of the Night. 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 2013

## European Film Movements

- 4 units - semester 2
- 5.5 contact hours per week (includes 2.5 hour screening)
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1500 word screening diary $25 \%, 1000$ word tutorial paper 25\%, 2500 word essay $50 \%$

This course gives an overview of the principal periods and movements in European Cinema from its early years to the 1960s. Topics to be studied include: Russian Formalism, German Expressionism, French Poetic Realism, Italian Neo-Realism, British Cinema of the 1950s and French Nouvelle Vague. These will be studied through background readings as well as by film analysis that focuses upon a significant film from each period. The
theoretical framework for the course is provided by the concept of National Cinema.

## EUST 2014

## Ancient Philosophy

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: $2 \times 1500$ word essays $40 \%$, seminar summaries $10 \%$, short seminar presentation \& 500 word outline $10 \%, 2$ hour exam 40\%

The aim of the course is to introduce some of the main ideas of the philosophers considered, and to explore their ideas in their historical context and impact upon the development of philosophy and Western civilisation. The main topics considered are: early philosophers: the Pre-Socratics; Sophists and Socrates; the classical period: Plato and Aristotle; philosophies of the Hellenistic and Roman periods: Cynics, Stoics and Epicureans; satirical and Christian critiques of philosophy, e.g. Lucian, Justin Martyr and Tertullian; and the Neo-Platonism of Plotinus.

## EUST 2015

## Music and Politics: German Song and Society

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Music/Humanities/Social Sciences
- Restriction: any German Studies II/III course where a student has chosen a modified/reduced version of Music \& Politics as part of it
- Assessment: seminar participation 10\%, 1000 word seminar paper $15 \%, 1500$ word essay $25 \%, 2500$ word major essay $50 \%$

In this course we examine some of the complex interrelationships between music and politics by considering aspects of German song in the context of historical and social developments in the 19th and 20th centuries. The course begins by exploring the importance of folk song, its interpretation as an expression of national character and its contribution to nationalist and other political movements. Folk song also formed the basis for German art song and under this heading the course considers major composers and their Lieder as well as the influence of such factors as men's singing groups (Liedertafeln), salons and other forms of domestic music-making, the introduction of the piano and the effects of gender expectations on both composition and performance.

The second half of the course traces the evolution of German song in the 20th century. Topics include the role of songs in the Wandervogel movement, Weimar caberet, the Brecht songs of Weill and Eisler and the use of songs in Nazi Germany.

## Level III

## EUST 3013

## European Film Movements

- 6 units - semester 2
- 5.5 contact hours per week (includes 2.5 hour screening)
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2500 word screening diary $25 \%, 1500$ word tutorial paper $25 \%, 4000$ word essay $50 \%$

This course gives an overview of the principal periods and movements in European Cinema from its early years to the 1960s. Topics to be studied include: Russian Formalism, German Expressionism, French Poetic Realism, Italian Neo-Realism, British Cinema of the 1950s and French Nouvelle Vague. These will be studied through background readings as well as by film analysis that focuses upon a significant film from each period. The theoretical framework for the course is provided by the concept of National Cinema.

## EUST 3014

## Ancient Philosophy

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: $2 \times 2500$ word essays $40 \%$, seminar summaries $10 \%$, short seminar presentation \& 500 word outline $10 \%, 2$ hour exam 40\%

The aim of the course is to introduce some of the main ideas of the philosophers considered, and to explore their ideas in their historical context and impact upon the development of philosophy and Western civilisation. The main topics considered are: early philosophers: the Pre-Socratics; Sophists and Socrates; the classical period: Plato and Aristotle; philosophies of the Hellenistic and Roman periods: Cynics, Stoics and Epicureans; satirical and Christian critiques of philosophy: e.g. Lucian, Justin Martyr and Tertullian; and the Neo-Platonism of Plotinus.

## EUST 3015

Music and Politics: German Song and Society

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Music/Humanities/Social Sciences
- Restriction: Any German Studies II/III course where a student has chosen a modified/reduced version of Music \& Politics as part of it
- Assessment: Seminar participation 10\%, 1500 word seminar paper $15 \%, 2000$ word essay $25 \%$, 4000 word major essay $50 \%$

In this course we examine some of the complex interrelationships between music and politics by considering aspects of German song in the context of historical and social developments in the 19th and 20th centuries. The course begins by exploring the importance of folk song, its interpretation as an expression of national character and its contribution to nationalist and other political movements. Folk song also formed the basis for German art song and under this heading the course considers major composers and their Lieder as well as the influence of such factors as men's singing groups (Liedertafeln), salons and other forms of domestic music-making, the introduction of the piano and the effects of gender expectations on both composition and performance.

The second half of the course traces the evolution of German song in the 20th century. Topics include the role of songs in the Wandervogel movement, Weimar caberet, the Brecht songs of Weill and Eisler and the use of songs in Nazi Germany.

## Honours

## EUST 4401A/B

## 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: $2 \times 7000$ word seminar papers $25 \%$ each and 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.

## FOOD SCIENCE \& TECHNOLOGY

## Level I

## FOODT\&M 1000RG

## Introduction to Food Technology

- 3 units - semester 2
- up to 6 hours per week (including lectures/practicals)
- Assessment: written exam 60\%, laboratory reports, assignments, report of industry visits $40 \%$

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.

## FOODT\&M 1001

Consumers, Food and Health

- 3 units - semester 1
- 2 lectures, 2 hours tutorial per week
- Assessment: two assignments $60 \%$, student diary $10 \%$, student led discussion $15 \%$, participation $15 \%$

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.

## Level II

## FOODT\&M 2001RG

## Food Engineering Principles

- 2 units - semester 1
- 2 lectures, 3 hours practical/tutorial per week
- Assumed Knowledge: CHEM ENG 1001 Introduction to Process Engineering

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.

## FOODTGM 2002WT

## Nutrition II

- 4 units - semester 2
- 2 lectures, 1 hour tutorial, 4 hours practical per week
- Assumed Knowledge: BIOCHEM 2106 Biochemistry II A (Agriculture)

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

## FOODT\&M 2003RG

## Food Microbiology II

- 4 units - semester 2
- 2 lectures, 4 hours practical per week
- Assumed Knowledge: APP ECOL 2003WT 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.

## FOODT\&M 2105RG

## Food Preservation and Packaging $\mathbf{A}$

-4 units - semester 1

- 3 lectures, 4 hour practical per week
- Eligibility: B.Food Science \& Technology students only
- Assumed Knowledge: FOODT\&M 1000RG Introduction to Food Technology
- Restriction: FOODT\&M 3000RG Food Preservation and Packaging
- Assessment: written exam 60\%, 2 laboratory reports 20\%, 2 assignments/presentations 20\%

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.

## FOODT\&M 2205RG

## Plant Food Processing A

- 4 units - semester 2
- 3 lectures, 4 hours practical per week
- Eligibility: B.Food Science \& Technology students only
- Assumed Knowledge: FOODT\&M 2105RG Food Preservation and Packaging
- Restriction: FOODT\&M 3026RG Plant Food Processing
- Assessment: written exam 60\%, 2 assignments 40\%

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

## FOODT\&M 3003RG

## Food Preservation and Packaging

- 3 units - semester 1
- 2 lectures, four hour practical per week
- Assumed Knowledge: FOODT\&M 2001RG Food Engineering Principles

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.

## FOODT\&M 3011RG

## Food Chemistry

- 3 units - semester 1
- 2 lectures, four hour practical per week
- Assumed Knowledge: BIOCHEM 2106 Biochemistry IIA (Agric.)

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.

## FOODT\&M 3014RG

## Food Quality and Regulation

- 3 units - semester 2
- 2 lectures, 4 hours practicals per week
- Assumed Knowledge: FOODT\&M 2105RG Food Preservation and Packaging A

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.

## FOODT\&M 3020AWT/BWT

## Research Project (Food Technology \& Management)

- 12 units - full year
- Assessment: thesis, a supervisor mark, final presentation

A research project on a food related topic.

## F00DT\&M 3021RG

## Food Product Development

- 3 units - semester 1
- 2 lectures, 4 hours practicals per week
- Assumed Knowledge: FOODT\&M 2105RG Food Preservation and Packaging A

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.

## FOODT\&M 3025RG

Animal Food Processing
Note: will be offered in 2006 for 2004 cohort of students who change to new degree

- 3 units
- 2 lectures, 4 hour practical per week
- Assumed Knowledge: FOODT\&M 2003RG Food Microbiology II

Red meat processing: Animal slaughter. Factors affecting meat quality. Meat microbiology. Chemistry and physiological structure of meat. Manufactured meat products including non-meat ingredients. Dairy processing: composition of milk. Hazards associated with raw milk. Microbiology of milk. Milk products and processing techniques including membrane technologies. Fish and seafood processing: classification of edible seafoods. Harvesting, storage and processing techniques. Seafood microbiology. Sensory evaluation. Fish and seafood products. Poultry and egg processing: animal slaughter and processing. Poultry microbiology. Handling and storage. Egg structure and composition. Assessment of egg quality. Poultry and egg microbiology. Egg products. HACCP programs and Food Regulations. Students will produce a variety of foods that contain animal tissue and extracts.

## FOODT\&M 3026RG

## Plant Food Processing

- 3 units - even years only
- 2 lectures, 4 hour practical per week
- Assumed Knowledge: FOODT\&M 2003WT Food Microbiology II

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.

## FOODTGM 3027WT

## Sensory Evaluation of Foods

- 3 units - semester 2
- 2 lectures, 1 practical per week
- 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.

## 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 and Culture (formerly French I: Language and Culture Part 1) or equivalent
- Assessment: regular tests, language assignments, essays, language exam

This course continues the intensive language training undertaken in Part 1 and introduces other aspects of French and Francophone culture and society. Students have a choice of two cultural studies options: Varietes du francais or Contemporary Fiction.

## Level II

## FREN 2002

## French IIA: Language and Culture

- 4 units - semester 1
- 5 contact hours per week
- Prerequisite: FREN 1003 French IA: Beginner's French (Pass Div 1) or FREN 1012 French I: Language and Culture Part 2 (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 and Culture (formerly French IIA: Language and Culture Part 1)
- Assessment: regular written assignments, oral exercises, written class tests, essays, oral exam, language exam

This course continues the intensive language training undertaken in Part 1 and introduces other aspects of French and Francophone culture and society. Students have a choice of two cultural studies options in common with French I: Varietes du francais or Contemporary Fiction.

## FREN 2007

## French Studies II

- 4 units - semester 1 or 2
- Culture - 2 contact hours per week; Language - 5 contact hours per week
- Prerequisite: Culture - FREN 1012 French I: Language and Culture Part 2 (Pass Div 1) or FREN 2003 French IIA Part 2; Language - sem 1, 6 units Level I Humanities/Social Sciences; sem 2 - French Studies II: Language (Semester 1)
- Restriction: Language - not available to students who have studied French at any level
- Assessment: Culture - tutorial papers, essays, tests; Language - regular assignments, tests, exam 60\%, 1500 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 Ecrivains du monde francophone or French Cinema; and in semester 2 students choose from either Dialectiques du 18 e siecle or another option to be announced. Students can do either Semester 1 or 2, or both semesters.

## Language

This course also offers the opportunity for students in second year to be introduced to French language and culture 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 complete Semester 1.

## FREN 2011

## French IISA: Language and Culture

- 4 units - semester 1
- 6 contact hours per week
- Prerequisite: FREN 1012 French I: Language and Culture Part 2 (Pass Div 1)
- Assessment: regular oral \& written exercises, class tests, end of semester exam for language, tutorial papers, essays, tests for cultural studies course

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 course is based on a wide range of texts: one option to be chosen (either Ecrivains du monde francophone or French Cinema).

## FREN 2012

## French IISB: Language and Culture

-4 units - semester 2

- 6 contact hours per week
- Prerequisite: FREN 2011 French IISA: Language and Culture (formerly French II: Language and Culture Part 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 course

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 course is based on a wide range of texts: one option to be chosen (either Dialectiques du 18e siecle or another option to be announced).

## Level III

## FREN 3002

## French IIIA: Language and Culture

- 6 units - semester 1
- 6 contact hours per week
- Prerequisite: FREN 2003 French IIA: Language and Culture Part 2
- Assessment: oral \& written exercises, class tests, end of semester exam for language; tutorial papers, essays, tests for cultural studies course

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 course is based on a wide range of texts: one option to be chosen (either Ecrivains du monde francophone or French Cinema).

## FREN 3003

## French IIIB: Language and Culture

- 6 units - semester 2
- 6 contact hours per week
- Prerequisite: FREN 3002 French IIIA: Language and Culture (formerly French IIIA: Language and Culture Part 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 course

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 course is based on a wide range of texts: one option to be chosen (either Dialectiques du 18e siecle, Adelaide High School Mentoring Scheme or another option to be announced).

## FREN 3007

French Studies III

- 6 units - semester 1 or 2
- Culture - 2 contact hours per week; Language - 5 contact hours per week
- Prerequisite: Culture - consult Course Coordinator; Language - sem 1, 8 units Level II Humanities/Social Sciences, sem 2, French Studies III: Language
- Restriction: Language 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 Ecrivains du monde francophone or French Cinema; and in semester 2 students choose from either Dialectiques du 18e siecle or another option to be announced. Students can do either Semester 1 or 2, or both semesters.

## Language

This course also offers the opportunity for students in third year to be introduced to French language and culture 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 complete Semester 1.

## FREN 3011

French IIISA: Language and Culture

- 6 units - semester 1
- 4 contact hours per week
- Prerequisite: FREN 2012 French II: Language and Culture Part 2
- Assessment: oral \& written exercises, class tests, end of semester exam for language, tutorial papers, essays, tests for cultural studies course

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 Ecrivains du monde francophone or French Cinema).

## FREN 3012

## French IIISB: Language and Culture

- 6 units - semester 2
- 4 contact hours per week
- Prerequisite: FREN 3011 French IIISA: Language and Culture (formerly French IIIA: Language and Culture Part 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 course

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 Dialectiques du 18e siecle, Adelaide High School Mentoring Scheme or another option to be announced).

## FREN 3103WT

## Technical French (Oenology)

- 3 units - semester 2
- 5 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 4401A/B

## Honours French Studies

- 24 units - full year
- Prerequisite: BA degree, credit 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 IIIA (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 AND SOCIAL INQUIRY

## Level I

## GWSI 1001

## GWSI 1001EX

## Social Sciences in Australia

- 3 units - semester 1
- 3 contact hours per week/Online for external students
- Available for Non-Award Study
- Assessment: tutorial participation, assignments, totalling approx. 4500 words

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 20\%, approx. 2000 word analysis of magazine/cover advertisement $40 \%$, approx. 2000 word news media analysis $40 \%$

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 global 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 trans-nationals 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 - total approx. 4500 words

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.

## GWSI 1004

## Introduction to Gender Studies

- 3 units - semester 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: written work totalling 4500 words

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 2001

Animals in Society: Relations, Meanings, Desires

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: workshop participation, critical literature review, research project

The course explores the meanings of animals in industrialised societies. We understand and use animals in many ways: as pets and iconic wild animals such as dolphins that we love, as stock animals that we eat, and as pests, like cockroaches and feral animals, that we kill. This course explores the different meanings of animals, including how contemporary attitudes to animals have developed, how western attitudes differ from those in other societies, and how different categories of animals have different meanings in Australian society. The particular empirical focus of the course will be animals in animal encounter sites (for example zoos, sanctuaries and encounters with 'wild' animals).

## GWSI 2002

## Social Organisation of Work

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: minor paper, document analysis \& presentation, major essay

Why do we work, and how is work changing? How does work shape us as individuals and groups, and what are the consequences for that shaping for society, families, communities and for women and men? This course examines past work patterns but particularly looks to the future and to change. The international flow of labour, the role of child labour, sex workers, and changes in traditional forms of work in factories, banks and new industries like IT, will be analysed, along with the organisational and occupational foundations of working life and power at work. The relationship between work and other institutions such as gender, the law and education will be considered. The course will draw on the conceptual foundations of sociology, and apply them to work practices and institutions in a global context. Students will develop analytical, policy and research tools.

## GWSI 2003

## GWSI 2003EX

## Women in Australian History

- 4 units - semester 1
- 3 contact hours per week/online for external students
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Australian Feminist History
- Assessment: 3000 word applied research essay, 1500 word seminar paper, seminar participation 1000 words equivalent

A survey of Australian women's history set in a context of recent debates in feminist history. Topics include Aboriginal women and history, the historiography of the women convicts, 'pioneer' women, women's separate sphere, first-wave feminism, sexuality, the birth rate, women's paid and unpaid work, the depression and the world wars. This course will be available through flexible delivery, for those who cannot attend the on-campus classes.

## GWSI 2004

Gender, 'The Body' and Health

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1000 word essay $25 \%, 6$ seminar exercises (incl. preparation, attendance, participation,) 2500 word equivalent $40 \%, 2000$ word applied research project $35 \%$

This course will explore the social and historical context of understandings of 'the body', gender and health. In particular it will investigate the role that the concept of biology and biological difference play in the construction of gender, and of health/illness. The course will draw on historical and contemporary instances to explore the plausibility of materialist, socio-biological, social constructionist, Foucauldian and post-modern theories of embodiment and their relationship to gender. Topics will include the exploration of changing understandings of reproduction, the immune system, heredity and psychosomosis and in doing so will focus on several topical health issues such as, infertility, impotence, cancer, obesity, anxiety disorders, insomnia, osteoporosis. The course will draw centrally from feminist scholarship in sociology, anthropology and the history and philosophy of science.

## GWSI 2015

## Social Research

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: may include practical assignments (incl. preparation \& participation for seminars), critical review, textual analysis, survey research assignment - total approx 6000 words

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 3001

## Animals in Society: Relations, Meanings, Desires

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: workshop participation, critical literature review, research project

The course explores the meanings of animals in industrialised societies. We understand and use animals in many ways: as pets and iconic wild animals such as dolphins that we love, as stock animals that we eat, and as pests, like cockroaches and feral animals, that we kill. This course explores the different meanings of animals, including how contemporary attitudes to animals have developed, how western attitudes differ from those in other societies, and how different categories of animals have different meanings in Australian society. The particular empirical focus of the course will be animals in animal encounter sites (for example zoos, sanctuaries and encounters with 'wild' animals).

## GWSI 3002

## Social Organisation of Work

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: minor paper, document analysis $\&$ presentation, major essay

Why do we work, and how is work changing? How does work shape us as individuals and groups, and what are the consequences for that shaping for society, families, communities and for women and men? This course examines past work patterns but particularly looks to the future and to change. The international flow of labour, the role of child labour, sex workers, and changes in traditional forms of work in factories, banks and new industries like IT, will be analysed, along with the organisational and occupational foundations of working life and power at work. The relationship between work and other institutions such as gender, the law and education will be considered. The course will draw on the conceptual foundations of sociology, and apply them to work practices and institutions in a global context. Students will develop analytical, policy and research tools.

## GWSI 3003

## GWSI 3003EX

## Women in Australian History

- 6 units - semester 1
- 3 contact hours per week/online for external students
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Australian Feminist History
- Assessment: 4000 word applied research essay, 2000 word seminar paper, seminar participation 1500 words equivalent

A survey of Australian women's history set in a context of recent debates in feminist history. Topics include Aboriginal women and history, the historiography of the women convicts, 'pioneer' women, women's separate sphere, first-wave feminism, sexuality, the birth rate, women's paid and unpaid work, the depression and world wars. This course will be available through flexible delivery, for those who cannot attend the on-campus classes.

## GWSI 3004

## Gender, 'The Body' and Health

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Science
- Assessment: 1500 word essay $25 \%, 6$ seminar exercises (incl. preparation, attendance, participation,) 2500 words equivalent $40 \%, 3500$ word applied research project $35 \%$

This course will explore the social and historical context of understandings of 'the body', gender and health. In particular it will investigate the role that the concepts of biology and biological difference play in the construction of gender, and of health/illness. The course will draw on historical and contemporary instances to explore the plausibility of materialist, socio-biological, social constructionist, Foucauldian and post-modern theories of embodiment and their relationship to gender. Topics will include
the exploration of changing understandings of reproduction, the immune system, heredity and psychosomosis and in doing so will focus on several topical health issues such as, infertility, impotence, cancer, obesity, anxiety disorders, insomnia, osteoporosis. The course will draw centrally from feminist scholarship in sociology, anthropology and the history and philosophy of science.

## GWSI 3015

## Social Research

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: may include practical assignments (incl. preparation \& participation for seminars), critical review, textual analysis, survey research assignment - total approx 9000 words

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 4401A/B

## Honours Gender, Work and Social Inquiry

- 24 units - full year
- Prerequisite: UG degree, minimum credit average in courses contributing to major in Gender, Work and Social Inquiry, or equiv. approved by the Discipline.
- Assessment: 2 seminar topics with written work of approx. 6500-7500 words $25 \%$ each, 15000-20000 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 <br> 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 $30 \%$, final essay assignment $50 \%$

This course aims to introduce students to an analysis of Indigenous health that draws on inter-disciplinary 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 2001HO

## 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 $30 \%$, final essay assignment $50 \%$

This course aims to introduce students to an analysis of Indigenous health that draws on inter-disciplinary 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 4000AHO/BHO

## Honours General Practice

- 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 and Cells A or BIOLOGY 1102 Biology l: Molecules, Genes and Cells B
- Restriction: GENETICS 2102 Genetics IIA (Molecular Biology), GENETICS 2106 Genetics IIA (Biomedical Science)
- 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 (Biomedical Science) 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 \& 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
- Lectures, tutorial, 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 (Molecular Biology), GENETICS 2206 Genetics IIB (Biomedical Science)
- 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 2200 Genetics IIA (Mol.Biol.)
- 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 Science) 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 2106 Genetics IIA (Biomed. Sc.)
- 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 consists of discussion topics with researchers in human genetics, advanced analysis of genetic linkage as applied in human genetics, and contact with research laboratories.

## Level III

## GENETICS 3000

Molecular Genetics: Genomes and Gene Expression

- 6 units - semester 1
- 6 lectures, tutorial, $3 \times 4$ hour practicals per fortnight
- Available for Non-Award Study
- Prerequisite: GENETICS 2100 \& GENETICS 2200, or GENETICS 2102 \& GENETICS 2202 or GENETICS 2106 \& GENETICS 2206
- Restriction: GENETICS 3002 Molecular Genetics III (Mol.Biol.)
- Assessment: exam, practical component, written reports

The DNA that comprises the genetic material is collectively referred to as the genome. In this course, the organisation and expression of the genome is explored using molecular genetic analysis. Topics include - structure and function of genomes and chromosomes; genomics; genome evolution; interactions between nuclear, mitochondrial and chloroplast genomes; mechanisms for the generation and maintenance of diversity in diploid genomes; regulation of gene expression; chromosome structure and gene expression; epigenetic mechanisms; the cell cycle and cell proliferation.

## GENETICS 3002

Molecular Genetics III (Molecular Biology)
-4 units - semester 1

- 6 lectures, tutorial per fortnight
- Eligibility: BSc (Molecular Biology) students only
- Prerequisite: GENETICS 2100 Genetics IIA: Foundation of Genetics \& GENETICS 2200 Genetics IIB: Function and Diversity of Genomes, or GENETICS 2102 Genetics IIA (Mol.Biol.) \& GENETICS 2202 Genetics IIB (Mol.Biol.)
- Restriction: GENETICS 3000 Molecular Genetics: Genomes and Gene Expression
- Assessment: exam

The DNA that comprises the genetic material is collectively referred to as the genome. In this course, the organisation and expression of the genome is explored using molecular genetic analysis. Topics include: structure and function of genomes and chromosomes; genomics; genome evolution; interactions between nuclear, mitochondrial and chloroplast genomes; mechanisms for the generation and maintenance of diversity in diploid genomes; regulation of gene expression; chromosome structure and gene expression; epigenetic mechanisms; the cell cycle and cell proliferation. This course consists of the lecture and tutorial components of GENETICS 3000 Molecular Genetics: Genomes and Gene Expression.

## GENETICS 3005

## Developmental and Medical Genetics (Biomed.)

- 6 units - semester 2
- 6 lectures, tutorial, $3 \times 4$ hour practicals per fortnight
- Eligibility: BHSc and BSc (Biomedical Science) students only
- Prerequisite: GENETICS 2100 Genetics IIA: Foundation of Genetics \& GENETICS 2200 Genetics IIB: Function and Diversity of Genomes, or GENETICS 2106 Genetics IIA (Biomed.Sc.) \& GENETICS 2206 Genetics IIB (Biomed.Sc.)
- Assumed Knowledge: GENETICS 3000 Molecular Genetics: Genomes and Gene Expression
- Restriction: GENETICS 3006 Human, Developmental and Evolutionary Genetics
- Assessment: exam, practical component, written reports

This advanced course examines the dynamic nature of genomes revealed by the study of human genetics, developmental genetics and evolutionary genetics. Topics include the human genome, human genome diversity, human genetic disease, genetic basis of cancer, neurogenetics, gene therapy, genetic control of animal development, genes and animal behaviour. The course includes specialist topics in clinical genetics, including prenatal diagnosis, genetic counselling and ethical issues in clinical genetics. Subject
to availability, the practical component of this course is a placement with a genetics laboratory. Students who are unsuccessful in securing a laboratory placement will undertake alternative practical activities.

## GENETICS 3006

## Human, Developmental and Evolutionary Genetics

- 6 units - semester 2
- 6 lectures, tutorial, $3 \times 4$ hour practicals per fortnight
- Available for Non-Award Study
- Prerequisite: GENETICS 2100 \& GENETICS 2200, or GENETICS 2102 \& GENETICS 2202, or GENETICS 2106 \& GENETICS 2206
- Assumed Knowledge: GENETICS 3000 Molecular Genetics: Genomes and Gene Expression
- Restriction: GENETICS 3005 Developmental \& Medical Genetics (Biomed.)
- Assessment: exam, practical component, written reports

This advanced genetics course examines the dynamic nature of genomes revealed by the study of human genetics, developmental genetics and evolutionary genetics. Topics include: the human genome, human genome diversity, human genetic disease, genetic basis of cancer, neurogenetics, gene therapy, genetic control of animal development, genes and animal behaviour, the genetic basis of evolution, the roles of natural selection and chance, molecular evolution, molecular phylogeny, species concepts and the speciation process, and conservation genetics.

## Honours

## GENETICS 4000A/B

## Honours Genetics

- 24 units - full year
- Prerequisite: satisfactory performance in appropriate Level III courses offered by Molecular \& Biomedical Science -other students 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
- Assessment: tutorial participation, attendance 10\%, workshop participation, attendance 10\%, essay 40\%, 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 globalisation, 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
- 4 contact hours per week, fieldwork
- Assessment: essay $30 \%$, workshop participation $10 \%$, workshop, fieldwork reports $60 \%$ - total approx 4500 words

The course is concerned with introducing students to the sustainability crisis that confronts Australia and the world and, in so doing, to the complexity of human-environment interactions. A major feature of the course is an examination of crucial environmental resources and ecosystem services and an investigation into patterns of their use. This enables a detailed examination of the consequences that natural resource scarcity and degradation hold for humanity. Local and international case studies are used to situate and illustrate these problems of
environmental sustainability. The course concludes by considering the future prospects of 'our fragile planet' and possible solutions to the search for sustainability.

## Level II

GEST 2001

## Managing Coastal Environments

- 4 units - semester 2
- 3 contact hours per week, fieldwork
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Assessment: tutorial participation 10\%, tutorial presentations/ exercises $30 \%$, essays/reports 60\% - total approx. 6000 words

This course examines selected strategies for managing coastal environments around the world, although the main focus is the Australian coast. Where appropriate, local examples are used in conjunction with local coastal fieldwork. The course provides an overview of various coastal processes as a background to an understanding of coastal management issues. A major focus of the course is on recent coastal management initiatives in Australia by both the Commonwealth Government and the State Governments.

## GEST 2002

## Environmental Management

- 4 units - semester 2
- 4 contact hours per week, fieldwork
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Assessment: tutorial participation,/presentations/ exercises, essays/reports 60\%, exam 40\% - total approx. 6000 words

The aim of this course is to suggest how our global physical and biological resources may be managed on a more sustainable basis. This is achieved by careful evaluation of both the beneficial and adverse effects of various forms of human interaction with local, regional and global environmental systems. The topics to be considered will include deforestation, biodiversity and global carbon storage; land degradation and desertification; salinisation and integrated catchment management; soil, water, and air pollution; plant and animal extinctions; global warming and climatic change; management of toxic wastes; ozone depletion; disease; international agencies and environmental management in Australia. Throughout the course particular attention will be given to methods of monitoring the status of various environmental systems.

## GEST 2003

## Urban Biodiversity Management

-4 units - semester 1

- 3 contact hours per week, 2 days fieldwork
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Assessment: workshop exercises $40 \%$, field trip reports $30 \%$, case study $30 \%$ - total approx. 6000 words

The focus of this course is the management of wildlife and wildlife habitats in cities. Although cities are dominated by humanconstructions intended to provide habitat for the human species, it is now recognised that urban areas form an environmental continuum from the semi-natural to the mainly artificial and that this environmental continuum provides habitat for a wide variety of plant and non-human animal species. It is also recognised that urban biodiversity is vitally important to the quality of human life in cities.

As understanding of the complexity and importance of urban biodiversity has grown there has been increasing demand for the greening of the cities by means of biodiversity conservation and restoration projects. The success of urban greening plans depends on getting the ecology right, but environmental managers who focus on the ecological product of planning while neglecting the social process of planning are unlikely to see their urban greening plans in action. For this reason the course will consider both the principles of urban ecology and ways of involving individuals, community groups, businesses and local government in urban biodiversity management.

## GEST 2004

## Population in Policy and Planning

- 4 units - semester 2
- 3 contact hours per week, field work
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Restriction: 5581 Geographical Analysis of Population II
- Assessment: tutorial and workshops 50\%, essay 20\%, exam 30\% - total approx 6000 words

All social and economic planning must be for people. Understanding of how and why populations change is fundamental to planning in both the private and public sectors and this course provides students with the theoretical and empirical knowledge and the 'hands on' skills to investigate how and why populations change and the implications of these changes. The focus is especially upon the Australian context and the course examines how populations change at the community and national level. There is a concentration on the spatial dimensions of population change and the wider consequences of these changes. Students are introduced to the main theories which have been put forward to explain population change. There is also consideration of what is involved in the development of population policies at national and state levels.

## GEST 2005

## Living on the Edge: Humans and Landscape

-4 units - semester 1

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences/Engineering
- Restriction: Landscape Patterns and Processes
- Assessment: essay, poster, 2 tutorial papers - 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 2006

## Indigenous People and Environmental Management

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Restriction: Indigenous Geographies
- Assessment: essays $50 \%$, exam 40\%, tutorial participation 10\% total approx 6000 words

The voice and political influence of indigenous peoples have become an important ingredient in the political processes that surround the use of land and the management of natural resources in many parts of the world, including both developed and developing nations. This course aims to provide students with an introduction to the political, economic, cultural, and biophysical contours of the tensions between indigenous peoples and nation states over land and natural resources. With reference to case studies from Papua New Guinea, Canada, the United States, Australia and India, the course seeks to 1) demonstrate that indigenous status is not uncomplicated; 2) reveal that disputes are often prompted by competition, conflicts or contradictions in resource claims between 'national' and 'indigenous' interests; 3) examine the outcomes and implications of these disputes; and 4) examine possible ways to accommodate indigenous perspectives and claims in the allocation and management of land and natural resources.

## GEST 2019

## Environment and Media: Communicating Change

- 4 units - semester 2
- 4 contact hours per week, 2 days fieldwork
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Assessment: 2500 words major essay $40 \%, 3$ field exercises totalling 2500 words $40 \%, 1000$ word minor report $20 \%$

This course prepares students to work with a variety of media to inform the public about the environment and about environmental issues. The course provides an introduction to the theory and practice of Environmental Communication, with a primary focus on environmental writing, particularly writing about the environment and environmental issues from a factual (natural sciences) perspective. The audio-visual and virtual dimensions of Environmental Communication will also be examined through workshops on environmental soundscapes, films, websites and exhibits. Fieldwork will give students practical experience in the use of basic techniques of environmental observation and description. In considering the applications of Environmental Communication, the course will examine the professional problems encountered by environmental communicators who attempt to advocate for the environment while providing factual accounts of newsworthy environmental issues for dissemination by the mass media. The course will also consider the role of Environmental Communication as a strategic tool for attitudinal and behavioural change through community education. In this context, the course will review the design features of an effective environmental communication strategy to promote community awareness of environmental sustainability principles.

## GEST 2020

## Urban Futures: Environmental and Social Issues

- 4 units - semester 1
- 4 contact hours per week, field work
- Prerequisite: 6 units Level I Humanities/Social Sciences/Sciences
- Assessment: essays/reports 60\%, tutorial presentations/ exercises $30 \%$, tutorial participation $10 \%$ - 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 socioeconomic '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 $60 \%$, exam $30 \%$, class participation $10 \%$ total approx. 6000 words

This course will examine the problem of increasing resource scarcity as an allocative and distributional problem. The course will use a number of environmental resources, such as water, to show how processes of allocation and distribution are crucial to understanding scarcity, other environmental problems (such as degradation) and issues of inequality or social justice. Environmental issues and problems, in other words, can be understood as part of systems of economic production and allocation. There is now widespread use of economic instruments as a means of changing how we use environmental resources such as water to overcome problems of scarcity and degradation. The course will therefore also critically examine the use of economic instruments to improve patterns of resource allocation and consider the main instruments used, as well as their advantages and disadvantages.

## GEST 2022

## Introductory Spatial Information Systems

- 4 units - semester 1
- 4 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assumed Knowledge: intermediate computer skills
- Assessment: practical exercises/reports $50 \%$, tutorial $10 \%$, exam 40\% - total approx. 6000 words
This course provides an introduction to the theory behind and application of a variety of spatial information systems such as geographic information systems, remote sensing, and geographic positioning systems. The course will explain what spatial information systems are and how they are used, and will discuss some of the basic concepts behind the input, storage, maintenance, manipulation, analysis, modelling and communication of spatial information. Fundamental concepts such as scale, reference data, projections and coordinate systems will be discussed along with just how we model reality within a computer using the vector and raster data models. The lectures will cover some basic spatial data visualisation and analysis techniques such as map overlay. Importantly, the focus of this course will be the application of spatial information systems to solving real world problems in many diverse areas including social, urban and the environment. The practical sessions will implement some basic spatial analytical techniques in some of the above areas of application using spatial information systems.


## Level III

## GEST 3001

## Managing Coastal Environments

- 6 units - semester 2
- 3 contact hours per week, fieldwork
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Assessment: tutorial participation 10\%, tutorial presentations/ exercises 30\%, essays/reports 60\% - total approx. 9000 words

This course examines selected strategies for managing coastal environments around the world, although the main focus is the Australian coast. Where appropriate, local examples are used in conjunction with local coastal fieldwork. The course provides an overview of various coastal processes as a background to an understanding of coastal management issues. A major focus of the course is on recent coastal management initiatives in Australia by both the Commonwealth Government and the State Governments.

## GEST 3002

## Environmental Management

- 6 units - semester 2
- 4 contact hours per week, fieldwork
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Assessment: tutorial participation, tutorial presentations/exercises, essays/reports 60\%, exam 40\% - total approx. 9000 words

The aim of this course is to suggest how our global physical and biological resources may be managed on a more sustainable basis. This is achieved by careful evaluation of both the beneficial and adverse effects of various forms of human interaction with local, regional and global environmental systems. The topics to be considered will include deforestation, biodiversity and global carbon storage; land degradation and desertification; salinisation and integrated catchment management; soil, water, and air pollution; plant and animal extinctions; global warming and climatic change; management of toxic wastes; ozone depletion; disease; international agencies and environmental management in Australia. Throughout the course particular attention will be given to methods of monitoring the status of various environmental systems.

## GEST 3003

## Urban Biodiversity Management

- 6 units - semester 1
- 5 contact hours per week, 4 days field work
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Assessment: workshop exercises 40\%, field trip reports 30\%, field project report $30 \%$ - total approx. 9000 words

The focus of this course is the management of wildlife and wildlife habitats in cities. Although cities are dominated by humanconstructions intended to provide habitat for the human species, it is now recognised that urban areas form an environmental continuum from the semi-natural to the mainly artificial and that this environmental continuum provides habitat for a wide variety of plant and non-human animal species. It has also been recognised that urban biodiversity is vitally important to the quality of human life in cities.

As understanding of the complexity and importance of urban biodiversity has grown there has been increasing demand for the greening of the cities by means of biodiversity conservation and restoration projects. The success of urban greening plans depends on getting the ecology right, but environmental managers who focus on the ecological product of planning while neglecting the social process of planning are unlikely to see their urban greening plans in action. For this reason the course will consider both the principles of urban ecology and ways of involving individuals, community groups, businesses and local government in urban biodiversity management.

## GEST 3004

## Population in Policy and Planning

- 6 units - semester 2
- 3 contact hours per week, field work.
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Restriction: Geographical Analysis of Population II
- Assessment: Tutorial, workshops 50\%, essays 20\%, exam 30\% total approx. 9000 words

All social and economic planning must be for people. Understanding of how and why populations change is fundamental to planning in both the private and public sectors and this course provides students with the theoretical and empirical knowledge and the 'hands on' skills to investigate how and why populations change and the implications of these changes. The focus is especially upon the Australian context and the course examines how populations change at the community and national level. There is a concentration on the spatial dimensions of population change and the wider consequences of these changes. Students are introduced to the main theories which have been put forward to explain population change. There is also consideration of what is involved in the development of population policies at national and state levels.

## GEST 3005

## Living on the Edge: Humans and Landscape

- 6 units - semester 1
- 3 contact hours per week, field work
- Prerequisite: 8 units Level II Humanities/Social Sciences/ Sciences/Engineering
- Restriction: Landscape Patterns and Processes
- Assessment: essay, poster, 2 tutorial papers, 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 3006

## Indigenous People and Environmental Management

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Restriction: Indigenous Geographies
- Assessment: essays 50\%, exam 40\%, tutorial participation 10\% total approx 9000 words

The voice and political influence of indigenous peoples have become an important ingredient in the political processes that surround the use of land and the management of natural resources in many parts of the world, including both developed and developing nations. This course aims to provide students with an introduction to the political, economic, cultural, and biophysical contours of the tensions between indigenous peoples and nation states over land and natural resources. With reference to case studies from Papua New Guinea, Canada, the United States, Australia and India, the course seeks to 1) demonstrate that indigenous status is not uncomplicated; 2) reveal that disputes are often prompted by competition, conflicts or contradictions in resource claims between 'national' and 'indigenous' interests; 3) examine the outcomes and implications of these disputes; and 4) examine possible ways to accommodate indigenous perspectives and claims in the allocation and management of land and natural resources.

## GEST 3019

## Environment and Media: Communicating Change

- 6 units - semester 2
- 4 contact hours per week, 5 days field work
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Assessment: major essay 3000 words $35 \%$, 3 field exercises total 3000 words, $35 \%, 3$ minor reports total 3000 words $30 \%$

This course prepares students to work with a variety of media to inform the public about the environment and about environmental issues. The course provides an introduction to the theory and practice of Environmental Communication, with a primary focus on environmental writing, particularly writing about the environment and environmental issues from a factual (natural sciences) perspective. The audio-visual and virtual dimensions of Environmental Communication will also be examined through workshops on environmental soundscapes, films, websites and exhibits. Fieldwork will give students practical experience in the use of basic techniques of environmental observation and description. In considering the applications of Environmental Communication, the course will examine the professional problems encountered by environmental communicators who attempt to advocate for the environment while providing factual accounts of newsworthy environmental issues for dissemination by the mass media. The course will also consider the role of Environmental Communication as a strategic tool for attitudinal and behavioural change through community education. In this context, the course will review the design features of an effective environmental communication strategy to promote community awareness of environmental sustainability principles.

## GEST 3020

## Urban Futures: Environmental and Social Issues

- 6 units - semester 1
- 4 contact hours per week, field work
- Prerequisite: 8 units Level II Humanities/Social Sciences/Sciences
- Assessment: essays/reports 60\%, tutorial presentations/ exercises $30 \%$, tutorial participation $10 \%$ - 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 socioeconomic '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 60\%, exam 30\%, class participation 10\% total approx. 9000 words

This course will examine the problem of increasing resource scarcity as an allocative and distributional problem. The course will use a number of environmental resources, such as water, to show how processes of allocation and distribution are crucial to understanding scarcity, other environmental problems (such as degradation) and issues of inequality or social justice. Environmental issues and problems, in other words, can be understood as part of systems of economic production and allocation. There is now widespread use of economic instruments as a means of changing how we use environmental resources such as water to overcome problems of scarcity and degradation. The course will therefore also critically examine the use of economic instruments to improve patterns of resource allocation and consider the main instruments used, as well as their advantages and disadvantages.

## GEST 3022

## Introductory Spatial Information Systems

- 6 units - semester 1
- 4 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assumed Knowledge: intermediate computer skills
- Assessment: practical exercises/reports 50\%, tutorial 10\%, exam 40\% - total approx. 9000 words

This course provides an introduction to the theory behind and application of a variety of spatial information systems such as geographic information systems, remote sensing, , and geographic positioning systems. The course will explain what spatial information systems are and what they are used for, and will discuss some of the basic concepts behind the input, storage, maintenance, manipulation, analysis, modelling and communication of spatial information. Fundamental concepts such as scale, reference data, projections and coordinate systems will be discussed along with just how we model reality within a computer using the vector and raster data models. The lectures will cover some basic spatial data visualisation and analysis techniques such as map overlay. Importantly, the focus of this course will be the application of spatial information systems to solving real world problems in many diverse areas including social, urban and the environment. The practical sessions will implement some basic spatial analytical techniques in some of the above areas of application using spatial information systems.

## 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, 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.

## GEST 3101

## Advanced Spatial Analysis

- 6 units - semester 2
- 4 contact hours per week
- Prerequisite: GISC 2010/3010 Introductory Spatial Information Systems, 4 units Level II Humanities/Social Sciences
- Assumed Knowledge: intermediate computer skills
- Assessment: practical exercises/reports 50\%, tutorial 10\%, exam 40\% - total approx. 9000 words

This course builds upon and consolidates the work from GISC 2010/3010 and broadens considerably the theoretical basis and practical implementation of these systems. The lectures introduce different data models used in the analysis of spatial information such as rasters and surfaces, geometric networks, topological editing, data acquisition and metadata, raster analysis and modelbuilding with both social and environmental examples. Practical sessions implement these concepts with real applications in ArcGIS. Practical sessions will involve data management and analysis in a modern GIS environment, and topics such as data management and utilisation, topological editing, network analysis, raster data management, analysis and modelling.

## Honours

## ENVT 4401A/B

## Honours Environmental Studies

- 24 units - full year
- Eligibility: B.Environmental Studies (Honours) students only
- Pre-Requisite(s): Bachelor of Environmental Studies or equivalent
- Assessment: 15000-20000 word dissertation; essays/project work for each elective topic totalling 7000-9000 words per topic

Students wishing to take Honours Environmental Studies should consult Honours Coordinator prior to commencing Level II to ensure appropriate course choices are made in preparation for Honours.

The course consists of two parts - the first, equivalent to $50 \%$ of the course, is a compulsory workshop on research methodology leading to submission of a dissertation. The second part consists of two coursework topics, each equivalent to $25 \%$ of the course each studied during a single-semester of lecture/seminars and tutorials/ practicals. Details of the Honours coursework topics available each year are given in the Environmental Studies Honours Handbook.

In some circumstances Honours Environmental Studies can be studied part-time over two years or can be combined with Honours in another discipline.

## GEST 4401A/B

## Honours Geographical \& Environmental Studies

- 24 units - full year
- Prerequisite: UG degree with credit average in courses contributing to major in Geography, Environmental Studies or equivalent approved by Head of Discipline
- Assessment: 15000-20000 word dissertation; essays/project work for each elective totalling 7000-9000 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 hours 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 hours practical work per week, field work
- Eligibility: only available for B.Sc (Ag.Sc), B.Sc (NR.Mgt.), B.Sc (Viti.) students
- 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 obtain a 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, GEOLOGY 1200 Earth's Environment
- 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: GEOLOGY 1100 Earth's Interior I or GEOLOGY 1200 Earth's Environment I

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 palaeonyology is taught using key South Australian examples.

## GEOLOGY 2008

## Surficial Geology 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

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 mid-year 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 equiv
- Assumed Knowledge: GEOLOGY 1100 Earth's Interior, GEOLOGY 1200 Earth's Environment
- 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 solid-earth, 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 (S)

- 3 units - semester 2
- 2 lectures, 3 hours practical work, 1 tutorial per week
- Prerequisite: 16 units of Level II science 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 'handson' 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 1100 Earth's Interior, GEOLOGY 1200 Earth's Environment, GEOLOGY 2000 Mineralogy \& Petrology II or GEOLOGY 2006 Igneous and Metamorphic Geology, GEOLOGY 2001 Structural \& Field Geology II or 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 fourdimensional 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

## Surficial Geology III

- 3 units - semester 2
- 2 Lectures, 4 hour practical, 1 tutorial per week, 2 days field work
- Assumed Knowledge: GEOLOGY 2008 Surficial Geology II
- Restriction: GEOLOGY 3009 Environmental Geology III, GEOLOGY 3011 Environmental Geology IIN

This course covers advanced aspects geological processes in nearsurface geological environments and the methods used to quantify these processes in time and space. The evolution of soil and regolith are treated in a context of landscape evolution and climatic variation
on local, regional and global scales. Thus the course will draw on the basic principles of sedimentation, erosion and weathering on the earth's surface. Geo-microbiological principles are introduced as an integrative part of the soil/regolith evolution process.

Environmental issues such as contamination resulting from industrial activity, sea level changes and coastal erosion and agriculture and soil degradation will be discussed in the frame of their scientific background, their social and economic relevance on local, national and global scale. Practical work includes soil classification methods, quantitative regolith geochemistry, coastal erosion in urban planning and an introduction into the evaluation of contamination from mining wastes. The course will further include three days of field visits to sites of integrated field work and site inspection in the vicinity of Adelaide

## GEOLOGY 3015

## Surficial Geology III Field Program

- 3 units - semester 2
- 2 hours lectures/tutorials, 4 hours practicals per week/9 weeks, 6 days in field - soil \& regolith survey
- Assumed Knowledge: GEOLOGY 2008 Surficial Geology II

This course will develop skills in pedological and regolith survey. Students will gain an understanding of soil classification systems and methods of describing and evaluating the potential of soils and weathered materials for agricultural and engineering use by undertaking a field survey. 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. In the field and in the laboratory, students will learn how to measure a range of other physical, chemical and mineralogical properties of soils, surficial sediments 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 long-term thermaland 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: GEOLOGY 1100 Earth's Interior, GEOLOGY 1200 Earth's Environment, 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 1100 Earth's Interior, GEOLOGY 1200 Earth's Environment, GEOLOGY 2000 Mineralogy \& Petrology II or GEOLOGY 2006 Igneous and Metamorphic Geology II, GEOLOGY 2001 Structural \& Field Geology II or 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 fourdimensional 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.

## Level IV

## GEOLOGY 4007A/B

## Level IV Geological Study Tour

- 3 units - semester 1
- 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.

## Honours

## GEOLOGY 4000A/B

## Honours Geology

- 24 units - full year
- Prerequisite: Pass minimum 2 courses at level acceptable to Head or nominee, pass Geology III mapping camp
- 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, 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 4001A/B

## Honours Geophysics

- 24 units - full year
- Prerequisite: passes satisfactory to Head of Discipline in 3 Level III Geophysics courses \& at least 1 other Level III course offered by Applied Maths or Physics \& Mathematical Physics

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 4002A/B

## 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 4003A/B

## Honours Bachelor of Environmental Science (Geology)

- 12 units - full year
- Prerequisite: credit or higher in at least 2 Level III courses approved by Head of Discipline, Geology \& Geophysics
- Assessment: research proposal, literature review, seminars, thesis $60 \%$, average of 4 specified Level III courses $40 \%$
- Requirement: modest research project of student's choosing (on topic acceptable to Discipline) normally taken at same time as coursework (4 Level III courses - 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).

## GEOPHYS 4001A/B

## Honours Geophysics

- 24 units - full year
- Prerequisite: passes satisfactory to Head of Geology \& Geophysics in Earth's Structure, Geophysics \& Geostatistics III, Geophysics IIIS, at least one other Level III courses offered by Discipline, or Applied Maths or Physics \& Mathematical Physics

Students with different 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 4000A/B

## 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 (Pass Div 1) or equivalent
- 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 equivalent
- 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 (formerly German Studies I Part 1) (Pass Div 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 IA: 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 lectures and language classes with German Studies I, but will be required to do some additional work appropriate to their level.

## 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 (formerly German Studies IIA: Language and Culture Part 1) (Pass Div 1) or equivalent
- 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 lectures and language classes with German

Studies I, but will be required to do some additional work appropriate to their level.

## GERM 2005

## German in Germany

- 4 units - summer semester
- Jan - Feb 2006 at Stuttgart Winter University
- Prerequisite: 24 units at Level I or equivalent
- 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 Germanspeaking 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 I Part 2 (Pass Div 1) or German Studies IA: Beginners' German Part 2 (Pass Div 1); Language: Sem1-6 units Level 1 Humanities/Social Sciences; Sem 2 - Language Topic (semester 1)
- Restriction: Culture: consult the Discipline; Language: not available to students who have completed Level 1 German
- Assessment: Culture: as specified by the Discipline of German Studies; Language: as for German Studies IA or German Studies I 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 of German Studies. 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 I Part 2 (Pass Div 1) or equivalent
- 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 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 (formerly German Studies II: Language \& Culture) (Pass Div 1) or equivalent
- 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 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 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 IIA: Language \& Culture Part 2 or equivalent
- 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 IIA. 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 Part 1 or equivalent
- 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 Part 1. 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 - February 2006 at Stuttgart Winter University
- Prerequisite: Pass 1 GERM 2003 or GERM 2012 or equivalent
- 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 Germanspeaking 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 II 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 II Part 2 or German Studies IIIA Part 2 or German Studies IIB Part 1 or German Studies IIB Part 2 or equivalent; 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 of German Studies. 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 II: Language and Culture Part 2 or equivalent
- 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 (formerly German Studies III: Language and Culture Part 1) or equivalent
- 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 4401A/B

## Honours German Studies

- 24 units - full year
- Prerequisite: UG degree, credit average in courses contributing to major in German Studies or equivalent 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
- Restriction: HIST 1105A/B Europe, Empire and the World 1450-1956
- 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
- Restriction: HIST 1105A/B Europe, Empire and the World 1450-1956
- Assessment: 2500 word essay $40 \%, 1200$ word seminar paper $25 \%$, quizzes $10 \%$ and 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 Sciences
- 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 2004

## Australia and the World in the Twentieth Century

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Twentieth Century Australia: Home and Away
- Assessment: 1000-1200 word paper, 3500 word research essay, 2 hour exam with pre-circulated questions

This course puts Australian history in an international and comparative context. It is designed to give students the opportunity to reflect on how perceptions of 'Australia' and 'Australian' have changed over time, and to explore the local and international influences that have shaped and reflected Australian identities in the twentieth century. We will test the assumption that the twentieth century has been marked by increasing globalisation of cultural, economic and political life through Australian case studies that examine our interactions with other parts of the world, particularly the United States and Asia. Key themes of visions of utopia, of the role of regional difference, of religious belief and of the impact of global culture will provide foundations for exploring Australia's place in a changing world.

## HIST 2009

## Europe at War 1792-1919

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: essays \& optional exam

In this course, we will study major military conflicts from the French Revolution to the Great War. Our aim will be not only to understand great battles, but also to place battles and wars in their broader sociopolitical, technological, and cultural contexts. We will seek to understand how wars have changed in response to changes in society, culture, and technology; we will also look at the ways in which wars have themselves produced change. In addition, we will look at changes in the norms of war: what is 'legitimate' or 'acceptable' in warfare; who fights (and when); and what constitutes victory and defeat. There will be a significant amount of reading for this course.

## HIST 2019

The Origins of Modern America

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: short paper 25\%, 2500 word major essay 45\%, exam 30\%

This course examines the American experience from the colonial period to the outbreak of the Civil War. It considers the role of major events such as the war of independence, the formation of the United States, the assertion of American predominance in its region, and western expansion in the development of American civilisation. It pays particular attention to the dispossession of native Americans and the growth of slavery, and asks why the forces that spread a single power across a whole continent, and enabled America to become a regional and global power, could not prevent the catastrophe of civil war.

## HIST 2021

## Modern France: From Revolution to Resistance

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: essays, seminar attendance and participation

This course addresses key themes in the history of modern Europe with the primary focus on France from the Revolution of 1848 to the end of World War II. For the period 1848-1918, lectures and seminars will cover a range of topics including the revolution and
the development of republicanism; music and art; nationalism; anti-Semitism; French feminism; and socialism. For the later period special emphasis will be placed on World War I and its impact; the social history of the interwar years; and World War II and French responses to German occupation.

## HIST 2022

## Modern Indonesia: War, Islam and Authority

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: The Making of Modern Indonesia: From Bali to Timor
- Assessment: essays or exam

Current developments in Indonesia have dominated Australian media coverage of Asia during the last few years. Timor, the fall of Suharto, the crisis in Aceh, democratisation and the potential radicalisation of Islam - all have drawn attention to the need to understand the recent history of our nearest neighbour to the north. This course encourages students to range over political, social and economic events in Indonesia's recent past, from feminism and its relation to the growth of Indonesian nationalism, to the fall of the New Order regime of President Suharto in 1998. It will examine the late-era history of Dutch colonialism in what was then called The Netherlands Indies, the water-shed decade of the 1940s when war and revolution shattered the colonial regime, and the intertwined history of Indonesia's first President, Sukarno, and the Communist Party, whose destruction by the army in 1966 at the height of the Cold War in Asia paved the way for Sukarno's removal from power and the rise of Suharto.

## HIST 2031

## Ethnic Cleansing and Genocide in Modern Europe

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 3000 word essay 50\%, seminar participation 20\%, final exam 30\%

Why do people of different ethnic backgrounds live as a more-orless united community for long periods of time only to embark upon internecine warfare in which one segment of the community strives to rid itself of another segment of that society? The analysis of this perplexing and important question forms the underlying motivation for this course. Students will analyse and discuss (through tutorials) six case studies (e.g. the Armenian genocide, the man-made famine in Ukraine, the genocide of the mentally ill and retarded in pre-War Germany, the Holocaust, the displacement of the Volksdeutsch after World War II, the deportation of entire ethnic populations in the immediate post war era in the USSR and
the 1990s Balkan tragedies). Each student will research one of these case studies as he/she attempts to discover and dissect the common historical, political and sociological threads that unite these tragedies. This exercise will help students come to an understanding of the dynamics which lead to these outbursts of inhumanity, which may very well strike again in Europe, as well as in other parts of the world in the not too distant future.

## HIST 2041

## Aboriginal Peoples and the Colonial World

-4 units - semester 1

- 3 contact hours per week or equivalent
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Settler Societies in a Global Context II/III
- Assessment: essays, tutorials

This course offers a comparative study of the relations between indigenous people and Anglo-European settlers in societies linked by their colonial origins: Australia, Canada, the United States and New Zealand. It considers European ideas about race, land tenure and civilisation that accompanied the spread of settler colonialism from the seventeenth century. The course also explores how Aboriginal peoples responded to the coming of Europeans to their lands. Issues to be covered include: the bases for cooperation between indigenous peoples and settlers, the causes of conflict between them, frontier violence, schemes for 'Christianisation and Civilisation', indigenous resistance, and the basis of citizenship in settler societies. A comparative approach identifies some of the common threads that bind former colonies, as well distinguishing the features that make each society unique.

## HIST 2044

## Slavery and Emancipation in the Atlantic World

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- 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 labor, 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 Sciences
- Assessment: TBA

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 long-standing 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 Sciences
- 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 3004

## Australia and the World in the Twentieth Century

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Twentieth Century Australia: Home and Away
- Assessment: 1500 word paper, 5000 word research paper, 2 hour exam with pre-circulated questions

This course puts Australian history in an international and comparative context. It is designed to give students the opportunity to reflect on how perceptions of 'Australia' and 'Australian' have changed over time, and to explore the local and international influences that have shaped and reflected Australian identities in the twentieth century. We will test the assumption that the twentieth century has been marked by increasing globalisation of cultural, economic and political life through Australian case studies that examine our interactions with other parts of the world, particularly the United States and Asia. Key themes of visions of utopia, of the role of regional difference, of religious belief and of the impact of global culture will provide foundations for exploring Australia's place in a changing world.

## HIST 3009

## Europe at War 1792-1919

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: essays, optional exam

In this course, we will study major military conflicts from the French Revolution to the Great War. Our aim will be not only to understand great battles, but also to place battles and wars in their broader sociopolitical, technological, and cultural contexts. We will seek to understand how wars have changed in response to changes in society, culture, and technology; we will also look at the ways in which wars have themselves produced change. In addition, we will look at changes in the norms of war: what is 'legitimate' or 'acceptable' in warfare; who fights (and when); and what constitutes victory and defeat. There will be a significant amount of reading for this course.

## HIST 3019

## The Origins of Modern America

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: short paper $25 \%, 3500$ word essay $45 \%$, exam 30\%

This course examines the American experience from the colonial period to the outbreak of the Civil War. It considers the role of major events such as the war of independence, the formation of the United States, the assertion of American predominance in its region, and western expansion in the development of American civilisation. It pays particular attention to the dispossession of native Americans and the growth of slavery, and asks why the forces that spread a single power across a whole continent, and enabled America to become a regional and global power, could not prevent the catastrophe of civil war.

## HIST 3021

## Modern France: From Revolution to Resistance

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: essays, seminar, attendance, participation

This course addresses key themes in the history of modern Europe with the primary focus on France from the Revolution of 1848 to the end of World War II. For the period 1848-1918, lectures and seminars will cover a range of topics including the revolution and the development of republicanism; music and art; nationalism; anti-Semitism; French feminism; and socialism. For the later period special emphasis will be placed on World War I and its impact; the social history of the interwar years; and World War II and French responses to German occupation.

## HIST 3022

## Modern Indonesia: War, Islam and Authority

- 6 units - semester 2
- 3 contact hours per week or equivalent
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: The Making of Modern Indonesia: From Bali to Timor
- Assessment: essays or exam

Current developments in Indonesia have dominated Australian media coverage of Asia during the last few years. Timor, the fall of Suharto, the crisis in Aceh, democratisation and the potential radicalisation of Islam - all have drawn attention to the need to
understand the recent history of our nearest neighbour to the north.

This course encourages students to range over political, social and economic events in Indonesia's recent past, from feminism and its relation to the growth of Indonesian nationalism to the fall of the New Order regime of President Suharto in 1998. It will examine the late-era history of Dutch colonialism in what was then called The Netherlands Indies, the water-shed decade of the 1940s when war and revolution shattered the colonial regime, and the intertwined history of Indonesia's first President, Sukarno, and the Communist Party, whose destruction by the army in 1966 at the height of the Cold War in Asia paved the way for Sukarno's removal from power and the rise of Suharto.

## HIST 3031

## Ethnic Cleansing and Genocide in Modern Europe

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 1500 word essay $20 \%, 3500$ word essay $40 \%$, seminar participation 20\%, final exam 20\%

Why do people of different ethnic backgrounds live as a more-orless united community for long periods of time only to embark upon internecine warfare in which one segment of the community strives to rid itself of another segment of that society? The analysis of this perplexing and important question forms the underlying motivation for this course. Students will analyse and discuss (through tutorials) six case studies (e.g. the Armenian genocide, the man-made famine in Ukraine, the genocide of the mentally ill and retarded in pre-War Germany, the Holocaust, the displacement of the Volksdeutsch after World War II, the deportation of entire ethnic populations in the immediate post war era in the USSR and the 1990s Balkan tragedies). Each student will research one of these case studies as he/she attempts to discover and dissect the common historical, political and sociological threads that unite these tragedies. This exercise will help students come to an understanding of the dynamics which lead to these outbursts of inhumanity, which may very well strike again in Europe, as well as in other parts of the world in the not too distant future.

## HIST 3041

## Aboriginal Peoples and the Colonial World

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Settler Societies in a Global Context II/III
- Assessment: essays, tutorials

This course offers a comparative study of the relations between indigenous people and Anglo-European settlers in societies linked by their colonial origins: Australia, Canada, the United States and New Zealand. It considers European ideas about race, land tenure and civilisation that accompanied the spread of settler colonialism from the seventeenth century. The course also explores how Aboriginal peoples responded to the coming of Europeans to their lands. Issues to be covered include: the bases for cooperation between indigenous peoples and settlers, the causes of conflict between them, frontier violence, schemes for 'Christianisation and Civilisation', indigenous resistance, and the basis of citizenship in settler societies. A comparative approach identifies some of the common threads that bind former colonies, as well distinguishing the features that make each society unique.

## HIST 3044

## Slavery and Emancipation in the Atlantic World

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- 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 labor, 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 Sciences
- Assessment: to be advised

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 long-standing 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.

## Honours

## HIST 4401A/B

## Honours History

- 24 units - full year
- Prerequisite: UG degree, credit average in courses contributing to major in History or equivalent approved by Head of Discipline
- Assessment: coursework (2 topics) usually in semester 1, 15000 word thesis written in semester 2 (lists of special courses \& thesis supervisors is 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 1
- Up to 6 hours per week (incl. lectures, tutorial, practicals) practicals may be replaced by tour
- Assumed Knowledge: ENV BIOL 2006 Botany II or equivalent
- Assessment: exam 70\%; assignments 30\%

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
- Up to 6 hours per week (incl. lectures, tutorial, 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 4000AWT/BWT

Honours Wine and Horticulture (B.Ag.Sc.)

- 12 units - full year
- Prerequisite: credits in two Level III courses offered by the Discipline
- Corequisite: two 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 4003AWT/BWT

Honours Wine and Horticulture (B.Sc.)

- 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

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 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 4005AWT/BWT

Honours Horticultural Science (B.Ag.Sc.)

- 12 units - full year
- Prerequisite: credits in 2 level III courses offered by the Discipline
- Corequisite: 2 additional level III courses offered by the Discipline
- Assessment: coursework, essays or other assignments not part of research project $40 \%$, research project - research proposal, seminar, thesis and viva voce - $60 \%$

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 4006AWT/BWT

## Honours Wine and Horticulture (B.Ag.)

- 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 $40 \%$, research project - research proposal, seminar, thesis and viva voce - $60 \%$

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.

## Level II

## 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 task-based 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 on-line.

## INDO 2012

## Indonesian Intermediate SB

- 4 units - semester 2
- 4 contact hours per week
- Prerequisite: INDO 2011 Indonesian Intermediate SA (formerly known as Indonesian Intermediate A Part 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 on line.

## 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 on-line.

## INDO 3002

## Indonesian Advanced B

- 6 units - semester 2
-4 contact hours per week
- Prerequisite: INDO 3001 Indonesian Advanced A (formerly Indonesian Advanced Part 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, cultural and current affairs sources in both audio and visual format will be undertaken. Part of this course will be delivered on line.

## 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 audio-visual, 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 (formerly Indonesian Advanced A Part 1) or permission of the 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 - semester 1
- 2 lectures, 1 tutorial per week
- 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 COMPSCI 1004 Computer Literacy I or COMPSCI 1001 Computer Applications I or PUREMTH1002 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 per week
- Available for Non-Award Study
- Assumed Knowledge: fundamentals of the World Wide Web, information system development \& relational database management systems (eg Microsoft Access) as taught 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 per week
- Available for Non-Award Study
- Prerequisite: fundamentals of the World Wide Web, information system development, relational database design \& 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 2
- 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) $10 \%$

The study of the international system is one of perceptions and perspectives. Indeed, the very depiction of the world as a single international system is a facet of perspective. Should we instead be describing the international environment as one of at times competing, at times blending national systems, cultural 'networks' bound by a single global economy, with differing economic orders creating a faceted (and subtly differentiated) global economic structure? The course tests these forms of perception by examining holistic approaches to looking at the world ('global systems' and 'World Orders' etc.), and then turning to perspectives from a number of individual states and groups of states (focusing mainly on Europe, Asia and the Middle East). In so doing, the course tests our ability to generalise in looking at the world. The core lectures will provide a theoretical/historical backdrop, against which a number of specialist guest lecturers will depict the 'politics of seeing' in International Studies.

## Honours

## INST 4401A/B

## Honours International Studies

- 24 units - full year
- Prerequisite: UG degree, credit average in courses contributing to major in International Studies
- Assessment: $2 \times 5000$ word seminars $25 \%$ each, 15000 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 (formerly Italian I Part 1)
- Assessment: periodic written \& 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 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 oralaural 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 contemporary 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 (formerly Italian II Part 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 contemporary 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 II Part 2
- Assessment: periodic written $\mathscr{G}$ 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 on the Flinders University campus.

## ITAL 3002

## Italian IIIB

- 6 units - semester 2
- 4-5 hours per week
- Prerequisite: ITAL 3001 Italian IIIA (formerly Italian III Part 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 on the Flinders University campus.

## JAPANESE

## Level I

## JAPN 1001 <br> 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 (Pass Div 1) or equivalent
- 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 equivalent
- 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 1012

## Japanese ISB

- 3 units - semester 2
- 6 contact hours per week
- Available for Non-Award Study
- Prerequisite: JAPN 1011 Japanese ISA (Pass Div 1) or equivalent
- Assessment: continuous - small tests, 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 equivalent
- 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 (Pass Div 1) or equivalent
- 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 equivalent
- Assessment: continuous - small tests, 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 (Pass Div 1) or equiv
- Assessment: continuous - small tests, 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 equivalent
- Assessment: continuous - small tests, 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 (Pass Div 1) or equivalent
- Assessment: continuous - small tests, 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 per week
- Prerequisite: JAPN 2012 Japanese IISB (Pass Div 1) or equivalent
- Assessment: combination of tests/exams/essays

The course aims to develop the language skills at an intermediate level. The course introduces the skills necessary for conducting basic research using Japanese language sources.

## JAPN 3012

## Japanese IIISB

- 6 units - semester 2
- 4 contact hours per week
- Prerequisite: JAPN 3011 Japanese IIISA (Pass Div 1) or equiv
- Assessment: combination of tests/exams/essays

This course is a continuation and extension of the material introduced in JAPN 3011 Japanese IIISA

## Honours

## JAPN 4401A/B

## 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 an average of 6 hours studio; contact hours vary from week to week
- Eligibility: B.L.Arch., B.Arch., and 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 an average of 6 hours studio; contact hours vary from week to week
- Eligibility: B.L.Arch, B.Arch./B.L.Arch. students only
- 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 an 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, 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 cross-disciplinary 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 only
- Prerequisite: admission is selective, based on prior results guidelines available from School of Architecture, Landscape Architecture and Urban Design
-Assessment: 3000-5000 word final report
Students wishing to take this course on a part-time 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, ComputerAided Design, Criticism and Landscape Architecture, Cultural Design Topics, Dryland Management, Ecological Restoration, Environmental Planning, Environmental Psychology, EthnoEcological 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 an average of 6 hours studio; contact hours vary from week to week
- Eligibility: B.L.Arch., B.Arch./B.L.Arch. students only
- 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 semi-arid/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 only
- 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 only
- 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 (Pass Div 1) 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 of semester 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 (Pass Div. 1) or satisfactory achievement in SACE Stage 2 Latin or equiv.
- Assessment: tests throughout semester 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 (Pass Div. 1) or equivalent
- Assessment: 2 end of semester exams - preparation text and discussion text $50 \%$, ability in unseen translation $40 \%$, 2 grammar tests throughout 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 (Pass Div. 1) or equiv
- Restriction: not available to students who have reached a satisfactory level of achievement in SACE Stage 2 Latin or equiv
- Assessment: four progressive tests throughout the 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 (Pass Div 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 3003

## Latin IIIB

- 6 units - semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Prerequisite: LATN 3002 Latin III Part 1 (Pass Div 1) or equivalent
- 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 (Pass Div 1) or equivalent
- Assessment: tests throughout semester 40\%, 3 hour exam on translation, grammar and 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 (Pass Div 1) or equivalent
- 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 4401A/B

## Honours Latin

- 24 units - full year
- Prerequisite: UG degree, credit average courses contributing to a major in Latin or equiv.approved by Head of Classical Studies
- Assessment: 4 short, 2 long or 1 long \& 2 short texts, assessed by exam 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.

In some circumstances Honours Latin can be studied part-time 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
- 36 hours
- Prerequisite/Corequisite: LAW 1001 Introduction to Australian Law
- Assessment: to be advised

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/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 <br> Property Law

-4 units - semester 2

- 50 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; coownership); 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 2006
- Prerequisite/Corequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Tort, LAW 1003 Law of Contract
- Assumed Knowledge: basic knowledge of legal reasoning
- Restriction: not to be presented with 5600 Public International Law
- Assessment: 4000 word essay

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. The course to some extent builds on and re-enforces concepts learned in Legal Skills, and will introduce students to some of the principles they will encounter again in Australian Constitutional Law and Administrative Law.

## LAW 1007

## Advanced Torts

- 4 units - semester 2
- 1 hour lecture, 2 hour seminar per weeks
- 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 foundation 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 groups activities.

## Level II

## LAW 2001

## Legal Research and Writing

- 2 units - semester 2
- 25 hours
- Quota may apply for semester 1
- 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 such as contracts, trust deeds and wills. 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

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 judicial 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 s 51 and s 52 ; 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 non-corporate 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\%, $4 \times 800-1000$ 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 1 or 2
- 20 hours
- Prerequisite/Corequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- Assessment: 3500 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 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\%, 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 2006
- 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 - not offered 2006
- 20 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1002 Law of Torts, LAW 1003 Law of Contract
- 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 2006
- 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

- 2 units - not offered 2006
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 1006 Introduction to Public International Law or LAW 3066 Public International Law or LAW 3015 International Environmental Law or LAW 2085 Human Rights: International and National Perspectives
- Assessment: class participation, presentation, 5000 word essay

The course involves the examination of current international legal issues at an advanced level. Topics covered will be drawn from: 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 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 - winter semester
- winter break
- Available for Non-Award Study
- Quota may apply
- Prerequisite: not to be counted with 3021 Capital Gains Tax and the Taxation of Entities, 2011 Tax and the Revenue Concept

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 2006
- 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 $80 \%$, class assessment $20 \%$

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 - summer 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 dying and the legal definition of death.

## LAW 2022

## Consumer Protection \& Unfair Trading

- 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

A study of: the regulation of trading practices under national and state laws (particularly advertising), remedies for infringement of the standards for fair trading; small claims procedures, class actions; assistance for consumers, consumer credit.

## LAW 2023

Roman Law

- 4 units - not offered in 2006
- 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 2006
-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 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 - not offered 2006
- Prerequisite: Law 1004 Law of Crime
- Assessment: exam or research essay 75-80\%, class participation 20-25\% (to be advised)

Federal Criminal Law is now codified in the Commonwealth Criminal Code. The Code, which now consists of seven chapters, ranging in subject matter from theft to terrorism, is prefaced by a comprehensive codification of the general principles of criminal responsibility. The Code is not yet complete. Some significant areas of criminal liability - drug related offences are the most notable example - have yet to be brought within the formal structure of the Code. Since December 15, 2001, however, all Commonwealth criminal offences are subject to the Code provisions on the general principles of criminal liability. The course will provide an overview of federal criminal law, ranging from the general principles to federal sentencing law. Topics will be drawn from the following list:1. Chapter 2: General Principles of Criminal Responsibility, 2. Customs Act: Drug offences - The Code and the Constitution, 3. Chapter 7: Theft, Fraud and Bribery, 4. Chapter 10: Cybercrime, 5. Chapter 2: Federal jurisdiction, 6. The civil/criminal divide: Forfeiture and pecuniary penalties, 7. Federal sentencing law.

## LAW 2036

## Land Transactions

- 4 units - not offered 2006
- 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 2006
- 20 hours
- Prerequisite/ 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 - semester 1

- 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 2006

- 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 75\%, 1000 word assignment $25 \%$

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/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 post-colonial 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 - semester 1 or 2
- 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 cross-cultural 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 2006
- 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: International \& National Perspectives

- 4 units - semester 1
- 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 2006
- 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/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 2006
- 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 - not offered 2006
- 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 - semester 1
- 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 - semester 1
- 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

## Advanced Contract Law

- 2 units - not offered 2006
- 20 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 subject will concentrate on one or more of the following: Nature of contractual obligation. Theories of contract. Good faith. Unconscionability. Law of Contract compared with tort, with particular reference to privity of contract, damages. Discharge of Contract by performance. Breach of contract. Frustration. Contractual remedies: specific performance; injunction; action for an agreement sum; damages.

## 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/ 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 2006
- 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 2006
- 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 'junk' 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\%, $1 \times 2500$ 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 1
- 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 cross-examination of witnesses, closing statements and jury addresses.

## LAW 3010

Alternative Dispute Resolution

- 4 units - semester 1
- 40 hours
- Prerequisite/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
- Available for Non-Award Study
- Quota will apply
- Prerequisite/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 21 st 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 2006
- 40 hours
- Prerequisite/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 2006
- 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

## Equality and Anti-Discrimination Law

- 2 units - semester 2
- 20 hours
- Prerequisite: LAW 2003 Australian Constitutional Law
- 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 anti-discrimination 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 2006
- 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 50\%, part B - essay questions $50 \%-3000$ 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 - semester 1
- 2 hour research seminars \& presentations
- Available for Non-Award Study
- Quota may apply
- Prerequisite: LAW 2059 Intellectual Property Law
- Assessment: 5000 word essay $70 \%$, class presentation $20 \%$, class participation 10\%

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 2006
- 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 selfgovernment.

In the 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 2006
- 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 - not offered 2006
- 20 hours
- Prerequisite: 2011 Tax and the Revenue Concept
- 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 - semester 1
- 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

## Moot Court 4

- 4 units - summer semester
- 40 hours
- Eligibility: Law students selected by course coordinator/ team coach
- 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 - semester 2
- 36 hours
- Prerequisite: LAW 2003 Australian Constitutional Law
- Restriction: not to be counted with Equality \& Anti-Discrimination Law
- Assessment: to be advised

The course will cover aspects of Australian and international antidiscrimination law, (with reference to relevant UK, US, Canadian and international law). Analysis of the law will be placed in a broad context: justifications for anti-discrimination law and the principle of non-discrimination will be examined. The course will make clear the assumptions that underlie traditional thinking concerning antidiscrimination legislation, and expose these to critical scrutiny.

## LAW 3025

## Statutory Interpretation

- 4 units - semester 1
- 36 hours - winter intensive semester
- 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 - semester 1
- 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 - semester 1
- 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

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 2

- 40 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

The course will focus on the legal regulation of work relationships, both individual and collective, through an examination of the common law, statute, and international law. Topics include: a) the changing nature of work and law in the Australian and global context; b) the formation of work relationships: including the contract of employment, contract for services including an examination of non-standard work relations; c) industrial awards and conciliation and arbitration: including the nature of test cases and awards as part of the 'safety net', the roles of the Australian Industrial Relations Commission and the South Australian Industrial Relations Commission, the "public interest" in industrial regulation, the role of trade unions and the legal concept of "industrial dispute"; d) equality in work relations: including the intersection of anti-discrimination law and the law regulating work, equality and enterprise bargaining; e) the law governing the breakdown of work relationships and security of employment: including at common law and the statutory provisions relating to the termination of employment; f) bargaining under the statutory system: including enterprise and collective agreements, parties and the role of trade unions, individual agreements and Australian Workplace Agreements, and protections for disadvantaged groups of workers; and g ) freedom of association: including international law and freedom of association, individual and collective aspects of the statutory protection of freedom of association, strikes as part of the bargaining process, common law liability for strike action.

## LAW 3047

## Environmental Protection Law

- 4 units - not offered 2006
- 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 3049

## Comparative Corporate Law and Theory

- 2 units - not offered 2006
- 20 hours
- Prerequisite: LAW 2004 Corporate Law
- Assessment: to be advised

An examination and comparative analysis of corporations law in Australia, United States and Japan. The analysis will focus on key doctrinal concepts as well as statutory provisions regarding attributes of corporate personality; corporate governance; and institutional supervision of corporate behaviour.

## LAW 3060

## Comparative Corporate Rescue Law

- 2 units - not offered 2006
- 20 hours
- Assumed Knowledge: completion/concurrent study of LAW 2004 Corporate Law is advisable
- Assessment: 3500-5000 word research essay

The aim of the course is to identify the role of insolvency law regimes in the global corporate environment, with particular emphasis on formal and informal rehabilitation processes for corporations experiencing financial difficulties. The course will cover the following topics as they relate to corporate rescue systems operating in the major trading regions of the world: when is rehabilitation appropriate? access to the process; protection afforded to the company on entering into the process; formulating a rehabilitation plan; the role of an independent administrator in the process; the role of creditors, members, and company officers in the process; the role of the court; informal $v$ formal rehabilitation processes.

## LAW 3065

Land and Water Resources Law

- 4 units - not offered 2006
- 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: 5000 word essay

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 3069

## Corporate Governance

- 2 units - not offered 2006
- 24 hours
- Prerequisite: LAW 1001 Introduction to Australian Law
- Assumed Knowledge: LAW 2004 Corporate Law
- Assessment: to be advised

The complex of legal rules and constitutional provisions which regulate the internal affairs of public and proprietary companies; distinguishing between ownership and management; the personnel of corporate governance; the distribution of corporate powers between members and directors; proceedings of the board; membership and meetings; the duties and liabilities of directors and officers; directors' and officers' insurance; controlling shareholders' duties; the role of the corporate investor; shareholder remedies for violation of corporate powers.

## LAW 3071

## Conservation Law

- 4 units - not offered 2006
- 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
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1002 Law of Torts, LAW 1003 Law of Contract, completion of 54 units of LLB - 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 2006
- 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 2006
- 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.

## Level IV

## LAW 4144

## International Justice and the Rule of Law

- 4 units - not offered 2006
- 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 Iraq. 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.

## Honours

## LAW 3089A/B

## Honours Research and Writing

- 2 units - semester 1

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 3099A/B

## 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.

## 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, $2 \times 500$ 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, basic skills in data gathering and analysis and an understanding of the educational, political and social aspects of language. 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, $2 \times 500$ 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 2005

## Language and Environment

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: essay 50\%, practical assignment 30\%, tutorial presentation 20\%

This course examines both the central role of human languages in the perceptions of environmental matters (language of ecology) and the nature of the environment in which such languages can survive (ecology of language). Students will learn to apply available linguistic techniques and methods to the analysis of environmental discourse and will learn about the interdependencies between linguistic and cultural diversity. A wide range of primary English language documents will be analysed and contrasted with environmental discourse in languages other than English. Students will find out about the rapidly growing ecolinguistic literature published around the world. Topics for discussion include: Ecospeak, environmental metaphors, upgrading environmental terminology, cross-cultural discourse about environmental issues.

## LING 2006

## Language and Meaning

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- 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 - summer semester
- 2 week intensive course 9am - 4pm daily
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 3 practical assignments, take home (open book) exam, essay or equivalent 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 2009

## Australian Indigenous Languages

-4 units - semester 2

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social sciences
- Assessment: 4 practical tasks $10 \%$ each, 1500 word essay $25 \%$, 2 hour test $25 \%$, attendance and participation $10 \%$

The course will provide an introduction to Australia's Indigenous languages, with a particular focus on the Indigenous languages of South Australia. The course will be delivered in collaboration with Indigenous groups and will be a source of affirmation for Indigenous students. It will deal with linguistic and sociolinguistic aspects of traditional and modern Indigenous languages and will give students practical experience in their analysis.

## LING 2011

## Mass Communicative Discourses

-4 units - semester 2

- 3 contact hours per week
- Assessment: 2000-2500 word theoretical/analytical essay 45\%, shorter writing exercises to total of 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 2033

## Language, Communication and Technology

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 2 assignments including practical project

Technoliteracy has become essential for many workplaces, including business, industrial and educational contexts. The use of computers has developed new patterns of communication and interaction. This course is designed for students to develop skills in applications of information technology. The course begins with a practical introduction to the use of computers for communication. Students develop skills in the use of electronic environments for accessing, creating and negotiation management. The course covers the development of students' technical skills as well as the design of electronic environments for communication. Students explore the nature of technoliteracies. They are introduced to the design and building of websites. Students have the opportunity to collaborate and to develop projects with practical applications in industry.

## Level III

## LING 3005

## Language and Environment

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: essay $50 \%$, practical assignment $30 \%$, tutorial presentation 20\%

This course examines both the central role of human languages in the perceptions of environmental matters (language of ecology) and the nature of the environment in which such languages can survive (ecology of language). Students will learn to apply available linguistic techniques and methods to the analysis of environmental discourse and will learn about the interdependencies between linguistic and cultural diversity. A wide range of primary English language documents will be analysed and contrasted with environmental discourse in languages other than English. Students will find out about the rapidly growing ecolinguistic literature published around the world. Topics for discussion include: Ecospeak, environmental metaphors, upgrading environmental terminology, cross-cultural discourse about environmental issues.

## LING 3006

## Language and Meaning

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- 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 - summer semester
- 2 week intensive course 9am - 4pm daily
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 3 practical assignments, take home (open book) exam, essay or equivalent 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 3009

## Australian Indigenous Languages

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 4 practical tasks $10 \%$ each, 2500 word essay $25 \%$, 2 hour test $25 \%$, attendance and participation $10 \%$

The course will provide an introduction to Australia's Indigenous languages, with a particular focus on the Indigenous languages of South Australia. The course will be delivered in collaboration with Indigenous groups and will be a source of affirmation for Indigenous students. It will deal with linguistic and sociolinguistic aspects of traditional and modern Indigenous languages and will give students practical experience in their analysis.

## LING 3011

## Mass Communicative Discourses

- 6 units - semester 2
- 3 contact hours per week
- Assessment: 3000-3500 word theoretical/analytical essay 45\%, shorter writing exercises to a total of 1500 words $15 \%$, 30003500 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 3033

## Language, Communication and Technology

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2 assignments including a practical project

Technoliteracy has become essential for many workplaces, including business, industrial and educational contexts. The use of computers has developed new patterns of communication and interaction. This course is designed for students to develop skills in applications of information technology. The course begins with a practical introduction to the use of computers for communication. Students develop skills in the use of electronic environments for accessing, creating and negotiation management. The course covers the development of students' technical skills as well as the design of electronic environments for communication. Students explore the nature of technoliteracies. They are introduced to the design and building of websites. Students have the opportunity to collaborate and to develop projects with practical applications in industry.

## Honours

## LING 4401A/B

## 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 Professor of 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 parttime 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 per week
- Available for Non-Award Study
- Assumed Knowledge: one semester of university study
- Assessment: exam, assignments, tutorial participation \& contribution as determined at the 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 per week
- Available for Non-Award Study
- Assumed Knowledge: one semester of university study
- Restriction: not to be counted with Management Principles and Practice II
- 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 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, international strategic management, organisational behaviour, people management and ethical and socially responsible behaviour in multinational corporations. 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 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 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 preliminary 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.

## MARKETNG

## Level II

## MARKETNG 2009

## Marketing II

- 4 units - semester 1
- 2 lectures, 1 tutorial per week
- Available for Non-Award Study
- Prerequisite: successful completion of 1 semester of university study
- Restriction: not to be counted with Marketing Management II
- 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 per week
- Available for Non-Award Study
- Assumed Knowledge: MARKETNG 2009 Marketing II
- Restriction: not to be counted with Consumer Behaviour III
- 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 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 per week
- Available for Non-Award Study
- Prerequisite: MARKETNG 2009 Marketing II
- Assumed Knowledge: MARKETNG 2011 Consumer Behaviour II
- Assessment: group work on case studies, major project, midsemester, final exam

This course is designed to introduce you to modern marketing philosophies and practices associated with international marketing. The purpose is to provide the student with a practical overview of the international marketing process and its basis in both theory and application. In brief, international marketing is concerned with the planning and conducting of transactions across national borders to satisfy the objectives of individuals and organisations. In its many forms, it ranges from export-import trade to licensing, joint ventures, wholly-owned subsidiaries, turnkey operations and management contracts. This course will provide experience in formulating marketing strategy in a variety of international situations. It spotlights the special marketing problems posed by export markets and examines the special marketing management problems faced by multinational organisations. Principle issues include the importance of culture in international marketing, the economic, political and cultural environments affecting the international marketing process, global marketing strategy and research, and the four 'Ps' of international marketing.

## MARKETNG 3017

## Market Research and Project III

- 4 units - semester 2
- 2 lectures, 1 tutorial 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 Market Research \& Project II
- 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.

## MATHEMATICAL STUDIES

## 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 Mathematical 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 inbuilt 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 students in B.Ma.\& Comp.Sc.
- 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 Div I)
- Restriction: cannot be presented with MATHS 1011/1012 Mathematics IA/B, 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 Div I)
- 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 Mathematical 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 and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I) 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, 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 2
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I) or co-requisite MATHS 2004 Mathematics IIM
- Corequisite: MATHS 2004 Mathematics IIM
- Assumed Knowledge: concurrent/prior enrolment in APP MTH 2000 Differential Equations and Fourier Series, prior enrolment in APP MTH 2007 Differential Equations II
- Restriction: cannot be presented with APP MTH 2006 Methods in Applied Mathematics II
- Assessment: written, 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II
- Assessment: written, 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 nondimensionalisation 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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, 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 Div I); or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: written, 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.Sc.or B.Ma.\&Comp.Sc. students
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II
- Restriction: may not be presented together with STATS 2004, STATS 2001, APP MTH 2004, or APP MTH 2010
- Assessment: written, 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 Stat Methods (Civil)

- 3 units - semester 1
- 51 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)or corequisite: MATHS 2004 Mathematics IIM
- Restriction: may not be presented together with APP MTH 2007 or APP MTH 2000, STATS 2001 or APP MTH 2009
- Assessment: written, 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 Div I) and MATHS 1013 Mathematics IMA (Pass Div I)
- Restriction: cannot be counted with MATHS 1012 Mathematics IB. See Academic Program Rules for constraints on this course within B.Ma.\& Comp. Sc. and B.Comp.Sc. degrees
- 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: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 1014 Mathematics IMB (Pass Div I) or MATHS 1008 Mathematics for Information Technology I (Pass Div 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 inclusion-exclusion principle. Additional topics of special relevance to Computer Science and other mathematical sciences courses, including geometry for Computer Graphics and Computer Vision.

## 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Restriction: Cannot 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, I'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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Corequisite: MATHS 2004 Mathematics IIM
- Restriction: cannot be counted with Real Analysis II passed before 2002, except under special arrangement with the Head of School
- 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 - not offered in 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2007 Differential Equations II or APP MTH 2000 Differential Equations and Fourier Series, 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 computer-generated 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II; APP MTH 2002 Vector Analysis and 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 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 or MATHS 1014 (Pass Div I); at least one of: STATS 1000 (Pass Div I), ECON 1008 (Pass Div I), 9134
(Pass Div I), MATHS 1008 Pass Div I), STATS 2004 , APP MTH 2009, STATS 2001 or APP MTH 2010
- Assumed Knowledge: MATHS 3014 Mathematics 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. Multi-decrement tables and associated single-decrement, combined tables and monetary functions. Both practical and theoretical aspects of the above will be discussed.

## APP MTH 3004

## Mathematical Biology III

- 3 units - semester 2
- 36 hours lecture, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 21 st 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 - not offered in 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 - not offered in 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2007 Differential Equations II, APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2010 Differential Equations and 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, tutorials, 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series, APP MTH 2002 Vector Analysis and Complex Analysis, APP MTH 2009 Numerical Analysis and Probability and Statistics
- Assessment: written, 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 - semester 2
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 methodology, 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 (Pass Div I) or MATHS 1011 Mathematics IA
- Assumed Knowledge: Familiarity with excel spreadsheets; finance such as in FINANCE 1000 International Financial Institutions and Markets I
- Restriction: cannot be counted together with APP MTH 3012 Financial Modelling III
- Assessment: 20\% written, 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: familiarity with Excel spreadsheets
- Restriction: cannot be counted with APP MTH 3011 Financial Modelling Techniques III
- Assessment: $20 \%$ written, 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: some knowledge of linear programming as in APP MATH 2008 Operations Research II
- Assessment: written, 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2008 Operations Research II, familiarity with STATS 2002 Introduction to Mathematical Statistics or STATS 2004 Laplace Transforms and Probability and Statistics advantageous
- Restriction: may not be presented with APP MTH 3015 Stochastic Modelling for Telecommunications III
- Assessment: written assignments, 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

- 3 units - semester 1
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series
- Assessment: written, 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.

## MATHS 3014

## Mathematics of Finance III

- 2 units - semester 1
- 2 lectures per week, 1 hour tutorial every 3 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I) or COMP SCI 1009 Computer Science IB (Pass Div I)
- 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 Communication 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 HahnBanach theorems. Hilbert spaces, operators on Hilbert spaces, the Spectral theorem.

## PURE MTH 3003

Number Theory III

- 3 units - semester 1
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics 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 2006
- 2 lectures per week, 1 tutorial, 1 computer practical per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 3010

## Logic III

- 3 units - semester 2
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: 3 hour exam, small percentage may be allocated for 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.

## 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Mathematics 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 - not offered in 2006
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS
- 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.

## 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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, 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 low-speed, 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: Level II Applied Mathematics courses with an 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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 Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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: 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- 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; block-matrix 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 heavytailed 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 and 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.

## MATHS 4003

## Industry Practicum (Maths. \& Comp. Sc.)

- 2 units - semester 1 or 2
- Eligibility: students undertaking a 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 4011A/B

## Honours Applied Maths \& 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 4015A/B

## Honours Applied Mathematics (B.A. or B.Sc.)

- 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: 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 4017A/B

Honours Applied Mathematics \& Statistics

- 24 units - full year
- Available for Non-Award Study
- 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.

## MATHS 4000A/B

## Honours Mathematical Sciences

- 24 units - full year
- Prerequisite: At least 10 units from Level III Applied Maths, Pure Maths and Statistics courses at credit 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 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 4001A/B

## Honours Pure Mathematics \& Statistics

- 24 units - full year
- Prerequisite: credit standard, or better, in at least 8 units of Pure Mathematics III units, 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 4002A/B

## Honours Math Physics \& Pure Mathematics

- 24 units - full year

Please contact the School for further information

## PURE MTH 4003A/B

Honours Pure \& Applied Mathematics Part 1

- 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 4004A/B

## 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 4005A/B

## Honours Pure Mathematics

- 24 units - full year
- Assessment: 3 hour semester exams (unless other arrangements notified), project also contributes to the final result
- Prerequisites: (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 3017, PURE MTH 3002 or PURE MTH 3009

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 4998A/B

## Honours Philosophy \& Pure Mathematics

- 24 units - full year

Please contact the School for further information.

## MEDIA

## Level I

## MDIA 1002

## Media Engagements

- 3 units - semester 1
- 3 contact hours per week
- Eligibility: B.Media students only
- Assessment: tutorial presentation $20 \%, 2$ reading logs $30 \%$, attendance \& participation $20 \%$, final essay $30 \%$

This course takes a synoptic look at the workings of the various media and how we engage with them in the shaping of our daily activities. It takes a socio-historical perspective in analysing the development of each branch of the media and in critiquing their ideological impact in society. There is an attempt at understanding how we interact with each other through how we interact with the media. Students are exposed to debates on ideological formation and how our engagement with the media shapes our social, cultural, economic, political and rational beliefs. Some of the topics covered include the press, film and television, radio, telecommunication, magazines, advertising, public relations, music and audiences.

## 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 Media Engagements, ENGL 1105 Media Studies, 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 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. The course will cover both qualitative and quantitative methodologies of investigating visual as well as textual material including the Internet. Students will be exposed to debates on issues such as academic honesty, 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 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 Media Engagements, ENGL 1105 Media Studies and SOCI 1002 Image, Text and Representation
- Assessment: attendance \& professional conduct $10 \%, 3$ small projects $10 \%$ each, group project $60 \%$ (group mark $30 \%$, individual contribution evaluation 30\%)

Multimedia Production A is aimed at providing students with skills in the various aspects of multimedia design and application, ranging from creative application of visual composition, manipulation, colour scheme, design tools and their application, to computer graphics, with special focus on interactive digital media, web design, audiovisual postproduction such as CD, DVD and animation. Emphasis is placed on stimulating creativity in students rather than on total reliance on technology. The final project could be, but need not be limited to any of the following: web design, animation, soundscaping and/or special effects, webcasting, audio and/or video streaming or design portfolio.

## 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 Media Engagements, ENGL 1105 Media Studies and SOCI 1002 Image, Text and Representation
- Assessment: attendance and professional conduct 10\%, practical exercises $30 \%$, group project $60 \%$ (group mark $30 \%$, individual contribution evaluation 30\%)

This course will introduce students to the basic skills and knowledge required in video production. The course will be predominantly hands-on, with students working in small groups in multiple roles on a variety of exercises with digital video cameras, sound recording equipment, off-line 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. The course will also examine theories of screen production, genre, style, directing and narration with a focus on short works designed for television and video production.

## Level III

## MDIA 3205

## Multimedia Production B

- 6 units - semester 1
- 3 contact hours per week
- Eligibility: B Media students only
- Prerequisite: Multimedia Production A

Assessment: attendance, professional conduct 20\%, critical incident analyses exercise $20 \%$, group project $60 \%$ (group mark $30 \%$, individual contribution mark $30 \%$ ) or individual project $60 \%$ Multimedia Production $B$ is aimed at extending the skills acquired in Multimedia Production A. It provides students with advanced skills in the various aspects of multimedia design and application, ranging from creative application of visual composition, manipulation, colour scheme, design tools to computer graphics, with special focus on interactive digital media, web design, audiovisual post-production such as CD, DVD and animation. 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. The final project could be, but need not be limited to, any of the following: web design, animation, soundscaping and/or special effects, webscaping, audio and/or video streaming, a design portfolio.

## MDIA 3206

## Video Production B

- 6 units - semester 1
- 3 contact hours per week
- Eligibility: B.Media students only
- Prerequisite: Video Production A
- Assessment: attendance, professional conduct 20\%, critical incident analyses exercise, group project 60\% (group mark 30\%, individual contribution evaluation 30\%)

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 working in small groups will collaborate in the development and execution of a short video project. 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, problem-solving and critical reflection will be utilised as the key learning processes in 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, techno-transformation/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: 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.

## Honours

## MDIA 4401A/B

## 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 a limited number of 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 Medical School's Clinical Skills Laboratory.

## 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, epidemiology are developed.

## Level II

## MEDIC ST 2000

## Second Year MBBS Examination <br> 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 a limited number of lectures.

## MEDIC ST 2102AHO/BHO

## 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 through placement n a hospital one day per week.

## 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, 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 a limited number of lectures.

## MEDIC ST 3102A/B

## 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 by spending a full day each week in a general practice for part of the year with the remaining time in the clinical skills laboratory.

## MEDIC ST 3103A/B

## Medical Professional\&Personal Development III

- 6 units - full year
- Weekly tutorials, 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.

## OBGGYNAE 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, B.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.


## Level IV

## MEDIC ST 4000AHO/BHO

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 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 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 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 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 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 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 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 4009AHO/BHO

## Medical and Scientific Attachment 1

- 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 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.

## LEVEL V

## MEDIC ST 5000AHO/BHO

## 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 5007AHO/BHO

## 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 5008AHO/BHO

## 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 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 5010AHO/BHO

## 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 5013HO

## 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 Examination

- 0 units - semester 2
- $4 \times 4$ week placements, 16 wk afternoon seminar program, 1 week program in ENT; $4 \times 4$ placement
- Eligibility: MBBS students
- Assessment: to be advised
- The final year of the program for the MBBS involves:
(a) $2 \times 4$ 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; 16 week seminar program on Friday afternoons; 1 week program in ENT, Ophthalmology and Dermatology.
(b) Undertaking $4 \times 4$ 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: To be advised at the start of the year


## MEDIC ST 6002AHO/BHO

## Medicine Internship \& Common Program VI

- 3 units - full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- Assessment: to be advised at the start of year


## MEDIC ST 6003AHO/BHO

## Surgery Internship VI

- 3 units - full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- Assessment: to be advised at the 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: to be advised at the 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: to be advised at the start of year


## MEDIC ST 6006AHO/BHO

## Psychological Health VI

- 3 units - full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- Assessment: to be advised at the start of year


## MEDIC ST 6007AHO/BHO

## Medicine SCAP VI

- 3 units - full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- Assessment: to be advised at the start of year


## MEDIC ST 6008AHO/BHO

## Surgery SCAP VI

- 3 units - full year
- Eligibility: MBBS students only
- Prerequisite: Year 5 MBBS exam
- Assessment: to be advised at the start of year


## Honours

## ANAES\&IC 4000AHO/BHO

## Honours Anaesthesia and Intensive Care

- 24 units - full year
- Eligibility: B.Med.Sc. students. appropriately qualified B.HIth.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 4000AHO/BHO

## Honours Medicine

- 24 units - full year
- Eligibility: B.Med.Sc. students. appropriately qualified B.HIth.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.

## OB\&GYNAE 4000AHO/BHO

## Honours Obstetrics and Gynaecology

- 24 units - full year
- Eligibility: appropriately qualified B.Hlth.Sc, B.Med.Sc, B.Sc students or permission of Head of Department
- Assessment: to be 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 Department as early as possible. Potential projects are listed on the departmental web site.

## ORTETRAU 4000AHO/BHO

## Honours Orthopaedics and Trauma

- 24 units - full year
- Eligibility: B.Med.Sc. students. appropriately qualified B.HIth.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 4000AHO/BHO

## Honours Paediatrics

- 24 units - full year
- Eligibility: B.Med.Sc. students, appropriately qualified B.HIth.Sc. students, or permission of Head of Department
- Assessment: details available on the Department 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 department as early as possible

## 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 equivalents
- Restriction: MICRO 2004 Microbiology II or equivs
- 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.H.Sc 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 equivalents
- Restriction: MICRO 2000A 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 for 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, and BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equivs
- Assumed Knowledge: MICRO 2000A Microbiology and Immunology II or MICRO 2001A Microbiology and Immunology II (Biomedical Science) or MICRO 2002 Microbiology II (Biotechnology ) or MICRO 2004 Microbiology II or equivs
- Restriction: MICRO 2000B Microbiology \& Immunology II (Part II) or equivalent
- 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, antiviral drugs and viral diagnostics. Students enrolled in this course will attend one or more of Practicals $\mathrm{A}, \mathrm{B}$ 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 (Biomedical Science) 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 equivs
- Restriction: MICRO 2001A Microbiology and Immunology II (Biomedical Science) Part I or equivs
- 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 eukaryotic 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 Sc)

- 4 units - semester 2
- 3 lectures, 1 tutorial, 4 hours practical work per week
- Eligibility: BSc (Biomedical Science) 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
- Assumed Knowledge: MICRO 2101 Microbiology II (Biomedical Science) or equiv
- Restriction: MICRO 2001B Microbiology and Immunology II (Biomedical Science) or equivalent
- 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, BIOLOGY 1201 Biology I: Human Perspectives or BIOLOGY 1202 Biology I: Organisms, or equivs
- Assumed Knowledge: MICRO 2002 Microbiology II (Biotechnology) or MICRO 2004 Microbiology II or equiv
- 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 (Biotechnology) or MICRO 2004 Microbiology II are presented as a prerequisite
- Restriction: MICRO3102Infection and Immunity A(Biomed. Sc.)
- 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 equiv
- Assumed Knowledge: MICRO 2004 Microbiology II or equiv
- Restriction: MICRO3202 Infection and Immunity B (Biomedical Science) or equivs
- 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 micro-organisms 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.Sc.) students only
- Available for Non-Award Study
- Prerequisite: MICRO 2101 Microbiology II (Biomed.Sc.) or MICRO 2004 Microbiology II or equivs
- Restriction: MICRO 3002A Infection and Immunity III (Biomedical Science) 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 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.

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 (Biomedical Science) students only
- Available for Non-Award Study
- Prerequisite: MICRO 2101 Microbiology II (Biomed.Sc.) or MICRO 2004 Microbiology or equivs, and MICRO 2201 Immunology and Virology II (Biomed.Sc.)or MICRO 2005 Immunology and Virology II or equivs
- Restriction: MICRO 3002A Infection and Immunity III(Biomedical Science) or equivalents
- 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 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. Practicals will be research-based.

## Honours

## MICRO 4000A/B

## Honours Microbiology and Immunology

- 24 units - full year
- Prerequisite: satisfactory performance in Level III courses offered by School - 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 either Microbiology, Immunology or Virology, involving 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: regular class language assessment, culture component based on individual research project

This course consists of either section A, for students who have had no formal instruction in the language - 3 hours per week, a systematic introduction to the Greek language through class interaction for gradually improving communication skills (all grammar explanations in English); or section B, for students who have had some formal instruction in the language - 3 hours per week, for gradually improving conversational and compositional skills based on a variety of contemporary themes, such as Greek culture and its multiple contexts, culture and the media, youth issues in Greece and Australia.

All students will have a 1 hour lecture/class discussion on Greek Culture and Society as viewed by Europeans and by Greeks in Greece and Australia. Culture is discussed from the perspectives of cultural anthropology, and social linguistics.

## 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: regular class language assessment, culture component based on individual research project

Language at the appropriate level of either section A or B. Section A - 3 hours per week review of the fundamental aspects of Greek grammar and introduction to the writing of simple passages, and further class interaction for the improvement of communication skills. Section B-3 hours per week for gradually improving sentence structure, paragraph connection, and cohesion in expression based on contemporary themes.

All students take the culture component of 1 hour of lecture and discussion on aspects of Greek culture from antiquity to the present - to include folklore and contemporary culture.

## Level II

## MGRE 2001

## Modern Greek IIA

- 4 units - semester 1
- 4 contact hours per week
- Prerequisite: MGRE 1002 Modern Greek I, Part 2
- Assessment: language - class assessments, culture - oral exam

There are two interconnected study components in this course: Greek language and culture - 3 hours per week of language classes for gradually improving conversational skills based on a variety of contemporary themes such as technology and information, environment and tourism. Greek culture and society - 1 hour per week of lecture and discussion based on a range of Greek cultural issues, popular tradition, the past in the present.

## MGRE 2002

## Modern Greek IIB

- 4 units - semester 2
- 4 contact hours per week
- Prerequisite: MGRE 2001 Modern Greek A (formerly Modern Greek II Part 1)
- Assessment: language - class assessments, culture - oral exam

There are two interconnected study components in this topic: 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 II Part 2
- Assessment: language - class assessments; culture - oral exam

There are two interconnected study components in this course: Greek language and culture - 3 hours per week of lectures and tutorials, language classes for improving conversation and compositional skills based on a variety of contemporary issues in the context of Australian-Greek relations; Greek culture and society - 1 hour per week of lectures and discussion based on current affairs and Greek cultural issues in the context of European Studies.

## MGRE 3002

## Modern Greek IIIB

- 6 units - semester 2
- 4 contact hours per week
- Prerequisite: MGRE 3001 Modern Greek IIIA (formerly Modern Greek III Part 1)
- Assessment: language - class assessments; culture - oral exam

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 skills based on a variety of contemporary themes: Greek world diaspora and language diversity; Greek culture and society - 1 hour per week of lectures and discussion based on contemporary issues in the European and global context.

## 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: 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

- $2 \times 1.5$ hour rehearsals per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Prerequisite: audition
- Restriction: 8784 Large Vocal Ensemble I
- 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 1002A/B

## Adelaide Connection I

- 3 units - full year
- $2 \times 2$ hour 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 I
- 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: 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 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 1009A/B

## Elder Conservatorium Symphony Orchestra I

- 3 units - full year
- Up to 5 hours Orchestra rehearsal 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
- 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 or 4 hours supervised rehearsals for the Wind Ensemble per week; 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: 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: 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 hours classes, supervised rehearsals per week
- Eligibility: priority given to music degree students - consult relevant Academic Program Rules - other students may also audition for limited number of places
- Prerequisite: Audition
- Restriction: 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 hour rehearsal per week; performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: music degree students only - consult relevant Academic Program Rules
- 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: ongoing development of choral, musical and ensemble skills to a high level.

## ENS 1026A/B

Adelaide Voices I

- 3 units - full year
- $1 \times 2$ hour, $1 \times 1$ hour rehearsals per week, performances as scheduled, additional rehearsals for concerts may be required
- Eligibility: music degree students only - consult relevant Academic Program Rules
- 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: ongoing development of choral, musical and ensemble skills to a high level.

## ENS 1027A/B

## Bella Voce I

- 3 units - full year
- 2 hour rehearsals per week, performances as scheduled, additional rehearsals for concerts may be required
- 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 early music ensembles, new music ensembles, brass, percussion and guitar ensembles.

## 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 early music ensembles, new music ensembles, brass, percussion and guitar ensembles.

## GENMUS 1001

From Elvis to U2 I

- 3 units - semester 1
- 3 hours per week
- Eligibility: ability to play or read music is not a requirement for this course
- 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.

## GENMUS 1002

## Keyboard Laboratory I

- 3 units - not offered 2006
- 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 nonkeyboard 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
- Prerequisite: ability to play or read music is not a requirement for this course
- 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 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 or 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
- $3 \times 1$ 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 - not offered 2006
- 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 2006
- 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 work.


## GENMUS 1026A/B

## Perspectives in Music Technology I

- 3 units - full year
- $2 \times 1$ hour seminars per week/24 weeks
- Eligibility: Music degree students only - consult relevant Academic Program Rules
- Assessment: papers/presentations: 50\%, Exams: 50\%

Seminar 1: broad cultural and historical analysis of new technologies and their impact in the field of music from the nineteenth century to the present day. This includes Termen, Edison, Hindesmith, Fause, Spector, Martin, and Banks. Seminar 2: broad scientific analysis and understanding of physics and psychophysics of sound; acoustics; synthesis and processing;audio and MIDI theory.

## JAZZ 1000A/B Jazz Performance I

- 9 units - full year
- 1 hr indiv. tuition p/w - 24 wks; jazz forum (using small jazz ensembles; 1.5 hrs $\mathrm{p} / \mathrm{w}$; technique/repertoire class (masterclass) according to instrumental/vocal specialisation, $1.5 \mathrm{hrs} \mathrm{p} / \mathrm{w}-24$ wks; small jazz ensemble 1 hr 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 \& 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 and colour.

## JAZZ 1003A/B

## Improvisation I

- 3 units - full year
- 1 hour lecture/tutorial, 1 hour Applied Rhythm lecture per week
- 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 1005A/B

## 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 varying skill levels and areas of particular development. Beginning students will be allocated their stream on the basis of a placement test.

## MUSCORE 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 singing, with emphasis on sight-reading, aural development and vocal skills.

## MUSTECH 1003A/B

Music Technology I

- 6 units - full year
- 4 hours per week (2 hour laboratory practical \& 2 hour workshop) for 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 fundamentals students will develop broad 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 and media production.

Workshop: Students will embrace and extend the basic concepts of music technology. This will be achieved through the development of creative and technical skills in workshop topics, project participation and fulfilment.

## 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, figured bass, improvisation, score reading, modulation and rapid learning.

## PERF 1500A/B

## Classical Performance I

- 9 units - full year
- 1 hour indiv. tuition per week for 30 wks; Classical Performance Forum 1.5 hours per week/24 wks; technique/repertoire class, organised according to instrumental/vocal specialisation, 1.5 hours per week/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 are available in: 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 per week/24 wks; technique/repertoire class, organised according to instrumental/ vocal specialisation, 1.5 hours per week/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 are available in: 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
- $2 \times 1.5$ hour 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 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
- $2 \times 2$ hour 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 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: 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 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 2009A/B

## Elder Conservatorium Symphony Orchestra II

- 3 units - full year
- Up to 5 hours for the Orchestra per week, 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: 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: 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 hours classes and 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 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 hour rehearsal per week; plus performance as scheduled, additional rehearsals for concerts may be required
- 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 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 hours, $1 \times 1$ hour rehearsals per week; plus performances as scheduled; additional rehearsals for concerts may be required
- 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; ongoing 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, plus performances as scheduled, additional concert rehearsals may be required
- 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 per week, 1 hour of 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 early music ensembles, new music ensembles, brass, percussion and guitar ensembles.

## 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 early music ensembles, new music ensembles, brass, percussion and guitar ensembles.

## 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 pupil-centred focus.

## GENMUS 2005

## Music, Media \& Contemporary Society II

- 3 units - semester 2
- 3 hours per week
- Prerequisite: Ability to play or read music is 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 musicmaking 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 - semester 2
- 3 hours per week
- Prerequisite: ability to play or read music is 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 musicmaking 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 or 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 2020A/B

## Choral Masterworks II

- 3 units - not offered 2006
- 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 work

## GENMUS 2021A/B

## Choral Repertoire II

- 3 units - not offered 2006
- 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 work.

## GENMUS 2023

## Conducting IIA

- 1.5 units - semester 1
- 2 hour workshop
- 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
- 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
- $2 \times 1$ hour seminars per week for 24 weeks
- Eligibility: music degree students only
- Prerequisite: Perspectives in Music Technology I
- Assessment: Papers/Presentations 50\%, Exams 50\%

Seminar 1: Specific musical, cultural and historical analysis of new technologies and its application to computer music and electroacoustic composition. This includes founders and contemporary practitioners such as Xenakis, Stockhausen, Cage, Cary, Reich, Riley, Wishart, Pope, Lansky, Polansky, Miranda, Anderson and Glass.

Seminar 2: Specific scientific analysis and understanding of concepts, composition and generative music through chaos, grammars, probability and other associated concepts.

## JAZZ 2000A/B Jazz Performance II

- 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 (masterclass) p/w -24 wks; Develops small jazz ensemble skills through an emphasis on group organisation \& individual instrumental skill
- 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 semester 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 (including 1 hour AfroAmerican 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 45\%, sem. 1 exam 20\%, 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 per week/24 wks
- Eligibility: students enrolled in a music degree -consult relevant Academic Program Rules
- Prerequisite: JAZZ 1000B Jazz Performance I Part 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 $5 \%, 15$ 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 1.5 hour performance class particular to their major study.

## MUSCORE 2001

## Music in Context IIA: Polyphony \& Harmony

- 3 units - semester 1
- 1 hour aural, 1 hour lecture, 1 hour tutorial per week
- Assumed Knowledge: harmonic conventions \& formal procedures of western music (refer to MUSCORE 1004 Music in Context I: Tonality and Form in Western Music for more detail)
- Restriction: 2770 Harmony Workshop IIIA, 1222 Aural Development II, 1930 Aural Training IIM, 4851 Music Theory III (harmony topic)
- Assessment: Repertoire listening exam $20 \%$, assignments $50 \%$, Aural as required for stream/level 30\%

Aural - refer to MUSCORE 1008.
Lectures - a survey and analysis of polyphonic and contrapuntal practice in a wide variety of styles and historical eras. Tutorials - analytical study of polyphonic music (with particular attention to set works) and practical applications in the writing of contrapuntal music.

## MUSCORE 2002

## Music in Context IIB: Nineteenth Century Music

- 3 units - semester 2
- 1 hour aural, 1 hour lecture, 1 hour tutorial
- Assumed Knowledge: harmonic conventions \& formal procedures of western music (refer to MUSCORE 1004 Music in Context I: Tonality and Form in Western Music for more details)
- Restriction: 1222 Aural Development II, 1930 Aural Training
- Assessment: Repertoire listening exam $20 \%$, assignments $50 \%$, Aural as required for stream/level 30\%

Aural: refer to MUSCORE 1008.
Lectures: historical and cultural studies of European Music in the 19th century, and the currents of thought, social and political changes, and technological developments that shaped it. Tutorials: theoretical and analytical studies of thematic, harmonic, stylistic and formal aspects of 19th century music. Topics will include chromatic harmony; the progressive expansion and subsequent dissolution of tonality.

## MUSCORE 2003

## Music in Context IIA: Jazz

- 3 units - semester 1
- 1 hour aural, 1 hour theory lecture, 1 hour theory tutorial, 1 hour history lecture, 1 hour 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 super-imposition), 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 aural, 1 hour theory lecture, 1 hour theory tutorial, 1 hour history lecture, 1 hour 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.

## 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). Only available to students enrolled in a Music degree. Consult relevant Academic Program Rules
- 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

- 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 per week (2 hour laboratory practical +2 hour workshop) for 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 advanced practical study of software and hardware students will develop specialist 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 and media production.

Workshop: Students will embrace and extend the advanced concepts of music technology. This will be achieved through the development of creative and technical skills in workshop topics, project participation and fulfilment.

## 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 per week, 1 hour movement class
- 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 per wk/30 wks; Classical Performance Forum 1.5.hours per wk/24 wks; technique/repertoire class, organised on instrumental/vocal specialisation, 1.5 hours per $w k / 24 \mathrm{wks}$
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Restriction: PERF 1500 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 are available in: Brass, Keyboard, Percussion,

 Strings, Voice and WoodwindThrough 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 over 24 weeks; Practical Study Forum 1.5 hrs per wk/24 wks; technique/repertoire class, organised on instrumental/ vocal specialisation, 1.5 hrs per wk/24 wks
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Prerequisite: PERF 1600 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
- .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 2002 Practical Study IIB
- Restriction: 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
- $2 \times 1.5$ hour rehearsals per week, additional rehearsals for concerts may be required
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Pre-Requisite(s): 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
- 2 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: 4557 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 of supervised rehearsals (or equivalent) 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: 8163 Orchestra 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 symphony orchestra.

## ENS 3010A/B

## Elder Conservatorium Wind Orchestra III

- 3 units - full year
- 3-4 hours supervised rehearsals for the Wind Ensemble, additional rehearsals for concerts may be required
- Prerequisite: audition
- Restriction: 2705 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: 4557 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 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: 8964 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: 8677 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 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: 7399 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, plus performances as scheduled, additional rehearsals for concerts may be required
- Prerequisite: audition
- Restriction: 8463 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 hour, $1 \times 1$ hour rehearsals per week; plus performances as scheduled, additional rehearsals for concerts may be required
- 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; ongoing 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, plus performances as scheduled, additional concert rehearsals may be required
- 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: 9050 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 early music ensembles, new music ensembles, brass, percussion and guitar ensembles.

## 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: 9050 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 early music ensembles, new music ensembles, brass, percussion and guitar ensembles.

## 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 - semester 2
- 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 musicmaking 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 - semester 2
- 3 hours per week
- Eligibility: ability to play or read music is 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 musicmaking 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 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 or 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 - not offered 2006
- 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 2006
- 2 hour workshop
- Eligibility: only available to students enrolled in a music degree 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
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Corequisite: credit or higher in GENMUS 2024 Conducting IIB
- Assessment: assignments including score preparation, rehearsal planning, repertoire study, development of specific aural skills, observation \& review $40 \%, 2 \times$ viva voce and practical assessments 60\%

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 3024

## Conducting IIIB

- 1.5 units - semester 2
- 2 hour workshop
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Prerequisite: credit 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 $20 \%$

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 3026A/B

Perspectives in Music Technology III

- 3 units - full year
- $2 \times 1$ hour seminar per week for 24 weeks
- Eligibility: music degree students only
- Prerequisite: Perspectives in Music Technology II
- Assessment: papers/presentations 50\%, Exams 50\%

Seminar 1, Advanced musical, cultural and historical analysis of new technologies and their application in artistic practice. Areas that may be 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 signal mathematics, perception and understanding of signal manipulation, new processing, interface and instrument building methodologies.

## JAZZ 3000A/B

## Jazz Performance III

- 9 units - full year
- 1 hr individual tuition $\mathrm{p} / \mathrm{w}-24$ wks, jazz forum (using small jazz ensembles) $1.5 \mathrm{hrs} \mathrm{p} / \mathrm{w}$; technique/repertoire class (master class): organised by instrumental/vocal specialisation $1.5 \mathrm{hrs} \mathrm{p} / \mathrm{w}$; small jazz ensemble
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Prerequisite: JAZZ 2000B Jazz Performance Il 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
- Eligibility: only available to students enrolled in a music degree consult relevant Academic Program Rules
- Prerequisite: JAZZ 2006B Jazz Improvisation II part 2
- Restriction: 8075 Improvisation III
- Assessment: ongoing (including original contemporary jazz composition) $25 \%$, end of semester exams $75 \%$

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.

## JAZZ 3600A/B

## Practical Study III: Jazz

- 6 units - full year
- 12 hours individual tuition/24 wks, 1.5 hrs performance class per week; 1.5 hrs jazz performance forum per week, 1 hr supervised small jazz ensemble workshop (laboratory) per week/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
- 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, 1 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, 8075 Improvisation III
- Assessment: theory (weekly assignments \& tests $25 \%$, exam $75 \%$ ) $50 \%$; jazz arranging (small assignments $50 \%$, major assignment 50\%) 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

Mus in Context IIIB: Jazz

- 3 units - semester 2
- 1 hour theory lecture, 1 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, $8 \times 1.5$ 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: brass methodology journal \& practical demonstration $30 \%$, essay $30 \%$, curriculum assignments $40 \%$

Brass instrument methodology involving learning about the brass family, gaining experience in writing for and playing brass 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 hour lecture, 2 hour workshop (may be taught in condensed format to accommodate Music Education Practicum III) per week
- Eligibility: music degree students only - consult relevant Academic Program Rules
- Prerequisite: Music Education IIIA
- Restriction: 5364 Music Education III
- Assessment: string methodology journal \& practical demonstration $30 \%$, seminar presentation $20 \%$, curriculum assignments 50\%

String instrument methodology involving learning about the orchestral string family, gaining experience in writing for and playing string 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 year
- 2 hour ensemble (with Music Educ. 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
- Assessment: 4000 word 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
- Assessment: 4000 word 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 1: Aboriginal Music. A primary focus of the course will be the ceremonial songs and dances of Northeast Arnhem Land and other remote areas of Australia. The course will also consider Aboriginal popular music in urban and remote areas, the use of Aboriginal elements in work by non-Aboriginal 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
- 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 2006
- 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 in 2006
- 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 free-thinking 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
- 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
- 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
- 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
- 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.

## MUSTECH 3003A/B

## Music Technology III

- 6 units - full year
- 4 hours per week ( 2 hour laboratory practical +2 hour workshop) for 24 weeks
- Eligibility: Music degree students only
- Prerequisite: Music Technology II
- Assessment: Minor assignments 60\%, Major Project 40\%

Laboratory practical: Through the advanced practical study of software and hardware students will develop specialist 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 and media production.

Workshop: Students will further embrace and extend the advanced concepts of music technology. This will be achieved through the development of creative and technical skills in workshop topics, project participation and fulfilment.

## PERF 3003A/B

## Stagecraft III

- 3 units - full year
- 2 hour workshop per week, 1 hour movement class
- 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 Part 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 part 2

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.

Assessment: one practical assessment, one written assignment

## PERF 3500A/B

## Classical Performance III

- 9 units - full year
- 1 hour indiv. tuition per wk/30 wks; Classical Performance Forum 1.5 hours per wk/24 wks; technique/repertoire class, organised on instrumental/ vocal specialisation, 1.5 hours per wk/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 are available in: Brass, Keyboard, Percussion,

 Strings, Voice and WoodwindThrough 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 weeks; Practical Study Forum 1.5 hours per week/24 weeks; technique/repertoire class, organised according to instrumental/ vocal specialisation, 1.5 hours per week/24 weeks
- 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.

## Level IV

## MUSED 4001A/B

## Music Education IV

- 3 units - full year
- 2 hrs/week workshop (24 hours per year to be scheduled around blocks of teaching practice 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
- $12 \times 1$ hour workshop
- 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 4003A/B

## Honours Ethnomusicology

- 24 units - full year
- Approved honours music students only
- 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 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 4010A/B

## Honours Composition

- 24 units - full year
- Eligibility: approved honours music students only
- 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 4006A/B

## Honours Music Education

- 24 units - full year
- Eligibility: approved honours music students only
- Prerequisite: see Program Rule 6.6
- Assessment: $2 \times 3000$ word seminar papers (3 units each), 6000 word minor project ( 6 units), 6000 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 4011A/B

## Honours Musicology (B.Mus.)

- 24 units - full year
- Eligibility: approved honours music students only
- Prerequisite: see Program Rule 6.5
- Assumed Knowledge: reading knowledge of language/s necessary for the program of study
- Assessment: 5000 word research seminar paper $20 \%, 30$ min. oral presentation $5 \%$, negotiated project - variety of assessments by negotiation with supervisor and 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 eg. 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 4001A/B

## Honours Music Technology

- 24 units - full year
- Eligibility: approved honours music students only
- 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.

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 or more from a course/component of another Music Honours program.

## PERF 4005A/B

## Honours Performance

- 24 units - full year
- 30 hours individual tuition in performance (1 hour per wk/30 wks) supported by fortnightly performance workshops of 1.5 hours duration - both provide emphasis on style and interpretation
- Eligibility: approved honours music students only
- 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 $2 \times 3$ 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 4006A/B

## Honours Music Pedagogy

- 24 units - full year
- Eligibility: approved honours music students only
- Prerequisite: see Program Rule 6.4
- Assumed Knowledge: GENMUS 2003/GENMUS 3004 or equiv.
- Assessment: $2 \times 20$ min seminar presentations/demonstrations $25 \%, 6000$ word or $2 \times 3000$ 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 unit - 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 unit - 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 unit - semester 1
- $5 \times 1$ 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 non-electronic 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
- $8 \times 1.5$ 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 unit - semester 2
- $6 \times 1$ 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 1603A/B

## Theoretical Studies

- 2 units - full year
- 1 hour class per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: assignments $50 \%$, exams $50 \%$

This course develops an understanding of the fundamental principles of music theory, and their application in contemporary music. Areas covered include scales, chord structure, modern functional harmony, and contemporary production values.

## 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 1606A/B

## History of Commercial Music part I

- 2 units - full year
- 1 hour class per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: assignments 70\%, exam 30\%

The history and development of jazz, rock and other forms of popular music are studied in order to develop of 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 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: assignments 50\%, exams 50\%

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 $2 \times 5 \%$
- 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 $2 \times 5 \%$

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: 4 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: exams 50\%; assignments $50 \%$

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 tutorial per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: aural - as required for stream/level $30 \%$, choir demonstration of individual sight singing ability \& involvement in one performance per semester 30\%, lecture - one hour exam 40\%

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. Beginning students will be allocated their stream on the basis of a placement test. (Continues aural instruction from semester 1 courses).
Choir: Development of aural skills through choral singing, emphasis on sight-reading, aural development and vocal skills. Lecture: introductory survey of analytical and culture-based approaches to understanding music in its cultural context. Musical examples drawn from Western and Non-Western cultures.

## VETMUS 1701A/B

## Jazz Styles I

- 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 I

- 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 I

- 2 units - full year
- 1 hour per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Corequisite: 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 relating to other courses (eg, Theory, Arranging, Performance)

## VETMUS 1704A/B

## Jazz Performance I

- 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 $2 \times 5 \%$

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 I

- 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 I

- 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 unit - 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\%, 15 min. practical exam $30 \%$; sem 2: teacher assessment $5 \%$, 20 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 must be taken concurrently
- Assessment: 2 exams ( 30 min . playing time) $50 \%$; continuous assessment $50 \%$ - attendance at Jazz Forum \& perform there once in 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, 1 hour rhythm class per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: weekly class exercises \& participation $40 \%$, written $\&$ practical exam at end of each semester $40 \%$, rhythm class exam \& participation $20 \%$

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/B

## Jazz Diploma Forum

- 1 unit - 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 at 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\%, 15 min. practical exam 30\%; sem 2: teacher assessment 5\%, 20 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

## Small Ensemble (Class Dip)

- 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 must be taken concurrently
- Assessment: 2 exams ( 30 min . playing time) 50\%, continuous assessment $50 \%$ - attendance at Classical Diploma Forum \& perform there once in 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 classical music.

## VETMUS 1852A/B

## Classical Diploma Forum

- 1 unit - 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 1854A/B

## Keyboard Musicianship (Class Dip)

- 2 units - full year
- 1 hour workshop
- 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 1904A/B

## Recital

- 1 unit - full year
- Eligibility: VET music students only - consult relevant Academic Program Rule
- Assessment: semester 1 - written assessment, semesters 2 technical $\&$ creative assessments

Students, either individually or in groups, will experience the demands of preparing and presenting a public recital, installation or exhibition of their composition or performance projects. This will include performing a recital duty and preparing a musical work.

## VETMUS 1907A/B

Digital Audio Studies (C4)

- 4 units - full year
- 2 hours per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: technical \& creative assignments

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, postproduction, mastering, looping and sound-design. Software may include Cubase, Logic, Pro Tools and Live.

## VETMUS 1908

## Music Technology (C4)

- 1 units - semester 1
- 1 hour per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: exams

Students will study the theoretical concepts behind the key areas of music technology. This will include sound theory, analogue and digital audio, MIDI signal processing/effects and synthesis. Students will gain a theoretical perspective on the technology that they use to make music thereby enhancing use of those technologies.

## VETMUS 1909A/B

## MIDI Studies (C4)

- 2 units - full year
- 1 hour class per week
- Eligibility: VET music students only - consult relevant Academic Program Rules
- Assessment: technical \& 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. Areas examined include the MIDI protocol, software and hardware implementation, virtual instrumentation, MIDI scoring and performance and advanced techniques. Software may include Cubase, Logic and Reason.

## VETMUS 1910A/B

## Technology Journal (C4)

- 2 units - full year
- 5 hours per semester
- Eligibility: VET music students only - consult relevant Academic Program Rules

Assessment: research assignments
Students will examine an area of music technology of their own choosing from a practical and theoretical perspective. Students will increase specialised knowledge in an area of music technology
that interests them. Areas that may be examined include live sound reinforcement, recording, mixing, effects, synthesis, mastering, film sound, computer music, software programming, live performance technology, MIDI, digital audio, analogue audio or musical electronics.

## NURSING SCIENCE

## Level I

## CLIN NUR 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.

## CLIN NUR 1001

Nursing Practice IA

- 6 units - semester 1
- Workshops and 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 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. Trans-cultural nursing: cultural safety in nursing.

## CLIN NUR 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 pharmo-cokinetics in relation to nursing practice. (iv) Health and IIIness 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.

## CLIN NUR 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) Trans-cultural 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.

## OENOLOGY

## Level I

## OENOLOGY 1000

## OENOLOGY 1000EX

## Introductory Grape and Wine Knowledge

- 3 units - semester 1
- External: 4 or 5 day residential school during mid semester break; Internal: up to 2 lectures, 3 hours tutorial/practical per week some practical components may be held in mid semester break
- Eligibility: Bachelor or Diploma in 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 1001

## OENOLOGY 1001EX

## Vineyard and Winery Operations I

- 3 units - semester 2
- External: 5 day residential school; Internal: up to 2 lectures, 3 hours tutorials/practicals per week some practical components are held during mid semester break
- Eligibility: Bachelor or Diploma in 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 1018

## Foundations of Wine Science

- 3 units - semester 1
- Up to 2 lectures, 3 hours tutorial/practical per week -some practical components may be held in mid semester break
- Eligibility: B.Sc. (Viticulture), B.Oenology 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

## Level II

## OENOLOGY 2004

## OENOLOGY 2004EX

## Vineyard and Winery Operations II

- 4 units - semester 1
- External: 4 day residential school during mid semester break; Internal: 2 lectures per week, 24 hours of practical component held in mid semester break
- Eligibility: Bachelor or Diploma in Wine Marketing students
- Prerequisite: OENOLOGY 1001NW/1001EX Vineyard and Winery Operations I

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
- Up to 6 hours per week including lectures, tutorials, practicals
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1101 OR BIOLOGY 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 IB
- 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
- Up to 6 hours per week including lectures, tutorials, 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/1101 Foundations of Chemistry A;CHEM 1102/1201 Foundations of Chemistry IB
- 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.

## OENOLOGY 2025WT

## Microbiology for Viticulture and Oenology

- 4 units - semester 1
- Up to 7 hours per week, including lectures, practicals, tutorials
- Assumed Knowledge: BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1101 or BIOLOGY 1102 Biology I: Molecules, Genes and Cells; OENOLOGY 1018NW Foundations of Wine Science or equivalent courses
- Assessment: written exam (mid-year \& final) $60 \%$, practical exercises, practical exams (theory \& practice) $40 \%$

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
- 10 hours per week/ 1 semester or equiv. on project
- Assessment: literature review, research proposal, seminar

Enrolment subject to the approval of the Head of Discipline.
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 3003WT

## Wine Packaging and Quality Management

- 3 units - semester 2
- Up to 6 hours per week, including lectures, practicals, field trips
- Prerequisite: OENOLOGY 3007WA/3007WT7010WT 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
- Up to 6 hours per week including lectures, 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
- Up to 8 hours per week (including lectures, practicals, field trips)
- Prerequisite: OENOLOGY 2024WA/2020WT Introductory Winemaking
- Corequisite: OENOLOGY 3047WA/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 3037WT

## Distillation, Fortified and Sparkling Winemaking

- 3 units - semester 2
- Up to 6 hours per week including lectures, practicals - some practical components may be held in mid semester break
- Prerequisite: OENOLOGY 2024WA/2024WT Introductory Winemaking, OENOLOGY 2022WT Sensory Studies, OENOLOGY 3016WA/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 3045WT

## Advances in Oenology

- 3 units - semester 2
- Up to 6 hours per week (including lectures, practicals, field trips)
- 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, sulfur 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 3046WT

## Fermentation Technology

- 3 units - semester 2
- Up to 8 hours per week (including lectures, practicals, field trips)
- Eligibility: Bachelor of Oenology students
- Prerequisite: OENOLOGY 2024WT Introductory 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 3047WT

## Winemaking at Vintage

- 3 units - semester 1
- Up to 8 hours per week
- Eligibility: Bachelor of Oenology students
- Prerequisite: OENOLOGY 2024WT Introductory Winemaking, OENOLOGY 2022WT Sensory Studies
- Corequisite: OENOLOGY 3016WT Cellar and Winery Waste Management

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 (.BAg.Sc.)

- 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 $40 \%$, research project, research proposal, seminar, thesis and viva voce $60 \%$

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.

## ORAL HEALTH

## Level I

## HLTH 1200HO

## 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: tests, practical assessments, assignments, written exams

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 and psychology relevant to their role in the dental team. Topics include: professional practice and the role of the oral health practitioner in delivering holistic dental care, dental morphology, preventive dentistry, cariology, fluoride, developmental psychology and the management and motivation of dental patients, culture, health and disease, sociology of dentistry.

## 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

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, and involves the study of diseases of the teeth and their supporting tissues. 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 a para-dental professional. Topics include information literacy, orientation to learning and workplace communication. Information literacy 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. Workplace communication will develop communication strategies to effectively work as a member of the dental team.

Topics include orientation to learning, client interaction, team building communication, writing technical documents, health education, information literacy, database fundamentals.

## 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, nutrition, community health and health promotion.

## ORALHLTH 2202AHO/BHO

## Clinical Practice IIOH

- 12 units - full year
- 19 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 preventative, 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 dental auxiliary practice.

Topics include clinical dental hygiene practice, operative dentistry (theory \& practical), clinical dental therapy practice and periodontics.

## ORALHLTH 2203AHO/BHO

## Human Biology IIOH

- 4 units - full year
- 3 hours per week class meetings/research-based 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 Studies 110 H
- 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 dental auxiliary 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 1200 HO First Annual Oral Health Exam
- Corequisite: DENT 2201AHO/BHO Dental and Health Science IIOH, DENT 2202AHO/BHO Clinical Practice IIOH, DENT 2203AHO/BHO Human Biology 110 H
- Assessment: assignments, tests, written exams

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, and epidemiology.

## 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 the Dental School prior to enrolment in this course
- 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.

## Level III

## 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, applied child psychology, 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 a dental auxiliary. Topics include dental therapy practice, dental hygiene practice, clinical radiology.

## 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 professional. 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 only
- 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. dementia, diabetes mellitus, ischaemic heart disease, and some cancers).

## Level III

## PATHOL 3003

## General Pathology IIIHS

- 6 units - semester 1
- 2 lectures, 2 hour practical per week, 1 hour tutorial per fortnight, $3 \times 1$ hour clinico-pathological correlation (CPC) sessions
- Eligibility: B.Hlth.Sc., B.Sc \& B.Psych (Hons) students
- Prerequisite: B.Hlth.Sc. students - pass in ANAT SC 1102, ANAT SC 1103, Div 1 pass (P1) in PATHOL 2000 ; Other students - pass 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; tissue responses to injury; 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, $3 \times 1$ hour clinico-pathological correlation (CPC) sessions
- Eligibility: B.Hlth.Sc. \& B.Psych (Hons) students only
- Prerequisite: Div 1 pass (P1) grade 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.

## Honours

## PATHOL 4000

## Honours Pathology

- 24 units - full year
- Eligibility: B.Med.Sc. \& B.Hlth.Sc. students, or permission of Head of Department
- Assessment: details provided at start of clinical year

Students requiring further information are advised to consult the head of department.

## PHARMACOLOGY

## Level II

## HARM 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 only
- Prerequisite: ANAT SC 1102A Human Biology 1 or GENETICS 1000A/B Molecular and 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.HIth.Sci, B.Psych.(Hons.) students only
- Prerequisite: PHARM 2002 Pharmacology II
- Assessment: exam on lecture material, assessment test $\mathcal{G}$ 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.Health.Sc, B.Psych(Hons), B.Sc, B.Sc.(Biomed.Sc.), B.Sc.(Biotech.) B.Sc \& Engineering students only
- Quota will apply
- Prerequisite: 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
- Assessment: exam on lecture material, practical reports, assessment test

The course will provide students with an understanding of how new drugs are discovered. 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
- Assessment: exam on lecture material, practical \& research reports, assessment test

The course will provide students with an understanding of how new drugs are developed. 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. Students will also
gain an understanding of the drug development process from the time of first administration of an entity to humans through registration of a drug with relevant government agencies. 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 Clinical \& Experimental Pharmacology or acceptable alternative (subject to approval of head of department)
- Assessment: to be advised at start of year

Intending candidates should consult the Honours Coordinator, Department of Clinical and Experimental 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 Department. 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, pyramids, the Bermuda Triangle and alien abductions.

## PHIL 1102

## Mind, Knowledge and God

- 3 units - semester 2
- 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 in which we are embedded? 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 1
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: 1400-1800 word essay $50 \%$, exam 50\%

What ultimate grounding can be given to judgements of right and wrong, and how much control should society exert over the actions of its members? Three main topics are pursued in this course: (1) Ethics - Is there a rational basis for morality, whether in
terms of self-interest, the will of God, the demands of society, or the greatest happiness of the greatest number? (2) Ethics and Human Nature - Does evolutionary theory throw light on human nature, and what moral implications does it have? (3) Problems of Freedom - Is the standard Liberal approach to pornography sound? Do we have free will? Is the state justified in encroaching on personal freedom?

## 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 Ancient 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 that Argument and Critical Thinking is a useful preliminary.

## Level II

## PHIL 2002

## Crime and Punishment

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Humanities/Social Sciences, incl. 3 units Philosophy, or 6 units Law, or alternative approved by Head of Discipline
- Restriction: Choice, Culpability and the Application of Justice II/III
- Assessment: essay $50 \%$, tutorial presentation $25 \%$, exam $25 \%$

Examines the philosophical bases of theories of law and criminal culpability, justification of punishment, restorative versus retributive justice, sentencing and mercy, and the doctrine of double jeopardy. Discussion will centre on specific problematic offences including dangerous driving, child abuse, drugs, and rape.

## PHIL 2003

## Cognitive Science: Minds, Brains and Computers

-4 units - semester 1

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (incl. 3 units Philosophy); or 6 units Level I Psychology, Computer Science or Mathematics; or alternative approved by Head of Discipline
- Assessment: essays totalling 4800-6000 words

This course provides an introduction to the philosophical foundations of Cognitive Science, which is a relatively new interdisciplinary field of study that embraces aspects of philosophy, psychology, computer science and neuroscience. Topics to be discussed include: the computer as a model of the mind; classical (digital) and connectionist (analog) computational theories of cognition; the science and philosophy of perception; psychopathology, including delusions and schizophrenia; and the role of the emotions in cognition.

## PHIL 2005

## Evolution, Ethics and the Meaning of Life

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (incl. 3 units Philosophy); or 6 units Biological Sciences; or alternative approved by Head of Discipline
- Assessment: essays totalling 4800-6000 words

What bearing does the fact of our evolution have on our understanding of ourselves? This course will explore this general question by considering the impact of biology on the development of human nature. In doing so it will confront the highly contentious debate between evolutionary psychologists (the new sociobiologists) and social theorists about the respective roles of genes and culture in making us the way we are. The general aim of the course will be to consider whether there is a biological nature that can form the foundation of a naturalised approach to ethics, values and even the meaningfulness of life.

## PHIL 2011

## Moral Problems

-4 units - semester 1

- 3 contact hours per week
- Prerequisite: 6 units Level I courses in any faculty
- 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 2012

## Philosophy of Religion

-4 units - semester 2

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences, incl. 3 units Philosophy
- Assessment: 2 essays totalling 4800-6000 words, tutorial participation

Questions to be considered: Does recent research on the history of the physical universe indicate the existence of a designer? Could we moderns ever rationally believe in a miracle? Do pain, suffering and the Hitlers of this world show that there could not be a good God? What is faith? Might faith allow belief in God even if reason rules against it? Is religion needed for meaning in life? Does Buddhism (an exposition of which will be given) offer a plausible account of existence and a suitable path for us to embark on? Might there be One True Religion, with the others deeply mistaken, or rather might there be more than one path to salvation or enlightenment?

## PHIL 2013

## Philosophy of Science

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences (incl. 3 units Philosophy), or 6 units Sciences/Health Sciences/ Maths \& Comp.Sc./Engineering, or alternative approved by Head of Discipline
- Assessment: essays totalling $4800-6000$ words

Science has a significant impact on the kind of society we live in. For this reason it is vitally important to have a clear appreciation of the nature of scientific activity. This course will examine some central issues in the contemporary philosophy of science, including: the objectivity of science, the nature of scientific method, the status of scientific knowledge, and the character of scientific explanation, including explanation in the social sciences. The course will also explore the general picture of reality that emerges from modern science, and may examine some special topics in the philosophy of science, such as the interpretation of quantum mechanics and the interpretation of special relativity.

## PHIL 2017

Reality and Knowledge: Metaphysics \& Epistemology

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences, incl. 3 units Philosophy
- Restriction: Theory of Knowledge II/III
- Assessment: essays totalling 4800-6000 words

Metaphysics is the attempt to understand in the most abstract and systematic way the nature of reality. It deals with the fundamental concepts like the self and personal identity, causation, the mind, the nature of time and space, and the nature of explanation. Epistemology is the study of knowledge, more particularly the relationship between belief and knowledge. The two subjects inevitably influence each other especially when we come to consider the nature of truth and explanation. After all knowledge is true belief about the world. For two thousand years philosophers have investigated the relationship between the world as we experience it and the more fundamental and strikingly different world which gives rise to our experiences. In this course students will be introduced to some of the central questions in epistemology and metaphysics in both their traditional and current forms. We may discuss questions like 'When does a fetus become a person?' 'Are you the same person as the child born to your parents? ' Is time an illusion? 'What is essentialism?'

## PHIL 2023

## Professional Ethics

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I courses in any faculty
- 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, 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 2110

## Logic II: Intermediate Logic

- 4 units - semester 1
- 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 in-class tests, 3 hour exam (all 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 and with a more formal emphasis than Logic I. There are two normal routes of entry into Logic II, either via Logic I, or via a first year course having a substantially formal content and a component of logic, including Mathematics I or Computer Science I. We make extensive use of computer-aided instruction in the course. Logic II is a good preparation for Logic III. Content: semantics of truth-functions, proof theory of classical propositional logic, many-valued logics, proof theory and semantics of quantifier logic, modal logic and possible worlds, application to the theory of machines, philosophy of logics, paradoxes, introduction to writing about logic.

## PHIL 3002

## Crime and Punishment

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences, incl. 4 units Philosophy
- Restriction: Choice, Culpability and the Application of Justice
- Assessment: essay $50 \%$, tutorial presentation $25 \%$, exam $25 \%$

This course examines the philosophical bases of theories of law and criminal culpability, justification of punishment, restorative versus retributive justice, sentencing and mercy, and the doctrine of double jeopardy. Discussion will centre on specific problematic offences including dangerous driving, child abuse, drugs, and rape.

## Level III

## PHIL 3003

## Cognitive Science: Minds, Brains and Computers

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences incl. 4 units Philosophy; or 8 units Level II Psychology, Computer Science or Mathematics; or alternative approved by Head of Discipline
- Assessment: essays totalling 7500-9000 words

This course provides an introduction to the philosophical foundations of Cognitive Science, which is a relatively new interdisciplinary field of study that embraces aspects of philosophy, psychology, computer science and neuroscience. Topics to be discussed include: the computer as a model of the mind; classical (digital) and connectionist (analog) computational theories of cognition; the science and philosophy of perception; psychopathology, including delusions and schizophrenia; and the role of the emotions in cognition.

## PHIL 3005

## Evolution, Ethics and the Meaning of Life

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences (incl. 4 units Philosophy), or 8 units Level II Biological Sciences, or alternative approved by Head of Department
- Assessment: essays totalling 7500-9000 words

What bearing does the fact of our evolution have on our understanding of ourselves? This course will explore this general question by considering the impact of biology on the development of human nature. In doing so it will confront the highly contentious debate between evolutionary psychologists (the new sociobiologists) and social theorists about the respective roles of genes and culture in making us the way we are. The general aim of the course will be to consider whether there is a biological nature that can form the foundation of a naturalised approach to ethics, values and even the meaningfulness of life.

## PHIL 3011

## Moral Problems

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II courses from any faculty
- 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 3012

## Philosophy of Religion

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences, incl. 4 units Philosophy
- Assessment: 2 essays, to a total of 6800-8000 words, tutorial presentation \& participation

Questions to be considered: Does recent research on the history of the physical universe indicate the existence of a designer? Could we moderns ever rationally believe in a miracle? Do pain, suffering and the Hitlers of this world show that there could not be a good God? What is faith? Might faith allow belief in God even if reason rules against it? Is religion needed for meaning in life? Does Buddhism (an exposition of which will be given) offer a plausible account of existence and a suitable path for us to embark on? Might there be One True Religion, with the others deeply mistaken, or rather might there be more than one path to salvation or enlightenment?

## PHIL 3013

## Philosophy of Science

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences (incl. 4 units Philosophy) or 8 units Level II Sciences/Engineering/Math. \& Comp.Sc./Health Sc. or alternative approved by Head of Discipline
- Assessment: essays totalling 7500-9000 words

Science has a significant impact on the kind of society we live in. For this reason it is vitally important to have a clear appreciation of the nature of scientific activity. This course will examine some central issues in the contemporary philosophy of science, including: the objectivity of science, the nature of scientific method, the status of scientific knowledge, and the character of scientific explanation, including explanation in the social sciences. The course will also explore the general picture of reality that emerges from modern science, and may examine some special topics in the philosophy of science, such as the interpretation of quantum mechanics and the interpretation of special relativity.

## PHIL 3017

Reality and Knowledge: Metaphysics \& Epistemology

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences, incl. 4 units Philosophy
- Restriction: Theory of Knowledge II/III
- Assessment: essays totalling 7500-9000 words

Metaphysics is the attempt to understand in the most abstract and systematic way the nature of reality. It deals with the fundamental concepts like the self and personal identity, causation, the mind, the nature of time and space, and the nature of explanation. Epistemology is the study of knowledge, more particularly the relationship between belief and knowledge. The two subjects inevitably influence each other especially when we come to consider the nature of truth and explanation. After all knowledge is true belief about the world. For two thousand years philosophers have investigated the relationship between the world as we experience it and the more fundamental and strikingly different world which gives rise to our experiences. In this course students will be introduced to some of the central questions in epistemology and metaphysics in both their traditional and current forms. We may discuss questions like 'When does a fetus become a person?' 'Are you the same person as the child born to your parents?' Is time an illusion? 'What is essentialism?'

## 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.

## Honours

## PHIL 4401

## Honours Philosophy

- 24 units - full year

Prerequisite: Undergraduate degree, credit average in courses contributing to a major in Philosophy or equiv. approved by Head of Discipline

Assessment: $3 \times 5000-6000$ 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 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.

## PHYSICS

## 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; $5 \times 3$ hour practicals
- Eligibility: B. E. students only

Available for Non-Award Study

- Prerequisite: C\&ENVENG 1001 Statics, MATHS 1011 Mathematics IA or MATHS 1013 Mathematics IMA (on application to Head of Discipline)
- Corequisite: MATHS 1012 Mathematics IB or MATHS 1014 Mathematics IMB (on application to Head of Discipline)
- 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 intended primarily for students of the humanities and social sciences and is taught in the style of those disciplines. 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 1008

## Physics Principles \& Applications I

- 3 units - semester 1
- 35 lectures, 11 tutorials, $5 \times 3$ hour practical sessions
- 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 three-hour practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Physics, Mathematical Studies, Specialist Mathematics - in exceptional circumstances, high achieving students who have not completed Specialist Maths may be granted exemption on application to Head of Discipline
- 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 Discipline
- 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. $4 \times 3$ hour practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Physics Subject Achievement score of at least 13 (or equivalent), Mathematics Studies
- 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 1200

## Physics IB

- 3 units - semester 2
- 3 lectures, 1 tutorial per week; 5 x three hour practicals
- 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 and Earth Sciences I, PHYSICS 1000A/B Physics I, PHYSICS 1201 Physics for the Life and 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; $5 \times 3$ hour practicals
- Available for Non-Award Study
- Prerequisite: SACE Stage 2 Physics, Mathematical studies - other students may apply to Head of Discipline for exemption
- Assumed Knowledge: PHYSICS 1101 Physics for the Life and Earth Sciences IA
- 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: either PHYSICS 1000A/B Phys I(Pass Div I) or PHYSICS 1100 \& 1200 Physics IA/ IB, either MATHS 1011 \& 1012 Maths IA IB(Pass Div 1) or MATHS 2004 Maths IIM(Pass Div 1) other students may apply to Head of Discipline for exemption
- Corequisite: APP MTH 2000 Differential Equations and Fourier Series; APP MTH 2002 Vector Analysis and Complex Analysis II
- Assessment: class exercises, exam

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.

## PHYSICS 2002

## 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 MATHS 1012 Mathematics IB(Pass Div 1) or MATHS 2004 Mathematics IIM (Pass Div 1), APP MTH 2000 Differential Equations \& Fourier Series; APP MTH 2002 Vector Analysis \& Complex Analysis - other students may apply to Head of Discipline for exemption
- Assumed Knowledge: PHYSICS 1100 Physics IA and PHYSICS 1200 Physics IB
- Restriction: PHYSICS 2000A/B Physics II in 2002 and 2003
- 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, 8 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 Discipline 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: exam, assignments, tests

Wave mechanics with examples from atomic, sub-atomic 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, one-dimensional bound states and scattering, barrier penetration, Pauli principle, field emission, alpha decay, scanning tunnelling microscope, Fermi energy, harmonic oscillator, raising and lowering operators.

## 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 Humanities/Social Sciences
- 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
- Lecture, 3 hour practical per week, 1 tutorial per fortnight
- Prerequisite: PHYSICS 1100 \& 1200 Physics IA/B; 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.

## 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) and B.E.(Aerospace Eng.) students only
- Prerequisite: PHYSICS 1003 Physics IHE \& C\&ENVENG 1001 Statics \& ELEC ENG 1005 Electrical Systems AM, or PHYSICS 1100 \& 1200 Physics IA/B; either MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: PHYSICS 1002 Astronomy I or PHYSICS 1007 Space Science and Astrophysics I
- Assessment: exam, assignments, practical work

Protostars and star formation; stellar interiors and atmospheres; 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 and 1 four-hour practical per week
- Available for Non-Award Study
- Prerequisite: either PHYSICS 1000A/B Physics I (Pass Div 1) or PHYSICS 1100 \& 1200 Physics IA/B; either MATHS 1012 Math IB
(Pass Div 1) or MATHS 2004 Maths IIM (Pass Div 1) - other students may apply to Head of Discipline 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 hour practical per week
- Available for Non-Award Study
- Prerequisite: either PHYSICS 1000A/B Physics I(Pass Div I) or PHYSICS 1100 \& 1200 Physics IA/IB; APP MATH 2002 Vector Analysis and Complex Analysis \& APP MATHS 2000 Diff Equations \& Fourier Series-other students may apply to Head of Discipline for exemption
- Assumed Knowledge: PHYSICS 2100 Physics IIA, PHYSICS 2001 Classical Mechanics II
- Restriction: PHYSICS 2000A/B Physics II
- Assessment: written exam, tests, practical work

Thermodynamics: equilibrium, 1st and 2nd laws, entropy, 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 Electro magnetic Waves. Practical work: electromagnetism and projects.

## PHYSICS 2211

## Electromagnetism II

- 2 units - semester 2
- 24 lectures, 8 tutorials
- Available for Non-Award Study
- Prerequisite: either PHYSICS 1000A/B Physics I(Pass Div I) or PHYSICS 1100 \& 1200 Physics IA/B; APP MTH 2002 Vector Analysis \& Complex Analysis \& APP MATH 2000 Diff Equations \& Fourier Series-other students may apply to Head of Discipline 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: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA or PHYSICS 2004 Introductory Quantum Mechanics \& Applications II \& APP MATHS 2000 Differential Equations \& Fourier Series - other students may apply to Head of Discipline 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 the package Mathematica. It teaches programming procedures such as logical statements, conditional statements, loops and modules and covers basic mathematical methods such as root finding, integration and solving differential equations, 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 visualisation 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
- Assumed Knowledge: APP MTH 2000 Differential Equations \& Fourier Series, APP MTH 2002 Vector Analysis \& Complex Analysis, PHYSICS 2002 Classical Fields \& Mathematical Methods II
- Restriction: PHYSICS 3018 Electromagnetism III, PHYSICS 3019 Physical Optics III

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: either PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B - other students may apply to the Head of Discipline for exemption
- Assessment: laboratory work, 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: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA or PHYSICS 2004 Introductory Quantum Mechanics \& Applications II and APP MATHS 2000 Differential Equations and Fourier Series - other students may apply to Head of Discipline 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; one-dimensional scattering and bound states, unitary Smatrix; 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
- Prerequisite: either MATHS 1012 Maths IB(Pass Div I) or MATHS 2004 Maths IIM(Pass Div I); PHYSICS 2002 Classical Fields \& Math Methods II or PHYSICS 2000A/B in 2002/2003; PHYSICS 2001 Classical Mechs II -other students may apply to Head of Discipline 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; fieldstrength 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 1000A/B Physics I (Pass Div I) or PHYSICS 1100 \& 1200 Physics IA/B, \& MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I) - other students may apply to Head of Discipline for exemption
- Assumed Knowledge: PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B and APP MTH 2000 Differential Equations and Fourier Series
- 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: either PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B - other students may apply to Head of Discipline for exemption
- Assessment: written exam, 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. Cosmic ray acceleration and propagation. Introductory cosmology.

## PHYSICS 3014

## Atmospheric \& Environmental Physics III

- 2 units - semester 2
- 2 lectures per week, approx. 1 tutorial per fortnight
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B - other students may apply to Head of Discipline 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

A program whereby students enrolled in third year B.Sc, B.Sc. (Optics \& Photonics) or B.Sc. (Space Science \& Astrophysics) who have achieved an average credit level in Levels I \& \| 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

A program whereby students enrolled in third year B.Sc, B.Sc. (Optics \& Photonics) or B.Sc. (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
- Available for Non-Award Study
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B - other students may apply to Head of Discipline for exemption
- Assumed Knowledge: APP MTH 2002 Vector Analysis and Complex Analysis
- 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, multi-layer dielectric coatings, polarisation and birefringence.

## PHYSICS 3019

## Physical Optics III

- 2 units - semester 1
- 24 lectures, 4 tutorials
- Eligibility: B.E.(Electrical \& Electronic)/B.Sc(Physics) students only
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B
- Assumed Knowledge: PHYSICS 3018 Electromagnetism III or equivalent, APP MTH 2002 Vector Analysis and Complex Analysis
- Restriction: PHYSICS 3001 Electromagnetism and Optics III, PHYSICS 3018 Electromagnetism III from 2006
- 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, polarisation and birefringence.

Solutions of wave equation, numerical beam propagation, FresnelKirchhoff 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
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 \& 2200 Physics IIA/B; PHYSICS 2009 Photonics II - other students may apply to the Head of Discipline for exemption
- Assessment: exam, continuous assessment of tutorial work

Optical fibres, microstructured optical fibres, fibre Bragg gratings, fibre sensors, optical materials, photonic crystals, interaction of light with matter, time dependent perturbation theory, stimulated and spontaneous emission and absorption, optical gain, Gaussian beams, stability of resonators, pulsed lasers, Q -switching, mode locking, review of common lasers, laser safety.

## 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 III, APP MTH 2000 Differential Equations and Fourier Series, APP MTH 2002 Vector Analysis and Complex Analysis
- Assumed Knowledge: PHYSICS 2004 Introductory Quantum Mechanics and Applications II, or PHYSICS 2100 Physics IIA
- Restriction: PHYSICS 3005 Advanced Quantum Mechanics or PHYSICS 3022 Applied Quantum Mechanics III
- Assessment: exam, assignments

This course extends the formalisation and applicability of quantum mechanics to include time dependent phenomena and various approximation methods. 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. Radiation, external fields. Scattering, partial waves, density matrix, S-matrix.

## PHYSICS 3230

## Photonics IIIP

- 3 units - semester 2
- 2 hour lecture, 1 hour tutorial, 3 hour practical per week
- Eligibility: BSc (Optics and Photonics)
- Assumed Knowledge: PHYSICS 2100 Physics IIA, PHYSICS 2200 Physics IIB, PHYSICS 3018 Electromagetism III
- Restriction: PHYSICS 3020 Photonics III
- Assessment: examination, marked assignments, practicals

Interaction of light with matter, time dependent pertubation theory, stimulated and spontaneous emission and absorption; lasers, 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, optimum output coupling, injection-locking, frequency stabilisation, pulsed lasers, gain switching, Q-switching, injection-seeding, transform limit, pulse chirping, mode-locked lasers; semiconductor lasers, fibre lasers, fibre Bragg gratings, fibre couplers, WDM's. Lasers: ruby, chemical, solid state, dye, excimer, ion, CO2. Laser safety. Photonics practical work.

## 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 Discipline required for entry into Honours
- Assessment: project, report

Potential participants are advised to see Head of Discipline 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 Discipline.

## PHYSICS 4001

## Honours Mathematical Physics

- 24 units - full year
- Prerequisite: 5 Level III Mathematical Physics courses and other Level III Science or Mathematical Sciences courses
- Assessment: exams, project

Students considering this course should see the Head of Discipline 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 and 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 (Biomedical Science) or previously offered courses with significant overlap
- Assessment: written exams, practical assessments

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 semesterlength 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; Level I Biology; Level I Physics
- Restriction: PHYSIOL 2201 Human Physiology IIB (Biomedical Science) or previously offered courses with significant overlap
- Assessment: written exams, practical assessments

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 semesterlength 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 only
- 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 previously offered courses with significant overlap
- Assessment: end of semester written exam, practical assessments

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 human-based 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 only
- 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 (Biomedical Science); Level 1 Biology, Chemistry and Physics
- Restriction: PHYSIOL 2003 Human Physiology IIB: Homeostasis \& the Nervous System or previously offered courses with significant overlap
- Assessment: end of semester written exam, practical assessments

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 four-hour practicals a week
- Available for Non-Award Study
- Prerequisite: 8 units of Level 2 Physiology
- Restriction: PHYSIOL 3102 Human Physiology IIIB (Biomedical Science) or equiv.
- Assessment: 3 written exams, research project - components include laboratory performance, background literature survey, research proposal \& critique of published scientific manuscript

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: the physiology of energy balance and the pathophysiology of obesity and diabetes; cardiorespiratory function, the impressive integration that occurs within the cardiorespiratory system during exercise; the range of physiological mechanisms which may contribute to the development of high blood pressure, heart arrhythmias and heart failure; the integrative physiology of the endocrine stress response; growth and development with a focus on the recent 'Early Origins of Adult Disease' hypothesis which highlights the association between being small at birth and an increased incidence of the metabolic syndrome in adult life. 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.

## 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 (Biomedical Science) or equiv.
- Assessment: exams, essays

This course consists of 2 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 the neural control of human movement. Issues that will be covered in depth include sensation, special senses and advanced neuromuscular physiology with emphasis on the peripheral and central control of movement, biological rhythms and sleep. The Physiology in Action practical stream involves a research project supported by a series of workshops and tutorials which are designed to develop your research skill base. 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 3102

## Human Physiology IIIA (Biomedical Science)

- 6 units - semester 1
- 3 lectures, 4 hour practical, 4 hour PBL tutorial per week
- Eligibility: BSc (Biomedical Science) students only
- Prerequisite: 8 units Level 2 Human Physiology
- Restriction: PHYSIOL 3001 Neurobiology III or equiv.
- Assessment: written exams for lecture streams; research project includes written assignments, 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. The latter is derived in the Biomedical Research Unit, which consists of a two-semester practical project based in a working research laboratory and a problem based learning (PBL) component. Students use PBL to 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 PBL tutorial per week
- 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. The latter is derived in the Biomedical Research Unit, which consists of a two-semester practical project based in a working research laboratory and a problem based learning (PBL) component. Students use PBL to 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 two 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
- 2 lectures, 1 tutorial, 3 hours practical work a week
- Assumed Knowledge: SACE Stage I Chemistry
- Assessment: exam 70\%, practicals 30\%

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
- 3 lectures, 4 hours practical/tutorial per week
- 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 60\%, practical exercises 15\%, project work 15\%, tutorials 10\%

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
- 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 60\%, practical exercises 30\%, tutorials 10\%

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.

## Level III

## PLANT SC 3002WT

## Biotechnology in the Food and Wine Industries

- 2 units - semester 1
- Assumed Knowledge: BIOCHEM 2106 Biochemistry IIA (Agriculture) or equivalent
- Assessment: practical reports 30\%, presentation $10 \%$, written exam 60\%

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, non-alcoholic 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
- Up to 6 hours per week (includes lectures, practicals, visits)
- Prerequisite: PLANT SC 2001WT Agricultural Botany, ENV BIOL 2006 Botany II or VITICUL 2002WT Viticultural Science or APP ECOL 1003RW Biology of Plants and Animals; or equivalent
- Assessment: exam $50 \%$, practical reports $40 \%$, reviews, essays 10\%

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, genetic control of adaptation to nutrient limitations in soils, the role of symbiotic dinitrogen fixation, nutritional aspects of nitrogen fixation. A practical component supplements the lectures by providing hands on experience of the important issues.

## PLANT SC 3007WT

## Introductory Plant Breeding

- 3 units - semester 1
- 2 lectures, 4 hours practicals a week
- Assumed Knowledge: ANIML SC 2029WT Genes and Inheritance or GENETICS 2000A/B Genetics II or APP ECOL 1004RW Cell Biology and Genetics
- Restriction: PLANT SC 3007WT Introductory Plant and Animal Breeding
- Assessment: to be advised

This course provides an introduction to the principles of plant breeding and their application to plant improvement in broadacre agriculture and horticulture. The lectures will cover the various steps in the development of a new cultivar, from the initial stages of defining objectives and breeding strategies to the commercial development of superior germplasm. The fundamental concepts of plant breeding that will be discussed include: genetic diversity and modes of inheritance; strategies for setting objectives and maximising selection and improvement of key traits; breeding methodologies for self and cross pollinated plants and perennials, field evaluation of germplasm, cultivar release and recommendations. Some of the recent trends in plant breeding, such as the applications of new technologies and the growing importance of intellectual property will also be discussed. The course is essential for students wanting to pursue a career in plant breeding or who will be involved in areas of agriculture and horticulture that involve making recommendations on varieties.

## PLANT SC 3009WT

## Plant Molecular Biology

- 6 units - semester 2
- 3 lectures, 1 tutorial, 4 hours practicals per week, 4 hours noncontact project time
- Prerequisite: BIOCHEM 2106 Biochemistry II (Biotechnology) A, ANIML SC 2029WT Genes and Inheritance or BIOCHEM 2000A/B Biochemistry II or equivalent at credit level
- Assessment: practicals $20 \%$, tutorial projects $10 \%$, research planning \& review $20 \%$, final exam $50 \%$

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 3018WT

## Advanced Plant Breeding

- 3 units - semester 2
- Prerequisite: PLANT SC 3007WT Introductory Plant and Animal Breeding or PLANT SC 3007WT Introductory Plant Breeding
- Restriction: PLANT SC 3018WT Advanced Plant and Animal Breeding
- Assessment: to be advised

This course builds on the ideas presented in Introductory Plant Breeding. The course aims to provide the necessary theoretical and practical background for students who are interested in pursuing plant breeding as a career or who want to learn about plant breeding in detail. The course covers the following areas: analysis of GxE interactions, breeding for quality characteristics including breeding for improved nutritive value of staple foods, breeding for disease resistance, breeding to address environmental problems such as salinity and the application of molecular markers to breeding. The international nature of plant breeding will be highlighted. There will be a number of field excursions and industry visits during the course to demonstrate the principles discussed in the lectures.

## PLANT SC 3022WT

## Research Project Plant and Pest Science

- 3 units - semester 1 or 2
- Prerequisite: relevant level II course offered by Plant and 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 Pest 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 3130WT

## Plant Pathology

- 3 units - semester 1
- 2 lectures, 4 hours of practical/tutorial per week
- 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 60\%, practical exercises 25\%, critical review 5\%, mini-internship 10\%

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.

## Honours

## PLANT SC 4003WT

## Honours Plant Science (B.Ag.Sc.)

- 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 by Discipline relevant to proposed research project and approved by Head of Discipline (at discretion of Head, a relevant course taught by another discipline may be accepted)
- Assessment: average of four Level III courses 40\%, research project - research proposal, seminar, thesis and viva voce 60\%

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 Pest and Plant 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 4010AWT

## Honour Plant Breeding B

- 9 units - full year
- Assessment: To be advised

Planning of the final year research project including preliminary field and laboratory work

## PLANT SC 4012AWT

## Honours Plant and Pest Science (B.Sc.)

- 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 Pest 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 (B.Ag.)

- 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 Pest 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\%

The 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 place 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, globalisation, security and sovereignty. The course concludes with an examination of new debates in gender and the global environment, and Australia's place in a turbulent region and a globalising world.

## POLI 1103

## Justice, Liberty, Democracy: Debates \& Directions

- 3 units - semester 2
- 3 contact hours per week
- Available for Non-Award Study
- Assessment: Participation 10\%, 1200-1500 word essay 30\%, 2500-3000 word essay $60 \%$

This course will introduce students to some of the basic issues involved in the relationship between citizens, the state and the law in a contemporary liberal-democracy such as Australia. The central theme will be the question of what constitutes the operations of a liberal-democratic system, with a focus on civil society as well as the state, and with due consideration given to the international aspect. Areas to be considered and which will form the basis both of lectures and tutorial work may include: human nature and politics, liberal-democracy, the rule of law and individual liberty, the public/private dichotomy, the nation-state and sovereignty, Foucault and governmentality, civil society and the family, justice and the penal system, equality, participation and social movements, post-colonialism and theories of difference.

## 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 nontraditional ways to compare nations, such as comparing what they chose to remember - and forget - about their pasts.

## Level II

## POLI 2002

## Comparative Politics

- 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 $50 \%$, 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, interdisciplinary 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 2005

## Understanding Modern Europe

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Contemporary Europe A
- Assessment: 1200-1500 word minor essay 25\%, 2500-3000 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 2006

## International Justice and Society

-4 units - semester 1

- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1500-2000 word essay 35\%, 3000-3500 word essay $55 \%$, tutorial participation $10 \%$

Should only legitimate and just states be allowed to be autonomous? What is a legitimate state? What is a nation? Do nations within multi-nation states have rights? In recent times the principle of non-interference that has been at the heart of international law since the mid-seventeenth century has been increasingly challenged. This course takes the concept of sovereignty as its central theme and examines whether it remains a viable and relevant basis for international organisation in the new millennium. How might outsiders justify interference in the internal affairs of other nations and states? Is war ever just? Are the moral obligations we owe to all people in the world the same as those we owe to our fellow nationals? How should we respond to the plight of refugees? Do universal values and human needs exist? Or
are values relative to each culture? In exploring the issues raised by these questions and others, this course examines the role of human rights in international law, war crimes tribunals, just war theory, the United Nations, proposals for future global governance, nationalism, national identity and international ethics.

## POLI 2009

Justice, Virtue and the Good

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: History of Political Thought (A)
- Assessment: 1500 word essay 30\%, 3000 word essay 50\%, tutorial work 20\%

This course explores the concepts of justice, virtue and the good life as developed in selected classic texts of Western political theory. Key themes to be examined include: justice and equality in classical thought; the origins and aims of political community; 'knowing' versus 'feeling' the good; gender and moral virtue; iniquity, vice and evil; freedom and obligation.

## POLI 2010

## Modern Political Theory

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: History of Political Thought (B)
- Assessment: tutorial participation 10\%, 1500 word essay $30 \%$, 3000 word essay $60 \%$

This course will introduce students to the ideas, thinkers and classic texts of modern Western political thought. Beginning with the landmark works of Thomas Hobbes and John Locke, the lectures and readings will examine theories of secular society and democratic political institutions as a revolutionary parallel to the Enlightenment and the rise of modern science.

## POLI 2013

## Culture, Globalisation and Power

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Culture and Imperialism II/III prior to 1999
- Assessment: coursework, tutorial participation

This course will aim at a study of the post-colonial world and of the effects of imperialism upon the development of culture and ideology.

A key theoretical perspective will be that deriving from works of Edward Said, in particular, Orientalism and Culture and Imperialism. The course will be wide-ranging in its scope and will take examples from both the developed and the developing world. However, a prime area of study will be the countries of the African continent.

## POLI 2016

## Current Debates in Political Thought

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: seminar participation 10\%, $2 \times 2500$ word essays 90\%

What does justice mean in the increasingly plural and multicultural societies that characterise most Western states in the new millennium? Should we have a neutral state that acts as an umpire between competing ways of life or do societies require some common values and conception of the good life to maintain cohesiveness? Do we need to accommodate and affirm cultural differences in our public policies and laws or is it sufficient to leave people free to pursue their distinctive ends within the limits of a common legal framework? These questions have been at the heart of contemporary political theory as we have seen a move away from universal theories of justice toward various attempts to accommodate difference, and yet, this new orthodoxy is now increasingly under attack. In tracing these debates, this course examines different conceptions of the individual and community, cultural membership, multiculturalism, nationalism, cosmopolitanism, citizenship, indigenous rights and co-sovereignty, representation, and the role of virtues and emotions in political thought. The course is designed to provide students with both a grounding in contemporary political theory and the opportunity to develop further their skills to reflect, analyse and argue critically by focusing on the primary texts of contemporary thinkers.

## POLI 2017

## Passion and Interests: The History of Greed

-4 units - semester 2

- 3 contact hours per week
- Prerequisite: 6 units Level 1 Humanities/Social Sciences
- Assessment: 1500-1800 word tutorial paper 30\%, 3000-3500 word essay $60 \%$, tutorial participation $10 \%$

The course is about self-interest. It attempts to solve the puzzle of how greed made its transformation from a Deadly Sin (avarice) to a cool virtue? How could Gordon Gecko seduce his audience so easily in Wall Street with his 'Greed is Good' speech? How did we get here?

The course will focus on seventeenth, eighteenth and nineteenth century responses to the emergence of market society (capitalism)
and will trace the demise of feudal and Renaissance idealism and the emerging 'bourgeois' mentality of the enlightenment era. The transformation of commercial activity from a base occupation to its culmination as a 'calling' is explored as part of an intellectual history of the legitimation of self interest. This history will cover, among other things: the division of labour; capitalism and the market; individualism; pre-commercial and market virtues; classical and modern communitarianism; and classical political economy. Important critics of self-interest will also be included. The course will conclude with a close study of the film Wall Street. Featured thinkers include: Niccolo Machiavelli; Thomas Hobbes, Bernard Mandeville, Adam Smith, Karl Marx, Max Weber, Milton Keynes, Frederick von Hayek and Francis Fukuyama.

## POLI 2018

## Environmental Politics

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level 1 Humanities/Social Sciences
- Assessment: $2 \times 3000$ 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 policy-making 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 2019

## Media, Identity and Politics

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1500-1800 word tutorial paper 15\%, 3000-3700 word essay $60 \%$, tutorial participation $10 \%$, presentation $15 \%$

Audience identification is eagerly sought by every form of media from news to advertising, from soaps to football, such identification centres on constructions of imagined identities that may appear more 'real', more powerful and more exciting than one's everyday self. The course will explore the increasing influence of mediated images in contemporary identity construction. It will examine gendered, classed and racialised identities presented through a range of contemporary mainstream media and popular culture, documentary and news media examples. These will include examples such as: the increasingly mediated nature of party politics and the growing emphasis on personalities in political reporting; images of the 'worker' and the consumer in popular television programs such as The Office or Kath and Kim; constructions of political identity in documentaries such as Fahrenheit 9/11, Letters to Ali; the construction of gendered identities in soaps such as Desperate Housewives and in television (make-over) shows such as Queer Eye for the Straight Guy and Extreme Makeover. Students will analyse and interpret the ways mainstream and popular media invite audience identification with 'real' political characters, fictional characters and/or celebrities, and political positions in the case of documentaries, and consider the implications of this for the construction of identity.

## POLI 2030

## Conflict and Change: Contemporary African Politics

- 4 units - not offered in 2006
- 3 contact hours per week
- Prerequisite: 6 units Level 1 Humanities/Social Sciences
- Assessment: tutorial participation 20\%, first essay 30\%, second essay 50\%

In considering the politics of the newly independent states of Africa, two features stand out: conflict and the speed and spread of change (often sudden and unexpected). This course explores the post-colonial predicaments which the nation-states of Africa have endured and continue to experience. It is, at its core, about understanding the dilemmas of modernisation and the manner in which African states negotiate their way through complexities that have grown out of the colonial experience. The 'developed' political process based on a multi-party system as an essential feature of constitutional democracy had been, in some African states, viewed as incompatible with African needs and aspirations: thus, the rise of the 'democratic one-party state'. The 1990s have renewed
debates about governance and politics in a number of African countries. Yet, in other cases, the state has collapsed in the wake of political conflict and/or economic crises - as in the case of Rwanda or the Democratic Republic of the Congo. Hence, initial theoretical and empirically-based interpretations have proven vulnerable in the face of change. This course, then, will expose students to some major patterns of contemporary politics in Eastern, Southern and Central Africa.

## POLI 2031

## Global Environments:Security, Resistance, Survival

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: $2 \times 3000$ word papers 50\% each, satisfactory completion of oral presentation in tutorial setting

This course investigates the rapidly burgeoning academic and activist fields devoted to three concepts and practices: i) environmental justice, ii) human and environmental security, and, iii) environmental resistance. Calls for environmental justice include: equity in the distribution of environmental goods, ills and risks; recognition of the diversity of the participants and experiences in affected communities; the protection of community capabilities and functioning; and participation in the political processes which create and manage environmental policy. The concept of environmental security is equally diverse in its meaning: it includes the traditional, conflict-based, statist frameworks which view environmental stress as an additional threat to peace and stability; the securitisation of the environment by nation-states; and, then, more innovative interpretations which envision it as a lynchpin of cooperative models of regional and global security, with the potential to secure access for all people to fulfil their basic needs for survival - a security to practice a diverse range of livelihoods. Most calls for global environmental justice and security come from new social movements involved in environmental resistance. These movements are radical challengers to business and politics-as-usual across the earth. This course investigates these struggles, providing detailed accounts from both majority and minority world cultures.

## POLI 2061

## Sex, Gender and Politics

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- 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 2062

## State of the World

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: tutorial participation $25 \%, 1800$ word essay $30 \%$, 3000-3500 word essay $45 \%$

This course takes its point of departure from the annual reviews of the State of the World issued by international agencies and nongovernment organisations (NGOs) such as the World Bank, UNICEF, the Worldwatch Institute, Amnesty International and so forth. The course focuses upon the state of the world's most vulnerable groups, women and children, indigenous peoples, the ultra-poor as well as the environment and upon their efforts to secure material improvement and social justice. Tutorials will examine contemporary issues in the Third World such as the desires and priorities of poor working women, the causes and cures of severe hunger and famine, the help and harm done by multinational corporations, the relationships between poor people and rainforests, the causes of the African crisis, the role of major international agencies such as the World Bank, the motivations behind and consequences of foreign aid and the impact of NGOs. Above all, the course looks at the efforts and activities undertaken by ordinary people around the globe to transform their lives.

## POLI 2071

## Issues In Australian Politics

- 4 units - semester 2
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- 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 2079

## Politics, Power and Popular Culture

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Assessment: 1500 word essay $30 \%, 3500$ word essay $60 \%$, tutorial participation 10\%

The 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. The course will examine, from a uniquely political perspective, issues of gender, race, class and ethnicity in several different genres; television, sport, film, theatre, art and literature.

## POLI 2081

## Post-Cold War International Relations

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- 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: globalisation and the impact of growing economic inequality, 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 2092

## Problems and Policy in Australia

- 4 units - semester 1
- 3 contact hours per week
- Prerequisite: 6 units Level I Humanities/Social Sciences
- Restriction: Problems, Policy and Australian Politics
- 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, domestic violence, environmental degradation, racism, and a declining birth rate, among others. Policy makers are portrayed as engaged in attempts to address these problems. By asking how policy proposals give social problems a particular shape, this course offers a new way to think about political processes. It directs attention to competing representations of social problems and what follows from these. After doing this course you may never read a newspaper the same way again!

## Level III

## POLI 3002

## Comparative Politics

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- 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, interdisciplinary 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 3005

## Understanding Modern Europe

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Contemporary Europe A
- Assessment: 1800-2200 word essay 25\%, 3500-4500 word 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 3006

## International Justice and Society

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: POLI 2006 International Justice and Society
- Assessment: 2000-2500 word essay 35\%, 4000-4500 word essay $55 \%$, participation $10 \%$

Should only legitimate and just states be allowed to be autonomous? What is a legitimate state? What is a nation? Do nations within multi-nation states have rights? In recent times the principle of non-interference that has been at the heart of international law since the mid-seventeenth century has been increasingly challenged. This course takes the concept of sovereignty as its central theme and examines whether it remains a viable and relevant basis for international organisation in the new millennium. How might outsiders justify interference in the internal affairs of other nations and states? Is war ever just? Are the moral obligations we owe to all people in the world the same as those we owe to our fellow nationals? How should we respond to the plight of refugees? Do universal values and human needs exist? Or are values relative to each culture? In exploring the issues raised by these questions and others, this course examines the role of human rights in international law, war crimes tribunals, just war theory, the United Nations, proposals for future global governance, nationalism, national identity and international ethics.

## POLI 3009

Justice, Virtue and the Good

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: History of Political Thought (A)
- Assessment: 2000 word essay $30 \%, 4000$ word essay $50 \%$, tutorial work 20\%

This course explores the concepts of justice, virtue and the good life as developed in selected classic texts of Western political theory. Key themes to be examined include: justice and equality in classical thought; the origins and aims of political community; 'knowing' vs 'feeling' the good; gender and moral virtue; iniquity, vice and evil; freedom and obligation.

## POLI 3010

## Modern Political Theory

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/ Social Sciences
- Restriction: History of Political Thought (B)
- Assessment: tutorial participation 10\%, 2000 word essay $30 \%$, 4000 word essay $60 \%$

This course will introduce students to the ideas, thinkers and classic texts of modern Western political thought. Beginning with the landmark works of Thomas Hobbes and John Locke, the lectures and readings will examine theories of secular society and democratic political institutions as a revolutionary parallel to the Enlightenment and the rise of modern science.

## POLI 3013

Culture, Globalisation and Power

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Culture and Imperialism II/III prior to 1999
- Assessment: coursework, tutorial participation

This course will aim at a study of the post-colonial world and of the effects of imperialism upon the development of culture and ideology. A key theoretical perspective will be that deriving from works of Edward Said, in particular, Orientalism and Culture and Imperialism. The course will be wide-ranging in its scope and will take examples from both the developed and the developing world. However, a prime area of study will be the countries of the African continent.

## POLI 3016

## Current Debates in Political Thought

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: POLI 2016 Current Debates in Political Thought
- Assessment: seminar participation $10 \%, 2 \times 3000-3500$ word essays $90 \%$

What does justice mean in the increasingly plural and multicultural societies that characterise most Western states in the new millennium? Should we have a neutral state that acts as an umpire between competing ways of life or do societies require some common values and conception of the good life to maintain cohesiveness? Do we need to accommodate and affirm cultural differences in our public policies and laws or is it sufficient to leave people free to pursue their distinctive ends within the limits of a common legal framework? These questions have been at the heart of contemporary political theory as we have seen a move away from universal theories of justice toward various attempts to accommodate difference, and yet, this new orthodoxy is now increasingly under attack. In tracing these debates, this course examines different conceptions of the individual and community, cultural membership, multiculturalism, nationalism, cosmopolitanism, citizenship, indigenous rights and co-sovereignty, representation, and the role of virtues and emotions in political thought. The course is designed to provide students with both a grounding in contemporary political theory and the opportunity to develop further their skills to reflect, analyse and argue critically by focusing on the primary texts of contemporary thinkers.

## POLI 3017

## Passion and Interests: The History of Greed

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2000-2500 word tutorial paper 30\%, 4500-5000 word essay $50 \%$, tutorial participation $10 \%$

This course is about self-interest. It attempts to solve the puzzle of how greed made its transformation from a Deadly Sin (avarice) to a cool virtue? How could Gordon Gecko seduce his audience so easily in Wall Street with his 'Greed is Good' speech? How did we get here?

The course will focus on seventeenth, eighteenth and nineteenth century responses to the emergence of market society (capitalism) and will trace the demise of feudal and Renaissance idealism and the emerging 'bourgeois' mentality of the enlightenment era. The transformation of commercial activity from a base occupation to its culmination as a ?calling? is explored as part of an intellectual
history of the legitimation of self interest. This history will cover, among other things: the division of labour; capitalism and the market; individualism; pre-commercial and market virtues; classical and modern communitarianism; and classical political economy. Important critics of self-interest will also be included. The course will conclude with a close study of the film Wall Street. Featured thinkers include: Niccolo Machiavelli; Thomas Hobbes, Bernard Mandeville, Adam Smith, Karl Marx, Max Weber, Milton Keynes, Frederick von Hayek and Francis Fukuyama.

## POLI 3018

## Environmental Politics

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: $2 \times 4500$ 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 policy-making 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 3019

## Media, Identity and Politics

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2500-3000 word tutorial paper 15\%, 5000-5500 word essay $60 \%$, tutorial participation $10 \%$, presentation $15 \%$

Audience identification is eagerly sought by every form of media from news to advertising, from soaps to football, such identification centres on constructions of imagined identities that may appear more 'real', more powerful and more exciting than one's everyday self. The course will explore the increasing influence of mediated images in contemporary identity construction. It will examine gendered, classed and racialised identities presented through a range of contemporary mainstream media and popular culture, documentary and news media examples. These will include examples such as: the increasingly mediated nature of party politics and the growing emphasis on personalities in political reporting; images of the 'worker' and the consumer in popular television programs such as The Office or Kath and Kim; constructions of political identity in documentaries such as Fahrenheit $9 / 11$, Letters to Ali; the construction of gendered identities in soaps such as Desperate Housewives and in television (make-over) shows such as Queer Eye for the Straight Guy and Extreme Makeover. Students will analyse and interpret the ways mainstream and popular media invite audience identification with 'real' political characters, fictional characters and/or celebrities, and political positions in the case of documentaries, and consider the implications of this for the construction of identity.

## POLI 3030

## Conflict and Change: Contemporary African Politics

- 6 units - not offered in 2006


## - 3 contact hours per week

- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: tutorial participation 20\%, first essay 30\%, second essay 50\%

In considering the politics of the newly independent states of Africa, two features stand out: conflict and the speed and spread of change (often sudden and unexpected). This course explores the post-colonial predicaments which the nation-states of Africa have endured and continue to experience. It is, at its core, about understanding the dilemmas of modernisation and the manner in which African states negotiate their way through complexities that have grown out of the colonial experience. The 'developed' political process based on a multi-party system as an essential feature of constitutional democracy had been, in some African states, viewed as incompatible with African needs and aspirations: thus, the rise of the 'democratic one-party state'. The 1990s have renewed debates about governance and politics in a number of African countries. Yet, in other cases, the state has collapsed in the wake of political conflict and, or, economic crises - as in the case of Rwanda or the Democratic Republic of the Congo. Hence, initial theoretical and empirically-based interpretations have proven vulnerable in the face of change. This course, then, will expose students to some major patterns of contemporary politics in Eastern, Southern and Central Africa.

## POLI 3031

## Global Environments:Security, Resistance, Survival

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: $2 \times 4500$ word papers $50 \%$ each, satisfactory completion of oral presentation in tutorial setting

This course investigates the rapidly burgeoning academic and activist fields devoted to three concepts and practices: i) environmental justice, ii) human and environmental security, and, iii) environmental resistance. Calls for environmental justice include: equity in the distribution of environmental goods, ills and risks; recognition of the diversity of the participants and experiences in affected communities; the protection of community capabilities and functioning; and participation in the political processes which create and manage environmental policy. The concept of environmental security is equally diverse in its meaning: it includes the traditional, conflict-based, statist frameworks which view environmental stress as an additional threat to peace and stability; the securitisation of the environment by nation-states; and, then, more innovative interpretations which envision it as a lynchpin of cooperative models of regional and global security, with the potential to secure access for all people to fulfil their basic needs for survival - a security to practice a diverse range of livelihoods. Most calls for global environmental justice and security come from new social movements involved in environmental resistance. These movements are radical challengers to business and politics-as-usual across the earth. This course investigates these struggles, providing detailed accounts from both majority and minority world cultures.

## POLI 3061

## Sex, Gender and Politics

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- 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, yet thorough guide to the whole field through an investigation of its major frameworks and debates.

## POLI 3062

## State of the World

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: tutorial participation 25\%, 2500 word essay 30\%, 4500-5000 word essay 45\%

This course takes its point of departure from the annual reviews of the State of the World issues by international agencies and nongovernment organisations (NGOs) such as the World Bank, UNICEF, the Worldwatch Institute, Amnesty International and so forth. The course focuses upon the state of the world's most vulnerable groups, women and children, indigenous peoples, the ultra-poor as well as the environment and upon their efforts to secure material improvement and social justice. Tutorials will examine contemporary issues in the Third World such as the desires and priorities of poor working women, the causes and cures of severe hunger and famine, the help and harm done by multinational corporations, the relationships between poor people and rainforests, the causes of the African crisis, the role of major international agencies such as the World Bank, the motivations behind and consequences of foreign aid and the impact of NGOs. Above all, the course looks at the efforts and activities undertaken by ordinary people around the globe to transform their lives.

## POLI 3071

## Issues in Australian Politics

- 6 units - semester 2
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences

Assessment: tutorial paper $30 \%$, essay $60 \%$, class contribution/ attendance 10\%

This course covers key issues for the 21 st 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 3079

## Politics, Power and Popular Culture

- 6 units - semester 1
- 3 contact hours per week
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 2500 word essay $30 \%, 5000$ word essay $60 \%$, tutorial participation 10\%

The 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. The course will examine, from a uniquely political perspective, issues of gender, race, class and ethnicity in several different genres television, sport, film, theatre, art and literature.

## 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 globalisation and the impact of growing economic inequality, 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 1
- 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

This course enables a small number of students to spend a semester in a research-based placement within a law related area in the South Australian public sector or a non-government agency.

Students spend time working on a defined research task under the joint supervision of a host supervisor and the academic convenor. By the end of the academic year, students write a report (about 7000 words) giving an account of the research project undertaken during the internship. Please note that due to the limited numbers of placements, entry to this course is by quota, based on academic merit. All students wishing to be considered for a placement should ensure that they have enrolled by 30 April.

## POLI 3083

## South Australian Parliamentary Internship

- 6 units - semester 2
- 40 hours
- Quota will apply
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Assessment: 7000-8000 word major research paper

This course enables students to gain first hand experience of working with a Member of the Parliament of South Australia on a research-based placement. During the course of their internship, students complete a short academic orientation to their role and a series of seminars that deal with relevant issues. They then spend time working on a defined research task under the joint supervision of a host MP and the academic convenor. By the end of the academic year, students write a detailed research report giving an account of the research project undertaken during the internship. Please note that due to the limited numbers of placements, entry to this course is by quota, based on academic merit. All students wishing to be considered for a placement should ensure that they have enrolled by 30 April. There may also be a small number of placements in the South Australian public sector or a nongovernment agency as part of this program.

## POLI 3085

## South Australian Internship Program - Law

- 4 units - semester 1 or 2
- 40 hours
- Prerequisite: LAW 1001 Introduction to Australian Law, LAW 1004 Law of Contract, LAW 1002 Law of Torts
- Assessment: 5000 word essay

Students spend a semester as interns working within a law-related area of the South Australian public sector while completing an agreed research task. A semester series dealing with these institutions and their place in the broader legal and political system, will run in conjunction with the research project.

## POLI 3087

## South Australian Internship Scheme

- 6 units - semester 2
- 3 contact hours per week
- Quota will apply
- Prerequisite: 8 units Level II Humanities/Social Sciences
- 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 short time as 'interns' working within specified areas of the South Australian public sector, while completing an agreed research task. Students will be allocated placements from among a range of offerings which include members of State parliament, public service departments, statutory authorities and other nongovernment organisations.

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 in Australia

- 6 units - semester 1
- 3 contact hours per week or equivalent
- Prerequisite: 8 units Level II Humanities/Social Sciences
- Restriction: Problems, Policy and Australian Politics
- 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, domestic violence, environmental degradation, racism, a declining birth rate, among others. Policy makers are portrayed as engaged in attempts to address these problems. By asking how policy proposals give social problems a particular shape, this course offers a new way to think about political processes. It directs attention to competing representations of social problems and what follows from these. After doing this course you may never read a newspaper the same way again!

## 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) 5,000-6,000 words each $25 \%$ each, $15000-18,000$ 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 only
- Restriction: Person, Culture and Medicine IA and 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 three-hour seminar/tutorial blocks.

## Level II

## PSYCHIAT 2002

## Emotion Culture and Medicine II

- 4 units - semester 2
- Eligibility: MBBS, B.HIth.Sc, B.Psych.(Hons) students only
- Restriction: Emotion, Culture and Medicine IIA and IIB
- Assumed Knowledge: PCM I may be advantageous
- 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 4000HO

## 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 form 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 report-writing and the ethical principles underlying psychological research and practice.

## PSYCHOL 1001

## Psychology IB

- 3 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 form 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 report-writing and the ethical principles underlying psychological research and practice.

## Level II

## 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 equivalent
- 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 computer-based 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 a majority of 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 divers 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 divers 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.

## Level III

## PSYCHOL 3000

## Psychological Research Methodology III

- 4 units - semester 1
- 2 lectures/week, practical work in computing \& statistics, 6 tutorials
- 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: statistical computing practical $33.3 \%$, written exam 66.7\%

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 Bayesian 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.

## PSYCHOL 3003

## Developmental Psychology III

- 2 units - semester 2
- 1 lecture/week; 3 tutorials, 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 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) age-related 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/week; 3 tutorials, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA, PSYCHOL 2003 Psychology IIB; and 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/week; 3 tutorials, 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 subject matter of this course mainly derives from the discipline of psychophysiology. Psychophysiologists 'unobtrusively' measure physiological responses whilst manipulating or observing some psychological process, with the aim of better understanding the relationship between mind and body. The course will present an overview of the human nervous system and a survey of systemic psychophysiology, for example, electroencephalography. There will then be some consideration of conceptual and inferential issues for example, polygraphic lie-detection. Finally, there will be lectures on connectionist models of the neural bases of behaviour.

## PSYCHOL 3009

Metapsychology: Psychology, Science, Society III

- 2 units - semester 1
- 1 lecture/week, 3 tutorials, practical work
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA and 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 1
- 1 lecture/week; 3 tutorials, 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 2

- 1 lecture per week, 3 tutorials, 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 2
- 1 lecture per week; 3 tutorials, 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
- Check with School for Non-Award Study
- Prerequisite: PSYCHOL 2002 Psychology IIA and 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/week; 3 tutorials, 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/week; 3 tutorials, 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.

## Honours

## PSYCHOL 4000

## Honours Psychology

- 24 units - full year
- Prerequisite: see Department 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 Department or consult the Department'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 Department or other person nominated by the Department 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

- Eligibility: B.Hlth.Sc, \& B.Psych.(Hons) students only
- 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
- Eligibility: B.Hlth.Sc, \& B.Psych.(Hons) students only
- 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 I and the more advanced treatment of theories and practice covered in Public Health Inquiry II and Public Health and Practice III.

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 3101HO

## Aboriginal Health Policy IIIHS

- 6 units - semester 2
- 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 3104HO

## Epidemiology of Infectious Diseases IIIHS

- 6 units - semester 2
- 3 hours lectures/tutorials/practicals/seminars per week
- Eligibility: 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 \& 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 3106HO

## Health Promotion IIIHS

- 6 units - semester 1
- 3 hours lectures/tutorials/practicals/seminars per week
- Eligibility: 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
- 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/practicals/seminars per week
- Eligibility: 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
- 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 re-emergence of old diseases. Local environmental health issues will be considered as examples of global environmental health problems.

## PUB HLTH 3109HO

## Introduction to Epidemiology \& Biostatistics IIIHS

- 6 units - semester 1
- 3 hours lectures/tutorials/practicals/seminars per week
- Eligibility: 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
- Assessment: To be advised

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 give 'undifferentiated' public health workers an introduction to 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 uses that are made of epidemiological information in public health; 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 3112HO

## Public Health Law IIIHS

- 6 units - Not offered in 2006
- 2 hours lectures/tutorials/practicals/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 2006
- 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 3116HO

## Health Program Evaluation IIIHS

- 6 units - Not offered in 2006
- 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 only
- 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: By permission from Head of Department 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, meta-analysis, 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 3119HO

## Public Health Internship III

- 6 units - semester 2
- 3 hour seminar
- Eligibility: B.HIth.Sc, \& B.Psych.(Hons) students only
- Quota will apply based on marks in PUB HLTH 1001 Public Health 1A, PUB HLTH 1002 Public Health 1B and PUB HLTH 2000 Public Health Inquiry II or PUB HLTH 2001 Public Health Sciences II
- Prerequisite: PUB HLTH 2000 Public Health Inquiry II, or 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 Commonwealth Department of Health and Ageing, the South Australian Department of Human Services, 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 3120HO

## 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 only
- 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 only
- 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 qualitative 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-bystep 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.

## Honours

## PUB HLTH 4000HO

## 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.

## PUB HLTH 4005HO

## Combined Honours Public Health \& Philosophy

- 24 units - full year
- Eligibility: B.Med.Sc. students. appropriately qualified B.HIth.Sc students, or permission of Head of Department
- Assessment: to be advised at start of year.


## 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
- Restriction: Issues and Techniques in the Social Sciences
- Assessment: workshops 60\%, exam 40\%

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, with a focus on Australian census data. 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, in line with the practical component of this course which incorporates a series of computer workshops.

## SOIL \& 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. This 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 soi 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.

## SOIL\&WAT 1102WT

## Land and Environmental Management

- 3 units - semester 1
- 2 lectures, 1 tutorial, 2 hours practical, some field trips in lieu of tutorials \& practicals
- Restriction: AGRIC 1000RW Perspectives on Modern Agriculture
- Assessment: assignments, exams

This course introduces students to some of the major issues in land and environmental management in Australia today including land degradation and rehabilitation, water resource management,
biodiversity and conservation of natural ecosystems, invasive species, climate changes. It examines a range of land use and management systems, the natural resources upon which they are based, their environmental impacts and their social, economic and political drivers.

## Level II

## SOIL\&WAT 2010RW

## Ecosystems and Community Ecology

- 3 units - not offered 2006
- 2 lectures, 5 -day field camp (mid-semester break)
- Assumed Knowledge: APP ECOL 1003RW Biology of Plants and Animals, APP ECOL 1006RW Plant and Animal Diversity or equiv
- Restriction: SOIL\&WAT 2001RW Community Ecology, SOIL\&WAT 2002RW Natural Resource Management II B, SOIL\&WAT 2004RW Natural Resource Management II A, ENV BIOL 1002 Environmental Biology I, ENV BIOL 2003 Ecology EB II
- Assessment: exam, practical assignments

The course examines major ecological principles applied at community and ecosystem levels and demonstrates these with reference to Australian ecosystems. At community level the topics are: concepts of community, detection and delineation of communities, community organisation, succession and temporal change, species diversity measures and the stability/diversity controversy. Specific emphasis is given to Australian vegetation communities: present composition, structure, distribution and environmental determinants, historic development and change, biogeographic relationships, and current classification and mapping programs. At ecosystem level structural and functional components of ecosystems are analysed, leading to examination of energy transfers, primary and secondary productivities, ecological efficiency, nutrient movements and budgets and ecosystem dynamics. Distinctive characteristics of Australian ecosystems are emphasised: nutrient relationships in the forest, sclerophyll and arid ecosystems, comparative productivity and biodiversity. Theory is applied in practical work covering quantification of vegetation, sampling systems, ground survey, numerical classification and temporal survey.

## SOIL\&WAT 2011RW

## 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

## SOIL\&WAT 2013RW

## Introduction to Engineering in Agriculture

- 2 units - semester 1
- 3 lectures, 2hours tutorial, 2 hours practical per week
- Restriction: CHEM ENG 1001 Engineering Physics

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

## SOIL\&WAT 3002WT

## Soil Management and Conservation

- 3 units - semester 1
- 2 lectures, 4 hours practical work (or equiv.) a 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
- 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 equivalents acceptable to Head of Discipline
- Corequisite: 2 level III courses offered by Discipline other than those serving as prerequisites, or equivalents 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
- 10 days during the summer vacation
- Available for Non-Award Study
- Assumed Knowledge: basic computing skills in Windows environment
- 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 2006
- Assumed Knowledge: basic computing skills in Windows environment
- 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 computer-based 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 - semester 2
- 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) a 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 , $\mathrm{N}, \mathrm{P})$ 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.NR.Mgt.)

- 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 non-research 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 (B.Sc.)

- 24 units - full year
- Prerequisite: credit 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: credit 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 standard in at least 2 Level III courses approved by the Head of Discipline
- Assessment: research proposal, seminars, research paper,viva voce $60 \%$, average of 4 specified Level III courses $40 \%$

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.

## SOIL\&WAT 4005WT

## Honours Soil Science (B.Sc.)

- 24 units - full year
- Prerequisite: credit 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 the end of July.

## SOIL\&WAT 4007WT

Honours Soil Science (B.Ag.)

- 24 units - full year
- Prerequisite: credit 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 the end of July.

## SOIL\&WAT 4009WT

Honours Soil \& Land Systems (B.Ag.Sc.)

- 12 units - full year
- Prerequisite: credit or higher standard in at least 2 level III courses approved by the 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 (formerly 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 completedSACE Stage 2 Spanish or have an equivalent knowledge of the language and have passed SPAN 1001 should enrol in the advanced stream.

## Level II

## 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 (formerly 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 (formerly 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 equivalent
- 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, mid-semester 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, mid-semester 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 Div I), or MATHS 2004 (Pass Div I) or corequisite MATHS 2004 Mathematics IIM
- Assessment: 2 hour exam, assignments
- There is a textbook for this course

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 Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: Either 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 and Probability and 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 Div I) or MATHS 2004 Mathematics IIM
- Restriction: may not be presented with APP MTH 2009, 6877 Probability \& Statistical Methods, STATS 2001, APP MTH 2003 taken from 2002, APP MTH 2006 taken before 2002
- 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 Div I), STATS 1004 (Pass Div 1), 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 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)
- 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 or practical every 2 weeks
- 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 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 2006
- 2 lectures per week, 1 tutorial, 1 hour practical every 2 weeks
- 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 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 - semester 2
- 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; post-stratification. 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 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 such as in any Level II Statistics course
- Assessment: 3 hour exam, assignment

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 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: 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 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 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 2006
- 2 lectures per week, 1 tutorial,1 hour practical every 2 weeks
- 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

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 2006
- 2 lectures, 1 hour tutorial or 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 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, tutorial, practical
- 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 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 and Probability and 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 Applied Mathematics 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 School before enrolling

Students with a different background of third-year courses may be accepted at the discretion of the Head of the School of Applied Mathematics.

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 School of Applied Mathematics. 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 School 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 Head of School

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 School. 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 School
- 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
- Up to 7 hours per week including lectures, practicals
- Assumed Knowledge: OENOLOGY 1018NW Foundations of Wine Science, BIOLOGY 1202 Biology I: Organisms; BIOLOGY 1101 or BIOLOGY 1102 Biology I: Molecules, Genes and Cells
- Assessment: final written exam 45\%, Mid-term exam 15\%, practical reports $25 \%$, practical exam 15\%

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.

## Level III

## VITICULT 3005WT

## Grape Industry Practice, Policy and Communication

- 2 units - semester 1
- Up to 7 hours lectures/seminars/tastings per week
- 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 students 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
- Up to 6 hours per week including field trips, lectures \& group oral presentation
- 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, postharvest 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
- 4 hours lectures per week
- Eligibility: viticulture \& oenology majors 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: exam, 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
- Up to 6 hours per week including lecture, tutorial, practical
- Eligibility: B.Sc.(Viticulture) students only
- Assumed Knowledge: VITICULT 2002WT Viticultural Science
- Restriction: VITICULT 3004 Viticultural Production A, VITICULT 3018 Viticultural Production B

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 (B.Ag.Sc.)

- 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 $40 \%$, research project, research proposal, seminar, thesis, vivo voce 60\%

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 4005AWT

## Honours Wine and Horticulture (B.Sc.)

- 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 $50 \%$ 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.

## WINE MARKETING

## Level I

## WINEMKTG 1003EX

## Legal Issues in Wine Marketing

- 3 units - semester 2
- External only
- Assessment: exam 50\%, assignments 50\%

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) $50 \%$, assignments $50 \%$

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

## WINEMKTG 1013WT

## Wine and Food Marketing Principles

- 3 units - semester 1
- External; Internal: Up to 3 hours per week (including lectures, practicals 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: 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 long-run 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 and Food Business

- 3 units - semester 2
- External only
- Assessment: Assignments and 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

## WINEMKTG 2002WT

## Wine and Society

-4 units - semester 1

- External; Internal: Up to 3 hours per week (including lectures, tutorials)
- Assumed Knowledge: WINEMKTG 1013WT/1013EX 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

WINEMKTG 2003WT

## International Wine Law

-4 units - semester 1

- External; Internal: Up to 3 hours per week (including 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

## WINEMKTG 2010WT

## Strategic Marketing Management

- 4 units - semester 2
- External; Internal: Up to 3 hours per week (including 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

## WINEMKTG 2011WT

## Applied Marketing Research

- 4 units - semester 2
- External; Internal: Internal: Up to 3 hours per week (including 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 qualitative 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

## WINEMKTG 2014WT

## International Marketing of Wine \& Ag Products

- 4 units - semester 2
- External; Internal: Internal: Up to 3 hours per week (including lectures, tutorials)
- Assumed Knowledge: WINEMKTG 1013WT/1013EX 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 2033EX

## Consumer Behavioural Analysis

- 4 units - semester 1
- External only
- Prerequisite: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles
- Assessment: to be advised

The aim of this course is to alert students to the many variables that impact upon the purchase and consumption of goods and services, especially wine. Within this multi-disciplinary course are the studies of perception, attitudes, human motivation, consumer information processing and decision making, the sociology of people, cultural and sub-cultural variables, group influences and the segmentation of consumers into manageable communicable target groups for wine markets. Knowledge of consumer behaviour provides direction and the basis for wine marketing efforts such as advertising, promotion, public relations, wine packaging, pricing, distribution and the nature of the wine product.

## WINEMKTG 2037WT

## Applied Management Science

- 4 units - semester 1
- Up to 4 hours per week (including lectures, tutorials, practicals)
- Assumed Knowledge: WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles, and ECON 1008 Business Data Analysis or WINEMKTG 1015EX Data Analysis for Wine and Food Business
- Assessment: to be advised

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

## WINEMKTG 3006WT

## Global Market for Wine

- 4 units - semester 1
- External; Internal: Up to 3 hours per week (including 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

## WINEMKTG 3014WT

## Food Marketing

- 4 units - semester 1
- External; Internal: Up to 3 hours per week (including lectures, tutorials)
- Prerequisite: WINEMKTG 7055WT/7055EX 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

## WINEMKTG 3028WT

## Winery Business Management III

## - 4 units - semester 2

- External; Internal: Up to 3 hours per week (including 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 decisionmaking to winery operations and their application to an actual (operating) winery. The primary course outcome is the development of a realistic and fully-integrated business plan for this operating winery.

## WINEMKTG 3034EX

## WINEMKTG 3034WT

## Advertising and Promotion III

- 4 units - semester 1
- External; Internal: Up to 3 hours per week (including. 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

## WINEMKTG 3040WT

## Wine Retail and Distribution Management

- 4 units - semester 2
- External; Internal: Up to 3 hours per week (including 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

## WINEMKTG 3047WT

## Internet Marketing and E-Commerce

- 4 units - semester 1
- External; Internal: Up to 4 hours per week (including lectures, practicals, 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 cellardoor 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
WINEMKTG 3065WT

## Database Marketing for Food and Wine Business

- 4 units - semester 2
- External; Internal: Up to 4 hours per week (including lectures, practicals, 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 or equiv, at least credit average in appropriate Level III courses offered by School of Agriculture and Wine 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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[^0]:    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.

[^1]:    * Available only to students whose native language is not English; may be presented in lieu of an elective at Level IV

[^2]:    \# Students who are not selected for Honours will be required to complete two additional final year specialisation courses instead of the Research Project.

[^3]:    - 3 units - semester 2
    - 2 lectures, 1 tutorial per week

