

# Academic Program Rules

## Faculty of Sciences

**Please note: The Academic Program Rules contained in this document apply only to students commencing their studies in the following programs in 2008.**

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## Undergraduate Awards

- Diploma in Wine Marketing
- Degree of Bachelor of Agriculture
- Degree of Bachelor of Food Science and Technology
- Degree of Bachelor of Oenology
- Degree of Bachelor of Rural Enterprise Management
- Degree of Bachelor of Science
- Degree of Bachelor of Science (Agricultural Science)
- Degree of Bachelor of Science (Animal Science)
- Degree of Bachelor of Science (Animal Science Pre-Veterinary)
- 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 (Marine Biology)
- 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 Resources)
- 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 (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

### 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.

## **Graduate Attributes**

### Bachelor of Science Degrees

#### **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..

## Graduate Attributes

### Further Programs in the Faculty of Sciences

These graduate attributes apply to the following Academic Programs:

- All Diplomas
- Bachelor of Agricultural Science (including all specialisations)
- Bachelor of Agriculture
- Bachelor of Food Science and Technology
- Bachelor of Rural Enterprise Management
- Bachelor of Science (Agricultural Science)
- Bachelor of Science (Animal Science)
- Bachelor of Science (Animal Science)(Pre-Vet)
- Bachelor of Science (Natural Resource)
- 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.



## 1 General

There shall be a Diploma of Wine Marketing.

## 2 Duration of program

The program of study for the diploma, which is only offered externally, shall extend over four years part-time study.

## 3 Admission

### 3.1 Status, exemption and credit transfer

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 exceptional cases and on grounds approved by the Faculty.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to 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 diploma may, on written application to the Faculty, be granted status towards such specific requirements as the Faculty shall determine, subject to the following conditions:

- (a) status will normally 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.
- (b) the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules.
- (c) a candidate shall complete a minimum of 24 units towards the award, as defined in 5.2 below which have not been presented for any other degree.

## 4 Assessment and examinations

4.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only

present courses for which a Conceded Pass has been obtained up to an aggregate value of 3 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 4.3
- (a) A candidate who obtains a Pass or higher grade in a course can not repeat the course.
  - (b) A candidate who fails to obtain a Pass or higher grade 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 or their delegate, do written and laboratory or other 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 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.

## 5 Qualification requirements

5.1 To qualify for the degree a candidate shall pass courses, listed in 5.2 below, to the value of 48 units.

### 5.2 Academic program

For the award of the Diploma in Wine Marketing a student shall complete all courses listed in the program of study for Level 1 and Level 2 of the Bachelor of Wine Marketing as specified under Academic Program Rule 5.2 for that program.

### 5.3 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.

### 5.4 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.



## 1 General

- 1.1 There shall be a Bachelor of Agriculture and an Honours degree of Bachelor of Agriculture.
- 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 Agriculture 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

- 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.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to 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) status will normally 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.
  - (b) the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules.
  - (c) a candidate shall complete a minimum of 24 units towards the award, as defined in 5.2 below which have not been presented for any other degree.

## 4 Assessment and examinations

- 4.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.
- 4.3
  - (a) A candidate who obtains a Pass or higher grade in a course can not repeat the course.
  - (b) A candidate who fails to obtain a Pass or higher grade 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 or their delegate, do written and laboratory or other 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 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.

## 5 Qualification requirements

- 5.1 To qualify for the degree a candidate shall pass courses, listed in 5.2 below, to the value of 72 units.

### 5.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 5.2.1 Level I

Passes in Level I courses which shall include:

##### Full year

AGRONOMY 1006ARW/BRW

Agricultural Experience I.....3

### Semester 1

AGRIC 1000RW Perspectives on Modern Agriculture.....	3
BIOLOGY 1103RW Cell Biology and Genetics.....	3
PLANT SC 1001RW Chemistry and Introductory Biochemistry A.....	3

### Semester 2

AGRIBUS 1009RW Rural Business Planning A.....	3
BIOLOGY 1203RW Biology of Plants & Animals...	3
SOIL&WAT 1000RW Soils & Land Management...	3
STATS 1002RW Data Management and Interpretation .....	3

## 5.2.2 Level II

Passes in Level II courses which shall include:

### Semester 1

#### *Agronomy courses:*

Introduction to Engineering in Agriculture.....	3
Rural Finance and Marketing .....	3

#### *Plant Science course:*

Microbiology and Invertebrate Biology .....	3
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#### *Soil & Water course:*

Soil and Water Resources .....	3
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### Semester 2

#### *Agricultural Business course:*

Agricultural Marketing .....	3
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#### *Agronomy courses:*

Agricultural Experience II.....	3
Production Agronomy.....	3

#### *Animal Science course:*

Livestock Production Science .....	3
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## 5.2.3 Level III

Passes in Level III courses which shall include:

i passes, not conceded passes, in core courses

### Semester 1

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

### Semester 2

AGRONOMY 3004RW Land Management Systems for the Future.....	3
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ii passes in additional courses to the value of 15 units chose from

### Summer semester

ANIML SC 3019RW Ecology and Management of Vertebrate Pests .....	3
ANIML SC 3043RW Animal Biotechnology ....	3

### Full year

PLANT SC 3030AEX/BEX Integrated Weed Management .....	3
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### Semester 1

AGRONOMY 3008RW Individual Studies (Ag). 3	
AGRONOMY 3012RW Advanced Agronomy..3	
ANIML SC 3017RW Comparative Animal Physiology .....	3
ANIML SC 3045RW Animal Breeding and Genetics.....	3
ANIML SC 3046RW Animal Reproduction and Development .....	3
HORTICUL 3000WT Production Horticulture..3	
HORTICUL 3001WT Horticultural Systems.....	3
PLANT SC 3131WT Integrated Pest Management A.....	3
SOIL&WAT 3002WT Soil Management and Conservation.....	3
SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling.....	3

### Semester 2

AGRIBUS 2009WT Issues in Australian Agribusiness .....	3
AGRIBUS 3010WT International Agribusiness Environment .....	3
AGRONOMY 3000RW Agroforestry.....	3
AGRONOMY 3008RW Individual Studies (Ag). 3	
AGRONOMY 3016RW Crop and Pasture Ecology .....	3
AGRONOMY 3026RW Ecology and Management of Rangelands (a).....	3
ANIML SC 3015RW Animal Nutrition and Metabolism.....	3
ANIML SC 3019RW Animal Health .....	3
HORTICUL 3004WT Olive Production and Marketing (a) .....	3
SOIL&WAT 3010 Remote Sensing (S) .....	3
PLANT SC 3004WT Mineral Nutrition of Plants.....	3
PLANT SC 3200WT Plant Breeding.....	3
SOIL&WAT 3012WT Soil Water Management..3	
SOIL&WAT 3014GT GIS for Agricultural Science (b) .....	3

or courses selected in consultation with the Program Coordinator.

(a) semester 2 course taught in mid-year break

(b) semester 2 course taught in mid-semester break

## 5.3 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.

## 5.4 The Honours degree

- 5.4.1 Candidates completing the Bachelor of Agriculture and to a standard which is acceptable to the Faculty may proceed to the Honours degree.
- 5.4.2 A candidate, subject to the approval of the Head of School, may proceed to the Honours degree in the following courses:
- ANIML SC 4004 Honours Animal Science.....24
  - HORTICUL 4003AWT/BWT Honours Horticulture.....24
  - PLANT SC 4012WT Honours Plant Science.....24
  - SOIL&WAT 4001WT Honours Soil and Land Systems .....24
- 5.4.3 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.
- 5.4.4 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 Food Science and Technology

## 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

- 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.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to 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) status will normally 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.
- (b) the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules.
- (c) a candidate shall complete a minimum of 24 units towards the award, as defined in 5.2 below which have not been presented for any other degree.

## 4 Assessment and examinations

- 4.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.
- 4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.
- 4.3
  - (a) A candidate who obtains a Pass or higher grade in a course can not repeat the course.
  - (b) A candidate who fails to obtain a Pass or higher grade 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 or their delegate, do written and laboratory or other 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 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.

## 5 Qualification requirements

- 5.1 To qualify for the degree a candidate shall pass courses, listed in 5.2 below, to the value of 72 units.

### 5.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 5.2.1 Level I

Passes in Level I courses which shall include:

##### Semester 1

BIOLOGY 1101 Biology I: Molecules Genes and Cells .....	3
CHEM 1100 Chemistry IA.....	3
or	
CHEM 1101 Foundations of Chemistry IA .....	3

FOOD SC 1001 Consumers, Food and Health.....	3
PHYSICS 1101 Physics for the Life and Earth Sciences.....	3
<i>or</i>	
PHYSICS 1008 Physics Principles & Applications I.....	3
<b>Semester 2</b>	
BIOLOGY 1202 Biology I: Organisms.....	3
CHEM 1200 Chemistry IB.....	3
<i>or</i>	
CHEM 1201 Foundations of Chemistry IB.....	3
FOOD SC 1000RG Introduction to Food Technology.....	3
STATS 1004 Statistical Practice I (Life Sciences) ..	3

### 5.2.2 Level II

Passes in Level II courses which shall include:

#### Semester 1

*Biochemistry course:*

Biochemistry II (Agriculture) A.....	3
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*Food Science & Technology courses:*

Food Engineering Principles.....	3
Food Science II.....	3

*Plant Science course:*

Microbiology & Invertebrate Biology.....	3
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#### Semester 2

*Biometry course:*

Research Methodology.....	3
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*Food Science & Technology courses:*

Food Chemistry.....	3
Food Microbiology.....	3
Sensory Evaluation of Food.....	3

### 5.2.3 Level III .....

Passes in Level III courses which shall include:

#### Semester 1

*Food Science & Technology course:*

Industry Experience.....	3
FOOD SC 3014RG Food Quality & Regulation .....	3
PLANT SC 3002WT Biotechnology in the Food and Wine Industry.....	3
WINEMKTG 3014WT Food Marketing.....	3

#### Semester 2

*Food Science & Technology courses:*

Advanced Food Processing and Technology .....	3
Nutrition .....	3
FOOD SC 3021RG Food Product Development....	3
PLANT SC 3230WT Communication in the Agri-Food Industry.....	3

### 5.3 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.

### 5.4 The Honours degree

- 5.4.1 Candidates completing the Bachelor of Food Science and Technology and to a standard which is acceptable to the Faculty may proceed to the Honours degree.
- 5.4.2 A candidate, subject to the approval of the Head of School, will proceed to the Honours degree in the following course:  
FOOD SC 4000WT A/B Honours  
Food Science and Technology..... 24
- 5.4.3 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.
- 5.4.4 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.



## 1 General

1.1 There shall be a Bachelor of Oenology

## 2 Duration of program

The program for the degree shall extend over four years of full-time study or the part-time equivalent. The first two years of the program shall follow the program of study for Level I and II of the Bachelor of Science (Viticulture) program as specified under the Academic Program Rule of 2.2 of that program.

## 3 Admission

### 3.1 Status, exemption and credit transfer

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.

Note: Partial or full status for some Level I courses may be granted on account of International Baccalaureate upon application to 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) status will normally 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.
- (b) the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules.
- (c) a candidate shall complete a minimum of 24 units towards the award, as defined in 5.2 below which have not been presented for any other degree.

## 4 Assessment and examinations

4.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 9 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 4.3 (a) A candidate who obtains a Pass or higher grade in a course can not repeat the course.
- (b) A candidate who fails to obtain a Pass or higher grade 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 or their delegate, do written and laboratory or other 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 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.

## 5 Qualification requirements

5.1 To qualify for the degree a candidate shall pass courses, listed in 5.2 below, to the value of 96 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 and II in accordance with the rules of Bachelor of Science (Viticulture)
- (b) a candidate shall present passes in courses to the value of 24 units at each of level III and IV in accordance with rules 5.2.1 and 5.2.2 below.

### 5.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 5.2.1 Level III

Passes in Level III courses which shall include:

##### Semester 1

OENOLOGY 3007WT Stabilisation & Clarification...	3
OENOLOGY 3018WT Cellar and Winery Waste Management .....	3
OENOLOGY 3047WT Winemaking at Vintage .....	3
VITICULT 3021WT Viticultural Production .....	3

## Semester 2

AGRIBUS 3017WT Business Management for Applied Science .....	3
OENOLOGY 3037WT Distillation, Fortified and Sparkling Winemaking.....	3
OENOLOGY 3046WT Fermentation Technology...3	
CHEM ENG 3007WT Winery Engineering.....	3

### 5.2.2 Level IV

Passes in Level III courses which shall include:

- i passes in core courses

#### Semester 1

*Oenology course:*

Grape Industry Experience, Practice, Policy and Communication .....	6
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#### Semester 2

OENOLOGY 3003WT Wine Packaging and Quality Management.....	3
OENOLOGY 3045WT Advances in Oenology..3	

- ii passes in additional courses to the value of 12 units chosen from

FREN 3013WT Technical French (Oenology) ..3	
HORTICUL 3004WT Olive Production and Marketing (a).....	3
PLANT SC 3002WT Biotechnology in the Food and Wine Industries .....	3
SOIL&WAT 3014WT GIS for Agricultural Sciences .....	3
OENOLOGY 4002WT Honours Oenology.....	12

or from courses offered in the Faculty of Sciences selected in consultation with the program coordinator.

(a) July

### 5.3 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.

### 5.4 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 Rural Enterprise Management

## 1 Duration of program

The program for the degree shall extend over one year of full-time study or the part-time equivalent.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program of study for the Bachelor of Rural Enterprise Management shall have qualified for the Diploma of Agricultural Production or for the South Australian TAFE Advanced Diploma in Rural Enterprise Management or for an award accepted by the Faculty of Sciences as equivalent to those qualifications for the purpose of this rule.

2.2 The Faculty may, subject to such conditions (if any) as it may wish to impose, accept as a candidate for the Bachelor of Rural Enterprise Management a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake the academic program.

### 2.3 Status, exemption and credit transfer

Candidates who have previously passed courses in programs in the University or other tertiary educational institutions may, on written application to the Faculty, be granted such status in appropriate courses in the academic program for the degree of Bachelor of Rural Enterprise Management as the Faculty in each case may determine.

## 3 Assessment and examinations

3.1 (a) A candidate shall not be eligible to attend for examination unless written and laboratory or other practical work, where required, has been completed to the satisfaction of the teaching staff concerned.

(b) In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

3.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present a maximum of one course at the Conceded Pass level towards this award.

Courses for which a result of Conceded Pass has been obtained may not be presented towards a major in any discipline, nor as a prerequisite.

3.3 (a) A candidate who fails to pass in a course or who obtains a Conceded Pass and who desires to take the course again shall, unless exempted wholly or partially therefrom by the Head of Department concerned, do written and laboratory or other work in that course to the satisfaction of the teaching staff concerned.

(b) A candidate who has twice failed to obtain a Pass or higher in any course shall not enrol for the course again, or for any other course which in the opinion of the Faculty contains a substantial amount of the same material, except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or does not attend the examination in any course after having attended substantially the full program of instruction in it, shall be deemed to have failed to pass the course.

## 4 Qualification requirements

### 4.1 Unacceptable combinations of courses

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

### 4.2 Academic program

Candidates must pass courses to the value of not less than 24 units including a minimum of 20 units at Level III.

- 4.2.1 All candidates shall complete the compulsory courses:
- |  |   |
|--|---|
| AGRIBUS 3046 ARW/BRW Leadership in Agri-industries.....              | 3 |
| AGRIBUS 3047RW Organisational Management for Rural Enterprises ..... | 3 |
| AGRIBUS 3048RW Quality Management for Rural Enterprises .....        | 3 |
- 4.2.2 Candidates who have not previously completed the following courses or courses deemed by Faculty to be equivalent to those courses shall complete the following:

AGRIBUS 3049RW Marketing of Rural Commodities .....	3
WINEMKTG 1015EX Data Analysis for Wine and Food Business .....	3

4.2.3 Students must complete sufficient electives from the courses listed below to bring to a total value of 24 units the courses presented for the degree. To qualify for the Bachelor of Rural Enterprise Management students must have completed three courses from ONE of the production areas listed below. Choice of electives must be approved by the Program Coordinator.

**Electives**

AGRIBUS 2009WT Issues in Australian Agribusiness .....	3
AGRIBUS 3010WT International Agribusiness Environment.....	3
AGRIBUS 3012RW Rural Business Management .....	3
AGRIBUS 3044RW Individual Studies in Rural Enterprise Management .....	3
SOIL&WAT 3014WT GIS for Agricultural Sciences (b) .....	3
WINEMKTG 3014WT/EX Food Marketing .....	3
WINEMKTG 3047EX Internet Marketing and E-Commerce.....	3

**Production Electives**

**Agronomy**

AGRONOMY 2013RW Production Agronomy.....	3
AGRONOMY 3000RW Agroforestry.....	3
AGRONOMY 3004RW Land Management Systems for the Future.....	3
AGRONOMY 3012RW Advanced Agronomy .....	3
PLANT SC 3200WT Plant Breeding.....	3

**Animal Production**

ANIML SC 2030RW Livestock Production Science .....	3
ANIML SC 3015RW Animal Nutrition & Metabolism.....	3
ANIML SC 3016RW Animal Health .....	3
ANIML SC 3045RW Animal Breeding and Genetics.....	3

**Horticulture**

HORTICUL 3000WT Production Horticulture.....	3
HORTICUL 3001WT Horticulture Systems.....	3
HORTICUL 3004WT Olive Production and Marketing (MY)* .....	3

\* These courses offered at specified times:  
 MY - mid-year break (b) Sep (c) Summer

**4.3 Graduation**

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

**5 Special circumstances**

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



Students who commenced their program of study prior to 2004 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.

## 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 program

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, subject to approval by the School or Discipline, over two years of part-time study.

Note: Although students may commence study in July (Semester 2), February (Semester 1) commencement is more usual. As a consequence, some courses offered in Semester 2 require prerequisite courses offered in Semester 1.

## 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.

Note: Partial or full status for some Level I courses may be granted on account of International Baccalaureate upon application to 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) status will normally 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.

- (b) the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules and
- (c) the candidate shall present courses which satisfy the Level III 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 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 (a) There shall be four classifications of pass in any courses offered by the Faculty of Sciences, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units, or to an aggregate value of 3 units for the Bachelor of Science (Jurisprudence).
  - (b) 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 obtains a Pass or higher grade in a course can not repeat the course
  - (b) A candidate who fails to obtain a Pass or higher grade 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.

- (c) A candidate who has twice failed to obtain a Pass or higher grade 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.

## 5 Qualification requirements

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

- 5.1 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.

- 5.2 As part of the requirements of 5.1 above, a candidate may, in lieu of Level I or II courses, present passes to the value of 9 units, no more than 6 units at Level I, 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.)

### 5.3 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.

- 5.4 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

At least three of:

ANAT SC 3101 Anthropological & Forensic Anatomy.....	3
ANAT SC 3102 Comparative Reproductive Biology of Mammals.....	3
ANAT SC 3103 Integrative & Comparative Neuroanatomy.....	3
ANAT SC 3104 Structural Cell Biology.....	3

#### Biochemistry

BIOCHEM 3000 Molecular & Structural Biology III.....	6
BIOCHEM 3001 Cell & Developmental Biology III..	6

#### Botany

ENV BIOL 3002 Australian Biota: Past, Present and Future.....	3
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and

ENV BIOL 3009 Ecophysiology of Plants III.....	3
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and an additional Environmental Biology course to the value of 3 units.

#### Chemistry

CHEM 3111 Chemistry III.....	6
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and at least one of following Chemistry courses:

Environmental & Analytical Chemistry III.....	3
Research Methods in Chemistry III.....	3
CHEM 3211 Heterocyclic Chemistry & Molecular Devices III.....	3
CHEM 3212 Materials Chemistry III.....	3
CHEM 3213 Advanced Synthetic Methods III.....	3
CHEM 3214 Medicinal & Biological Chemistry III..	3

#### Chemistry - Double Major

CHEM 3111 Chemistry III.....	6
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and at least four of following Chemistry courses:

Environmental & Analytical Chemistry III.....	3
Research Methods in Chemistry III.....	3
CHEM 3213 Advanced Synthetic Methods III.....	3
CHEM 3211 Heterocyclic Chemistry & Molecular Devices III.....	3
CHEM 3212 Materials Chemistry III.....	3
CHEM 3214 Medicinal & Biological Chemistry III...3	3

#### Ecology

ENV BIOL 3121 Concepts in Ecology.....	3
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and at least two of

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 Cycling.....	3

<b>Entomology</b>	
ENV BIOL 3011 Evolution and Diversity of Insects .....	3
at least 2 of:	
ENV BIOL 3002 Australian Biota: Past, Present and Future.....	3
<i>or</i>	
ENV BIOL 3008 Conservation and Restoration ....	3
<i>or</i>	
ENV BIOL 3122 Evolution and Palaeobiology III ..	3
<i>or</i>	
PLANT SC 3131WT Integrated Pest Management	3
<b>Environmental Geoscience</b>	
GEOLOGY 3014 Environmental Geoscience Applications III .....	3
GEOLOGY 3015 Environmental Geoscience Processes III .....	3
SOIL&WAT 3007WT GIS for Environmental Management .....	3
<i>or</i>	
SOIL&WAT 3010 Remote Sensing (S) .....	3
<b>Geology</b>	
GEOLOGY 3013 Tectonics III .....	3
GEOLOGY 3016 Igneous & Metamorphic Geology III.....	3
GEOLOGY 3019 Field Geoscience Program III .....	3
<b>Geophysics</b>	
GEOLOGY 3008 Geophysics III .....	3
GEOLOGY 3017 Petroleum Exploration III .....	3
GEOLOGY 3018 Mineral Exploration III.....	3
<b>Genetics</b>	
GENETICS 3111 Genes, Genomes & Molecular Evolution .....	6
GENETICS 3211 Genetic Expression & Human and Developmental Genetics .....	6
<b>Marine Biology</b>	
ENV BIOL 3006 Research Methods in Environmental Biology III.....	3
<i>and</i>	
ENV BIOL 3010 Marine Ecology .....	3
<i>and either</i>	
ENV BIOL 3121 Concepts in Ecology .....	3
<i>or</i>	
ENV BIOL 3122 Evolution and Palaeobiology III ..	3
<b>Microbiology and Immunology</b>	
MICRO 3000 Infection and Immunity A.....	6
MICRO 3001 Infection and Immunity B.....	6
<b>Molecular and Biomedical Science</b>	
Courses to the value of 12 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).

<b>Pharmacology</b>	
PHARM 3010 Pharmacology A III.....	6
PHARM 3010 Pharmacology B III.....	6
<b>Physics</b>	
Physics IIIA .....	6
PHYSICS 3002 Experimental Physics III.....	3
Theoretical Physics	
Physics IIIA .....	6
<i>and</i>	
PHYSICS 3006 Advanced Dynamics and Relativity III .....	3
<i>or</i>	
Advanced Quantum Mechanics III.....	3
<b>Physics and Theoretical Physics</b>	
Physics IIIA .....	6
<i>and</i>	
PHYSICS 3002 Experimental Physics III.....	6
<i>and</i>	
PHYSICS 3006 Advanced Dynamics and Relativity III .....	3
<i>or</i>	
PHYSICS 3022 Quantum Mechanics III .....	3
and at least two of following Physics courses:	
Astrophysics & Atmospheric Physics III.....	3
Optics & Photonics III .....	3
PHYSICS 3000 Computational Physics III .....	3
<b>Physiology</b>	
PHYSIOL 3000 Advanced Systems Physiology III..	3
PHYSIOL 3001 Neurobiology III .....	3
<b>Psychology</b>	
Doing Research in Psychology: Advanced Research Design, Methods & Analysis .....	3
and at least three of following Psychology courses:	
Health & Lifespan Developmental Psychology .....	3
Individual Differences, Personality & Assessment .	3
Perception, Cognition & Neuropsychology.....	3
Psychology, Ideas and Action.....	3
Psychology in Society: Advanced.....	3
<b>Soil Science</b>	
Courses to the value of at least 9 units, which include at least two of the following:	
SOIL&WAT 3002WT Soil Management & Conservation.....	3

SOIL&WAT 3012WT Soil Water Management .....	3
SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling .....	3

**Spatial Information**

SOIL&WAT 3007WT GIS for Environmental Management .....	3
<i>or</i>	
SOIL&WAT 3014WT GIS for Agricultural Sciences.....	3

*and*

SOIL&WAT 3010 Remote Sensing (S) .....	3
<i>and</i>	
GEOLOGY 3015 Environmental Geoscience Processes III .....	3

or an additional Level III course from Soil & Land Systems or Ecology & Evolutionary Biology

**Wildlife**

ENV BIOL 3003 Ecophysiology of Animals III.....	3
ENV BIOL 3008 Conservation and Restoration.....	3
ENV BIOL 3122 Evolution and Palaeobiology .....	3

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 fulfilling 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)**

- 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. Information on foundation packages is available from the Faculty of Sciences Office or at [www.sciences.adelaide.edu.au/current](http://www.sciences.adelaide.edu.au/current). 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. It is highly recommended that at level I students take a minimum of 9 units per semester of continuing courses to ensure pathways into level II science courses. At Level II students are encouraged to take a minimum of 6 units per semester of continuing course to enable pathways into Level III science courses and the completion of a major.

Full- time students normally take courses with an aggregate value of 24 units at each of levels I, II and III. Information on foundation packages is available from the Faculty of Sciences Office.
- Work required to complete an Adelaide degree (policy of the Faculty of Sciences)

  - 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 5.1 and 5.2 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.
  - 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.
  - With the special permission of the Faculty, a student who has completed most of the degree at the University of Adelaide including Level III courses with an aggregate value of 12 units and a major in a science discipline may be permitted to complete the requirements for the degree at another institution. All applications must be made in writing to the Faculty.
- Under certain circumstances, and only with prior approval from the Faculty, courses to the value of not more than 6 units selected from the following list may be presented towards the degree of Bachelor of Science in lieu of Level III courses:

AGRONOMY 3026RW Ecology & Management of Rangelands .....	3
PATHOL 3003 General Pathology IIIHS.....	6
PLANT SC 3030AEX/BEX Integrated Weed Management.....	3

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

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 5.6.1 Level I Sciences

#### Semester 1

BIOLOGY 1101 Biology I: Molecules, Genes & Cells A .....	3
CHEM 1100 Chemistry IA.....	3
CHEM 1101 Foundations of Chemistry IA .....	3
GEOLOGY 1103 Earth Systems .....	3
PHYSICS 1002 Astronomy I .....	3
PHYSICS 1008 Physics Principles & Applications I .....	3
PHYSICS 1100 Physics IA.....	3
PHYSICS 1101 Physics for the Life & Earth Sciences IA .....	3
PSYCHOL 1000 Psychology IA.....	3
STATS 1000 Statistical Practice I .....	3

#### Semester 2

BIOLOGY 1201 Biology I: Human Perspectives....	3
BIOLOGY 1202 Biology I: Organisms .....	3
CHEM 1200 Chemistry IB.....	3
CHEM 1201 Foundations of Chemistry IB .....	3
ENV BIOL 1002 Ecological Issues.....	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 Level I Mathematical & Computer Sciences

APP MTH 1000 Scientific Computing I .....	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
STATS 1004 Statistical Practice (Life Sciences) I ..	3

Note: COMP SCI 1003 Internet Computing cannot be presented towards the Bachelor of Science.

### 5.6.3 Level II Science

#### Semester 1

##### *Anatomical Science course:*

Cells and Tissues II.....	3
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##### *Biochemistry course:*

Biochemistry IIA.....	3
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##### *Chemistry courses:*

Chemistry IIA .....	3
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Environmental & Analytical Chemistry II.....	3
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##### *Environmental Biology courses:*

Botany II.....	3
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Evolutionary Biology EB II .....	3
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##### *Genetics course:*

Genetics IIA .....	3
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##### *Geology courses:*

Sedimentology and Stratigraphy II.....	3
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Structural Geology II.....	3
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##### *Microbiology course:*

Microbiology II.....	3
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##### *Physics courses:*

Classical Physics II.....	3
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Electromagnetism II.....	3
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Physics IIA .....	3
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##### *Physiology course:*

Human Physiology IIA .....	3
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##### *Psychology courses:*

Doing Research in Psychology: Research Design, Methods & Analysis .....	3
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Psychology in Society.....	3
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##### *Soil & Water courses:*

Spatial Information and Land Evaluation.....	3
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Soil and Water Resources .....	3
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#### Semester 2

##### *Anatomical Science course:*

Comparative Anatomy of Body Systems II .....	3
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##### *Biochemistry course:*

Biochemistry IIB.....	3
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##### *Chemistry courses:*

Chemistry IIB .....	3
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Medicinal & Biological Chemistry II.....	3
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##### *Environmental Biology courses:*

Ecology EB II.....	3
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Zoology EB II.....	3
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##### *Genetics course:*

Genetics IIB .....	3
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##### *Geology courses:*

Igneous and Metamorphic Geology II.....	3
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Landscape Processes and Environments II .....	3
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<i>Microbiology course:</i>	
Immunology & Virology II.....	3
<i>Physics course:</i>	
Physics IIB .....	3
<i>Physiology course:</i>	
Human Physiology IIB .....	3
<i>Psychology courses:</i>	
Foundations of Perception & Cognition.....	3
Foundations of Health & Lifespan Developmental Psychology.....	3

#### 5.6.4 Level II Mathematical & Computer Sciences

<b>Semester 1</b>	
Maths I.....	3
Maths II.....	3
Maths III .....	3
Maths IV.....	3

<b>Semester 2</b>	
Applied Maths Elective I.....	3
Numerical Methods.....	3
Pure Maths Elective I.....	3
Statistics Elective I .....	3

In addition to other 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 three 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.

#### 5.6.5 Level III Science

<b>Agronomy</b>	
Semester 2	
AGRONOMY 3000RW Agroforestry.....	3

<b>Anatomical Sciences</b>	
Semester 1	
ANAT SC 3102 Comparative Reproductive Biology of Mammals .....	3
ANAT SC 3103 Integrative and Comparative Neuroanatomy .....	3

Semester 2	
ANAT SC 3101 Anthropological and Forensic Anatomy.....	3
ANAT SC 3104 Structural Cell Biology .....	3

<b>Chemistry</b>	
Semester 1	
CHEM 3111 Chemistry III.....	6
CHEM 3112 Chemistry Applications III.....	6

<b>Semester 2</b>	
CHEM 3211 Heterocyclic Chemistry and Molecular Devices III .....	3
CHEM 3212 Materials Chemistry III.....	3
CHEM 3213 Advanced Synthetic Methods III .....	3
CHEM 3214 Medicinal and Biological Chemistry III.....	3

#### **Environmental Biology**

<b>Semester 1</b>	
ENV BIOL 3004 Freshwater Ecology III.....	3
ENV BIOL 3006 Research Methods in Environmental Biology III.....	3
ENV BIOL 3011 Evolution and Diversity of Insects .....	3
ENV BIOL 3121 Concepts in Ecology .....	3
ENV BIOL 3122 Evolution and Palaeobiology .....	3

<b>Semester 2</b>	
ENV BIOL 3002 Australian Biota: Past, Present & Future .....	3
ENV BIOL 3003 Ecophysiology of Animals III.....	3
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.....	3

#### **Geology and Geophysics**

<b>Semester 1</b>	
GEOLOGY 3013 Tectonics III.....	3
GEOLOGY 3015 Environmental Geoscience Processes III.....	3
GEOLOGY 3016 Igneous & Metamorphic Geology III.....	3
GEOLOGY 3017 Petroleum Exploration III .....	3

<b>Semester 2</b>	
GEOLOGY 3008 Geophysics III .....	3
GEOLOGY 3014 Environmental Geoscience Applications III .....	3
GEOLOGY 3018 Mineral Exploration III.....	3
GEOLOGY 3019 Field Geoscience Program III .....	3

#### **Molecular and Biosciences**

<b>Semester 1</b>	
BIOCHEM 3000 Molecular and Structural Biology III .....	6
GENETICS 3111 Genes, Genomes and Molecular Evolution.....	6
MICRO 3000 Infection and Immunity A.....	6
PHYSIOL 3001 Neurobiology III .....	6
<b>Semester 2</b>	
BIOCHEM 3001 Cell and Developmental Biology III .....	6

GENETICS 3211 Gene Expression and Human and Developmental Genetics .....	6
MICRO 3001 Infection and Immunity B .....	6
PHYSIOL 3000 Advanced Systems Physiology ....	6
<b>Pharmacology</b>	
Semester 1	
PHARM 3010 Pharmacology A III.....	6
Semester 2	
PHARM 3011 Pharmacology B III.....	6
Physics	
Semester 1	
Astrophysics & Atmospheric Physics III.....	3
Physics IIIA .....	6
PHYSICS 3006 Advanced Dynamics	
Semester 2	
Advanced Quantum Mechanics III .....	3
Optics & Photonics III .....	3
PHYSICS 3000 Computational Physics III .....	3
PHYSICS 3002 Experimental Physics III.....	3
<b>Plant and Pest Science</b>	
Semester 2	
PLANT SC 3004WT Mineral Nutrition of Plants.....	3
PLANT SC 3009WT Plant Molecular Biology .....	6
PLANT SC 3231WT Insect Ecology.....	3
PLANT SC 3200WT Plant Breeding.....	3
PLANT SC 3131WT Integrated Pest Management .....	3
<b>Psychology</b>	
Doing Research in Psychology: Advanced Research Design, Methods & Analysis .....	3
Health & Lifespan Developmental Psychology .....	3
Individual Differences, Personality & Assessment .....	3
Perception, Cognition & Neuropsychology.....	3
Psychology, Ideas and Action.....	3
Psychology in Society: Advanced .....	3
<b>Soil and Land Systems</b>	
summer semester	
SOIL&WAT 3004WT Environmental Toxicology and Remediation.....	3
SOIL&WAT 3007WT GIS for Environmental Management .....	3
Semester 1	
SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling .....	3
SOIL&WAT 3022WT Soil Management & Conservation .....	3

Semester 2	
SOIL&WAT 3010 Remote Sensing (S) .....	3
SOIL&WAT 3012WT Soil Water Management .....	3
SOIL&WAT 3014WT GIS for Agricultural Sciences.....	3

### 5.6.6 Level III Mathematical & 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 4004ARW/BRW Honours Animal Science                 |
| BIOCHEM 4000A/B Honours Biochemistry                        |
| CHEM 4000A/B Honours Chemistry                              |
| ENV BIOL 4000A/B Honours Environmental Biology              |
| ENV BIOL 4002A/B Honours Botany and Geology                 |
| ENV BIOL 4003A/B Honours Rangeland Science and Management S |
| GENETICS 4000A/B Honours Genetics                           |
| GEOLOGY 4000A/B Honours Geology                             |
| GEOLOGY 4001A/B Honours Geophysics                          |
| GEOLOGY 4002A/B Honours Environmental Geoscience            |
| HORTICUL 40063AWT/BWT Honours Wine & Horticulture           |
| MICRO 4000A/B Honours Microbiology and Immunology           |
| PETROL 4000ATB/BTB Honours Petroleum Geology and Geophysics |
| PHYSICS 4000A/B Honours Physics                             |
| PHYSICS 4001A/B Honours Mathematical Physics                |
| PHYSIOL 4000A/B Honours Physiology                          |
| PLANT SC 4012AWT/BWT Honours Plant and Pest Science         |
| SOIL&WAT 4001AWT/BWT Honours Soil and Land Systems          |
| VITICULT 4006AWT/BWT Honours Viticulture                    |
- Note: see calendar entries for the Faculty of Health Sciences for information on Honours programs in Anatomical Sciences, Pharmacology and Psychology.

- 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)

*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 Sciences)

## 2 Qualification requirements

2.1 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
- (c) a candidate may complete a major in a discipline as set out in 2.2.3 below.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses

#### Semester 1

AGRIC 1000RW Perspectives on Modern Agriculture .....	3
BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....	3
CHEM 1100 Chemistry IA .....	3

or

CHEM 1101 Foundations of Chemistry IA.....	3
--	---

#### Semester 2

BIOLOGY 1202 Biology I: Organisms .....	3
CHEM 1200 Chemistry IB .....	3

or

CHEM 1201 Foundations of Chemistry IB.....	3
GEOLOGY 1200 Earth's Environment .....	3
STATS 1004 Statistical practice I (Life Sciences)* .....	3

- ii passes in additional Level I course to the value of 3 units chosen from:

#### Semester 1

MATHS 1013 Mathematics IMA .....	3
----------------------------------	---

or

MATHS 1011 Mathematics IA.....	3
--------------------------------	---

PHYSICS 1101 Physics for the Life & Earth Sciences IA .....	3
---	---

or

PHYSICS 1008 Physics Principles and Applications I.....	3
---	---

#### Semester 2

ENV BIOL 1002 Ecological Issues .....	3
MATHS 1011 Mathematics IA.....	3

\* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical practice I (Life Sciences).

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses

#### Semester 1

*Biochemistry course:*

Biochemistry II (Agriculture) A .....	3
---------------------------------------	---

*Environmental Biology course:*

Botany EBII .....	3
-------------------	---

*Soil & Water course:*

Soil and Water Resources .....	3
--------------------------------	---

*Plant Science course:*

Microbiology and Invertebrate Biology.....	3
--	---

#### Semester 2

*Agronomy course:*

Production Agronomy .....	3
---------------------------	---

*Animal Science courses:*

Genes and Inheritance .....	3
-----------------------------	---

Livestock Production Science .....	3
------------------------------------	---

*Biometry course:*

Research Methodology .....	3
----------------------------	---

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses

#### Semester 1

*Biometry course:*

Agricultural Experimentation .....	3
------------------------------------	---

#### Semester 2

*Plant Science course:*

PLANT SC 3230WT Communication in the Agrifood Industries.....	3
---	---

- ii passes in additional Level III course to the value of 18 units chosen from the list below. To complete a major in a discipline outlined below, a student must complete a minimum of 9 units from that discipline. Completion of a major is not essential.

<b>Crop and Pasture Science</b>	
Semester 1	
AGRONOMY 3012RW Advanced Agronomy..	3
PLANT SC 3200WT Plant Breeding.....	3
Semester 2	
AGRONOMY 3016RW Crop & Pasture Ecology .....	3
PLANT SC 3004WT Mineral Nutrition of Plants.....	3
PLANT SC 3009WT Plant Molecular Biology..	6
<b>Horticulture Science</b>	
Semester 1	
HORTICUL 3001WT Horticulture Systems .....	3
HORTICUL 3004WT Olive Production and Marketing (a) .....	3
VITICULT 3020WT Table and Drying Grape Production .....	3
Semester 2	
HORTICUL 3000WT Production Horticulture..	3
<b>Land Management and Soil Conservation</b>	
Semester 1	
SOIL&WAT 3002WT Soil Management and Conservation.....	3
SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling.....	3
Semester 2	
AGRONOMY 3026RW Ecology and Management of Rangelands (a).....	3
SOIL&WAT 3012WT Soil Water Management..	3
SOIL&WAT 3010 Remote Sensing .....	3
SOIL&WAT 3014WT GIS for Agricultural Sciences (b).....	3
<b>Livestock Science</b>	
Summer semester	
ANIML SC 3043RW Animal Biotechnology ....	3
Semester 1	
ANIML SC 3017RW Comparative Animal Physiology .....	3
ANIML SC 3045RW Animal Breeding and Genetics.....	3
ANIML SC 3046RW Animal Reproduction and Development .....	3
Semester 2	
ANIML SC 3016RW Animal Health .....	3
ANIML SC 3015RW Animal Nutrition and Metabolism.....	3

<b>Pest Science</b>	
Summer semester	
ANIML SC 3019RW Ecology and Management of Vertebrate Pests .....	3
Full year	
PLANT SC 3030AEX/BEX Integrated Weed Management .....	3
Semester 1	
PLANT SC 3131WT Integrated Pest Management .....	3
PLANT SC 3130WT Plant Pathology .....	3
<b>General Courses</b>	
Semester 2	
AGRIBUS 3010WT International Agribusiness Environment .....	3
AGRIBUS 3017WT Business Management for Applied Science .....	3
(a) semester 2 course taught in mid-year break	
(b) semester 2 course taught in mid-semester break	
iii Students may substitute up to 9 units of level III elective courses offered by the Faculty of Sciences, with approval of the BSc (Ag.Sc.) program coordinator.	

## 2.3 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.

## 2.4 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)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses

#### Semester 1

ANIML SC 1015RW Perspectives in Animal Science.....3

BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....3

CHEM 1100 Chemistry IA .....3

or

CHEM 1101 Foundations of Chemistry IA.....3

#### Semester 2

ANIML SC 1016RW Principles in Animal Behaviour, Welfare & Ethics .....3

BIOLOGY 1202 Biology I: Organisms .....3

CHEM 1200 Chemistry IB .....3

or

CHEM 1201 Foundations of Chemistry IB.....3

STATS 1004 Statistical Practice 1 (Life Sciences) \* .....3

- ii passes in additional courses to the value of 3 units chosen from:

#### Semester 1

PHYSICS 1101 Physics for the Life and Earth Sciences IA.....3

or

PHYSICS 1008 Physics Principles and Applications .....3

#### Semester 2

ENV BIOL 1002 Ecological Issues .....3

\* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical practice I (Life Sciences).

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses

#### Semester 1

*Animal Science course:*

Comparative Animal Anatomy & Physiology A.....3

ANIML SC 2031RW Companion Animal and Equine Studies .....3

ANIML SC 2014RW Wildlife Management.....3

BIOCHEM 2106WT Biochemistry II (Agriculture) A.....3

#### Semester 2

*Animal Science courses:*

Comparative Animal Anatomy & Physiology B.....3

ANIML SC 2029WT Genes and Inheritance.....3

ANIML SC 2030RW Livestock Production Science .....3

*Biometry course:*

Research Methodology .....3

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses

#### Semester 1

*Animal Science courses:*

Animal Reproduction & Development.....3

Laboratory Animal Science .....3

Microbiology and Invertebrate Biology.....3

#### Semester 2

ANIML SC 3015RW Animal Nutrition & Metabolism.....3

ANIML SC 3045RW Animal Breeding & Genetics.....3

ANIML SC 3016RW Animal Health .....3

- ii passes in additional courses to the value of 6 units chosen from:

**Summer semester**

ANIML SC 3043RW Animal Biotechnology ....3  
 ANIML SC 3019RW Ecology and Management of Vertebrate Pests.....3

**Semester 1**

AGRONOMY 3020RW Principles and Practice of Communications .....3  
 BIOMET 3000WT Agricultural Experimentation .....3

**Semester 2**

AGRIBUS 3017WT Business Management for Applied Science .....3  
 AGRONOMY 3026RW Ecology and Management of Rangelands (a).....3

*Animal Science course:*

Animal Behaviour.....3  
 (a) July

**2.3 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.

**2.4 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 Pre-Veterinary)

*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 Pre-Veterinary).

## 2 Academic Progress

2.1 A candidate must maintain the prescribed level of performance for progression from each of Levels I, II, and III. Any student who fails to maintain a minimum cumulative GPA of 4.00 or greater (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 in December of the year concerned. The letter will outline the show cause procedures.

2.2 A candidate who does not maintain the level of performance prescribed in 2.1 may not proceed with the Bachelor of Science (Animal Science Pre-Veterinary) program and will be required to transfer into the Bachelor of Science (Animal Science) program.

## 3 Qualification requirements

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

3.2 To qualify for the degree a candidate shall pass courses, listed in 3.3 below, to the value of 72 units.

### 3.3 Academic program

#### 3.3.1 Level I

##### Semester 1

ANIML SC 1017RW Perspectives in Animal Science (Pre-Vet) .....3

BIOLOGY 1510 Biology I: Molecules, Genes and Cells (Pre-Vet).....3

CHEM 1510 Chemistry IA (Pre-Vet) .....3

*or*

CHEM 1511 Foundations of Chemistry IA (Pre-Vet).....3

PHYSICS 1501 Physics for the Life and Earth Sciences IA (Pre-Vet).....3

*or*

PHYSICS 1508 Physics Principles and Applications (Pre-Vet) .....3

##### Semester 2

ANIML SC 1018RW Principles in Animal Behaviour, Welfare and Ethics (Pre-Vet) .....3

BIOLOGY 1520 Biology I: Organisms (Pre-Vet) .....3

CHEM 1520 Chemistry IB (Pre-Vet) .....3

*or*

CHEM 1521 Foundations of Chemistry IB (Pre-Vet).....3

STATS 1504 Statistical Practice I (Life Sciences) (Pre-Vet) .....3

#### 3.3.2 Level II

Courses in the areas of:

##### Semester 1

Comparative Veterinary Anatomy.....3

Comparative Veterinary Physiology.....3

Statistics (Research Methods) .....3

*and*

One 3-unit course in Biochemistry.....3

##### Semester 2

Animal Reproduction and Genetics .....3

Comparative Veterinary Anatomy.....3

Comparative Veterinary Physiology.....3

Veterinary Skills I.....3

#### 3.3.3 Level III

Courses in the areas of:

##### Semester 1

Animal Nutrition.....3

Veterinary Immunology.....3

Veterinary Microbiology.....3

Veterinary Parasitology .....3

##### Semester 2

Veterinary Skills.....3

Veterinary Pharmacology and Toxicology.....3

Veterinary Microbiology.....3

Veterinary Parasitology .....3

#### 3.4 The Honours degree

Refer to Academic Program Rule 5.7 of the degree of Bachelor of Science.

### **3.5 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.

## **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 (Biomedical Science)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
  - (c) a candidate shall complete a major in a discipline as set out in 2.2 below
  - (d) a candidate may also complete a major as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses:
  - Semester 1**
  - BIOLOGY 1101 Biology I:  
Molecules, Genes and Cells.....3
  - CHEM 1100 Chemistry IA .....3
  - or
  - CHEM 1101 Foundations of Chemistry
  - Semester 2**
  - BIOLOGY 1201 Biology I:  
Human Perspectives.....3
  - CHEM 1200 Chemistry IB .....3
  - or
  - CHEM 1201 Foundations of Chemistry .....3
- ii passes in additional Level I course to the value of 12 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses to the value of 6 units
  - Genetics courses:*
  - Semester 1**
  - Genetics IIA (Biomedical Science) .....3
  - and
  - Semester 2**
  - Genetics IIB (Biomedical Science) .....3
  - or
  - Microbiology courses:*
  - Semester 1**
  - Microbiology II (Biomedical Science).....3
  - and
  - Semester 2**
  - Immunology and Virology II  
(Biomedical Science) .....3
  - or
  - Physiology courses:*
  - Semester 1**
  - Human Physiology IIA (Biomedical Science) ..3
  - and
  - Semester 2**
  - Human Physiology IIB (Biomedical Science) ..3
- ii passes in courses to the value of 6 units:
  - Anatomical Science courses:*
  - Semester 1**
  - Cells and Tissues II.....3
  - and
  - Semester 2**
  - Comparative Anatomy of Body Systems II.....3
  - or
  - Biochemistry courses:*
  - Semester 1**
  - Biochemistry IIA .....3
  - and
  - Semester 2**
  - Biochemistry IIB .....3
  - or
  - Genetics courses:*
  - Semester 1**
  - Genetics IIA: Foundation of Genetics.....3
  - and

## Semester 2

Genetics IIB: Function & Diversity  
of Genomes.....3

or

*Microbiology courses:*

## Semester 1

Microbiology II.....3

and

## Semester 2

Immunology and Virology II .....3

or

*Physiology courses:*

## Semester 1

Human Physiology IIA: Heart, Lungs and  
Circulation.....3

and

## Semester 2

Human Physiology IIB: Homeostasis  
and Nervous System .....3

- iii passes in additional Level II course to the value of 12 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.3 and 5.6.4 for the degree of Bachelor of Science (including those listed in (ii) above).

### 2.2.3 Level III

Level III courses which shall include:

- i passes in core courses to the value of 12 units:

**For a major in Genetics**

#### Semester 1

GENETICS 3111 Genes, Genomes and  
Molecular Evolution (Biomedical Science).....6

#### Semester 2

GENETICS 3212 Gene Expression and Human  
and Developmental Genetics (Biomedical  
Science) .....6

**For a major in Microbiology and Immunology**

#### Semester 1

MICRO 3102 Infection and Immunity A  
(Biomedical Science).....6

#### Semester 2

MICRO 3202 Infection and Immunity B  
(Biomedical Science).....6

**For a major in Physiology**

#### Semester 1

PHYSIOL 3102 Human Physiology IIIA  
(Biomedical Science).....6

#### Semester 2

PHYSIOL 3202 Human Physiology IIIB  
(Biomedical Science).....6

- ii passes in additional Level III course to the value of 12 units in the disciplines of Anatomical Sciences, Biochemistry, Chemistry, Genetics, Microbiology and Immunology, Pharmacology or Physiology selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 for the degree of Bachelor of Science.

### 2.3 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.

### 2.4 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.



# Bachelor of Science (Biotechnology)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
- (c) a candidate shall complete a major in a discipline as set out in 2.2 below
- (d) a candidate may also complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses
  - Semester 1**
  - BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....3
  - BIOTECH 1000 Introduction to Biotechnology .....3
  - CHEM 1100 Chemistry IA .....3
  - or
  - CHEM 1101 Foundations of Chemistry IA.....3
  - CHEM ENG 1004 Introduction to Bio-processing .....3
  - Semester 2**
  - BIOLOGY 1201 Biology I: Human Perspectives.....3
  - and/or
  - BIOLOGY 1202 Biology I: Organisms .....3
  - CHEM 1200 Chemistry IB .....3
  - or
  - CHEM 1201 Foundations of Chemistry IB.....3

- ii passes in additional Level I courses to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.61 and 5.6.2 for the degree of Bachelor of Science.

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses
  - Semester 1**
  - Microbiology course:*
  - Microbiology II (Biotechnology) .....3
  - Semester 2**
  - Biochemistry courses:*
  - Biochemistry IIB (Biotechnology) .....3
  - Principles of Biotechnology II.....3
  - ii passes in additional courses to the value of 15 units selected from:
    - Semester 1**
    - Biochemistry course:*
    - Biochemistry IIA (Biotechnology).....3
    - Chemistry course:*
    - Chemistry IIA .....3
    - Genetics course:*
    - Genetics IIA Foundation of Genetics .....3
    - Physiology course:*
    - Human Physiology IIA .....3
    - Semester 2**
    - Chemistry courses:*
    - Chemistry IIB .....3
    - Medicinal & Biological Chemistry II.....3
    - Genetics course:*
    - Genetics IIB Function & Diversity of Genomes .....3
    - Microbiology course:*
    - Immunology & Virology II (Biotechnology).....3
    - Physiology course:*
    - Human Physiology IIB .....3
- or passes in additional Level II course selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.3 and 5.6.4 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses:

For a major in Biochemistry

#### Semester 1

BIOCHEM 3000 Molecular and Structural  
Biology III ..... 6

#### Semester 2

BIOTECH 3000 Biotechnology Practice II ..... 6

- ii passes in additional Level III course to the  
value of 12 units chosen from:

#### Semester 1

CHEM 3111 Chemistry III ..... 6

GENETICS 3111 Genes, Genomes  
& Molecular Biology ..... 6

MICRO 3000 Infection and Immunity A ..... 6

PHARM 3010 Pharmacology A III ..... 6

PHYSIOL 3001 Neurobiology ..... 6

#### Semester 2

BIOCHEM 3001 Cell & Developmental  
Biology ..... 6

CHEM 3211 Heterocyclic Chemistry &  
Molecular Devices III ..... 3

CHEM 3212 Materials Chemistry III ..... 3

CHEM 3213 Advanced Synthetic  
Methods III ..... 3

CHEM 3214 Medicinal & Biological  
Chemistry III ..... 3

GENETICS 3211 Gene Expression & Human &  
Developmental Genetics ..... 6

MICRO 3001 Infection and Immunity B ..... 6

PHARM 3011 Pharmacology B III ..... 6

PHYSIOL 3000 Advanced Systems  
Physiology ..... 6

PLANT SC 3009WT Plant Molecular Biology ...6

### 2.3 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.

### 2.4 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 (Ecochemistry)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
- (c) a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses  
**Semester 1**  
BIOLOGY 1101 Biology I:  
Molecules, Genes and Cells.....3  
CHEM 1100 Chemistry IA .....3  
*or*  
CHEM 1101 Foundations of Chemistry IA.....3  
GEOLOGY 1103 Earth Systems .....3  
**Semester 2**  
BIOLOGY 1202 Biology I: Organisms .....3  
*and/or*  
ENV BIOL 1002 Ecological Issues .....3  
CHEM 1200 Chemistry IB .....3  
*or*  
CHEM 1201 Foundations of Chemistry IB.....3  
GEOLOGY 1100 Earth's Interior I .....3
- ii passes in additional Level I course up to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science but

not including BIOLOGY 1201 Biology I: Human Perspectives.

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses  
*Chemistry courses:*  
**Semester 1**  
Chemistry IIA (Ecochemistry).....3  
Environmental & Analytical Chemistry II .....3  
**Semester 2**  
Chemistry IIB (Ecochemistry)..... 3  
Medicinal and Biological Chemistry II.....3
- ii passes in Level II courses to the value of 6 units chosen from:  
**Semester 1**  
at least one from:  
*Environmental Biology course:*  
Botany EBII .....3  
*Geology course:*  
Sedimentology & Stratigraphy.....3  
*Soil & Water course:*  
Soil & Water Resources .....3  
**Semester 2**  
at least one from:  
*Environmental Biology course:*  
Ecology EBII .....3  
*Geology course:*  
Landscape Processes and Environments II ....3
- iii passes in additional Level II courses to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2 and 5.6.3 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses:  
**Semester 1**  
*Chemistry course:*  
Environmental & Analytical Chemistry III .....3  
CHEM 3111 Chemistry III.....6  
**Semester 2**  
CHEM 3211 Heterocyclic Chemistry &  
Molecular Devices III.....3  
CHEM 3212 Materials Chemistry III.....3

- ii passes in additional Level III course to the value of 9 units chosen from:

**Summer semester**

SOIL&WAT 3004WT Environmental Toxicology and Remediation .....3

**Semester 1**

*Chemistry course:*

Research Methods in Chemistry III.....3

ENV BIOL 3004 Freshwater Ecology III.....3

ENV BIOL 3121 Concepts in Ecology EBII.....3

GEOLOGY 3015 Environmental Geoscience Processes III .....3

SOIL&WAT 3002WT Soil Management and Conservation.....3

SOIL&WAT 3012WT Soil Water Management .3

SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling.....3

**Semester 2**

CHEM 3213 Advanced Synthetic Methods III .....3

CHEM 3214 Medicinal & Biological Chemistry III.....3

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 .....3

GEOLOGY 3014 Environmental Geoscience Applications III .....3

SOIL&WAT 3010 Remote Sensing .....3

**2.3 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.

**2.4 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 (Evolutionary Biology)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
- (c) a candidate shall complete a major in a discipline as set out in 2.2 below.

### 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses
  - Semester 1**
  - BIOLOGY 1101 Molecules Genes & Cells..... 3
  - GEOLOGY 1103 Earth Systems ..... 3
  - Semester 2**
  - BIOLOGY 1202 Biology I: Organisms..... 3
  - GEOLOGY 1100 Earth's Interior ..... 3
- ii passes in additional Level I courses to the value of 12 units chosen from:
  - Semester 1**
  - CHEM 1100 Chemistry IA ..... 3
  - or*
  - CHEM 1101 Foundations of Chemistry IA..... 3
  - MATHS 1011 Mathematics IA\*
  - or*
  - MATHS 1013 Mathematics IMA ..... 3
  - Semester 2**
  - ENV BIOL 1002 Ecological Issues ..... 3
  - CHEM 1200 Chemistry IB ..... 3
  - or*
  - CHEM 1201 Foundations of Chemistry IB..... 3

- MATHS 1011 Mathematics IA\* ..... 3
- or*
- MATHS 1012 Mathematics IB..... 3
- STATS 1004 Statistical Practice (Life Sciences) \*\* ..... 3
- or* courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

\* may be taken in either Semester 1 or 2

\*\* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical Practice I (Life Sciences).

#### 2.2 Level II

Level II courses which shall include:

**For a major in Palaeontology**

- i passes in core courses
  - Semester 1**
  - Environmental Biology course:*
  - Evolutionary Biology EBII ..... 3
  - Geology course:*
  - Sedimentology & Stratigraphy II ..... 3
  - and one of
  - Environmental Biology course:*
  - Semester 1**
  - Botany II..... 3
  - or*
  - Semester 2**
  - Zoology II ..... 3
- ii passes in additional Level II courses to the value of 15 units chosen from:
  - Semester 1**
  - Environmental Biology course:*
  - Botany II..... 3
  - Genetics course:*
  - Genetics IIA: Foundations of Genetics ..... 3
  - Geology course:*
  - Structural Geology II..... 3
  - Semester 2**
  - Environmental Biology courses:*
  - Ecology EBII ..... 3
  - Zoology EB II ..... 3
  - Genetics course:*
  - Genetics IIB: Function & Diversity of Genomes..... 3

*Geology course:*

Landscape Processes and Environments II....3  
or additional courses selected in consultation  
with the program coordinator and in  
accordance with Academic Program Rules  
5.6.3 for the degree of Bachelor of Science.

**For a major in Systematic and Molecular  
Evolution**

i passes in core courses

**Semester 1**

*Environmental Biology course:*

Evolutionary Biology EBII .....3

*Genetics course:*

Genetics IIA: Foundations of Genetics.....3

**Semester 2**

*Genetics course:*

Genetics IIB: Function & Diversity  
of Genomes.....3  
and one of

*Environmental Biology courses:*

**Semester 1**

Botany II.....3

or

**Semester 2**

Zoology II.....3

ii passes in additional Level II courses to the  
value at least 12 units chosen from:

**Semester 1**

*Environmental Biology courses:*

Zoology EB II .....3

Botany II .....3

*Geology course:*

Sedimentology & Stratigraphy II.....3

**Semester 2**

*Environmental Biology course:*

Ecology EBII .....3

*Geology course:*

Landscape Processes and Environments II....3

iii or additional courses selected in consultation  
with the program coordinator and in  
accordance with Academic Program Rules  
5.6.3 for the degree of Bachelor of Science.

**2.2.3 Level III**

Level III courses which shall include:

**For a major in Palaeontology**

i passes, not conceded passes, in core courses

**Semester 1**

ENV BIOL 3122 Evolution & Palaeobiology.....3

**Semester 2**

ENV BIOL 3002 Australian Biota: Past,  
Present & Future .....3

ENV BIOL 3123 Issues in  
Evolutionary Biology.....3

GEOLOGY 3015 Environmental Geoscience  
Applications III.....3

ii passes in additional Level III courses to the  
value of 12 units chosen from:

**Semester 1**

ENV BIOL 3006 Research Methods in  
Environmental Biology .....3

ENV BIOL 3011 Evolution and Diversity  
of Insects.....3

ENV BIOL 3121 Concepts in Ecology .....3

GENETICS 3111 Genes, Genomes  
& Molecular Evolution.....3

GEOLOGY 3014 Environmental Geoscience  
Processes III .....3

**Semester 2**

SOIL&WAT 3010 Remote Sensing .....3

GEOLOGY 3014 Environmental Geoscience  
Applications III.....3

**For a major in Systematics & Molecular Evolution**

i passes, not conceded passes, in core courses:

**Semester 1**

ENV BIOL 3122 Evolution & Palaeobiology.....3

GENETICS 3111 Genes, Genomes  
& Molecular Evolution.....3

**Semester 2**

ENV BIOL 3002 Australian Biota: Past, Present  
& Future.....3

ENV BIOL 3123 Issues in  
Evolutionary Biology.....3

ii passes in additional Level III courses to the  
value of 12 units chosen from:

**Semester 1**

ENV BIOL 3006 Research Methods in  
Environmental Biology .....3

ENV BIOL 3011 Evolution and Diversity  
of Insects.....3

ENV BIOL 3121 Concepts in Ecology.....3

GEOLOGY 3014 Environmental Geoscience  
Processes III.....3

**Semester 2**

ENV BIOL 3003 Ecophysiology of Animals.....3

ENV BIOL 3008 Conservation & Restoration ..3

ENV BIOL 3009 Ecophysiology of Plants.....3

ENV BIOL 3010 Marine Ecology .....3

GENETICS 3121 Gene Expression & Human Developmental Genetics .....	3
GEOLOGY 3015 Environmental Geoscience Applications III .....	3

### **2.3 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.

### **2.4 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 (High Performance and Computational Physics)(Honours)

*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 and Computational Physics) (Honours)

## 2 Duration of program

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

## 3 Qualification requirements

3.1 To qualify for the degree a candidate shall pass courses, listed in 3.2 below, to the value of 96 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, III and IV
- (b) 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
- (c) a candidate may complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

### 3.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 3.2.1 Level I

Level I courses which shall include:

- i passes in core courses
  - 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
- ii passes in additional Level I courses to the value of 6 units chosen from:

#### Semester 1

APP MTH 1000 Scientific Computing I.....3	3
CHEM 1100 Chemistry IA .....3	3
ELEC ENG 1009 Electrical & Electronic Engineering IA.....3	3

#### Semester 2

CHEM 1200 Chemistry IB .....3	3
or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.	

#### 3.2.2 Level II

Level II courses which shall include:

- i passes in core courses

##### Semester 1

*Mathematics courses:*

Differential Equations.....3	3
Multivariable and Complex Calculus.....3	3

*Physics course:*

Physics IIA.....3	3
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##### Semester 2

*Applied Mathematics courses:*

Numerical Methods.....3	3
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*Physics courses:*

Classical Physics II .....3	3
Electromagnetism II .....3	3

- ii passes in additional Level II courses to the value of 6 units chosen from:

##### Semester 1

*Computer Science courses:*

Computer Systems.....3	3
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*Mathematics course:*

Probability and Statistics .....3	3
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##### Semester 2

*Applied Mathematics courses:*

Applied Maths Elective I .....3	3
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*Computer Science courses:*

Systems Programming in C and C++ .....3	3
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*Physics course:*

Physics IIB .....3	3
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*Pure Mathematics course:*

Pure Maths Elective I .....3

or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.3 and 5.6.4 for the degree of Bachelor of Science in the disciplines of Applied Mathematics, Computer Science, Physics and Pure Mathematics.

### 3.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses

#### Semester 1

*Physics course:*

Physics III.....6

PHYSICS 3006 Advanced Dynamics and Relativity.....3

#### Semester 2

PHYSICS 3022 Quantum Mechanics III .....3

PHYSICS 3000 Computational Physics III.....3

- ii passes in additional Level III course to the value of 9 units chosen from:

#### Semester 1

APP MTH 3000 Computational Mathematics ..3

*Physics course:*

Astrophysics and Atmospheric Physics.....3

#### Semester 2

*Physics course:*

Optics and Photonics III .....3

or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 and 5.6.6 for the degree of Bachelor of Science in the disciplines of Applied Mathematics, Computer Science, Physics and Pure Mathematics.

### 3.2.4 Level IV

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

PHYSICS 4000A/B Honours Physics .....24

or

PHYSICS 4001A/B Honours Mathematical Physics.....24

including some Level IV content selected in consultation with the program coordinator from COMP SCI 4999 A/B Honours Computer Science.

### 3.3 Unacceptable combinations of courses

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

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

### 3.4 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.

## 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 (Jurisprudence)

*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, which satisfy the requirements of 2.3 and 2.4 below.

### 2.3 Academic program

#### Note To students commencing this program in 2008

This program is currently under review, and there may be changes to the structure and the courses offered in this program from 2009. While the courses listed at Level I reflect the courses available in 2008, courses listed at higher levels should be considered as indicative only.

Students commencing study in 2008 will be provided with access to the revised Academic Program Rules for this program as part of their enrolment process. The revised Rules will be available from the following web address:  
[www.adelaide.edu.au/calendar](http://www.adelaide.edu.au/calendar)

A candidate shall pass courses to the value of at least 48 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 or equivalent
  - (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 (or equivalents), 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 will count as 4 units at Level I or II
- (b) additional Law courses presented for 2.4(b) will count as 4 units at Level II or III
- (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.
  - 3 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 LAW 1001 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.
  - 4 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 II courses chosen from those listed in Bachelor of Science Academic Program Rule 5.6.3 and 5.6.6 plus Law courses chosen with the advice of the Law Program Adviser.

#### Third year

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 chosen with the advice of the Law Program Adviser.

#### 5 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.

#### 6 Credit on account of previous studies in the University of Adelaide (Policy of the Faculty of Sciences)

- (a) Candidates who hold an LL.B. degree and hold no other degree will be given status for 2.4(a) and 2.4(b).
- (b) Candidates who hold an LL.B. degree and also a degree in a Faculty other than Law will be given status for 2.4(a) and 2.4(b) and may, in addition, be granted credit for the purposes of 2.4 on account of appropriate studies for a non-Law degree. Such candidates will be required as a minimum to complete Level III courses from Bachelor of Science Academic Program Rule 5.6 to the value of 12 units including a major in a Science discipline.
- (c) Candidates may also be granted credit towards the degree of B.Sc. (Jurisprudence) on account of studies not presented for a degree.

#### 7 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 (Marine Biology)

*These rules should be read in conjunction with Academic Program Rules parts 2, 3 and 4 of the Bachelor of Science*

## 1 General

There shall be a degree of Bachelor of Science (Marine Biology)

## 2 Qualification requirements

2.1 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 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
- (c) a candidate may complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include: .....

- i passes in core courses
  - Semester 1**
  - BIOLOGY 1101 Molecules Genes & Cells.....3
  - GEOLOGY 1103 Earth Systems .....3
  - Semester 2**
  - BIOLOGY 1202 Organisms.....3
  - ENV BIOL 1002 Ecological Issues .....3
  - STATS 1004 Statistical Practice (Life Sciences) \* .....3
  - \* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical practice I (Life Sciences).
- ii passes in additional Level I courses to the value of 9 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2 and 5.6.1 for the degree of Bachelor of Science.

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses
  - Semester 1**
  - ENV BIOL 2006 Botany EBII.....3
  - Geology course:*
  - Sedimentology & Stratigraphy.....3
  - Semester 2**
  - ENV BIOL 2003 Ecology EBII .....3
  - ENV BIOL 2000 Zoology EBII .....3
- ii passes in additional Level II course to the value of 12 units chosen from:
  - Semester 1**
  - SOIL&WAT 2011 Spatial Information & Land Evaluation .....3
  - Geographical & Environmental Studies courses:*
  - Global Change and Coasts .....3
  - Introduction to Environmental Impact Assessment.....3
  - Managing Coastal Environments.....3
  - or additional courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.3 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- i passes in core courses
  - Semester 1**
  - ENV BIOL 3006 Research Methods in Environmental Biology .....3
  - ENV BIOL 3121 Concepts in Ecology.....3
  - ENV BIOL 3124 Frontiers In Marine Biology...3
  - Semester 2**
  - ENV BIOL 3010 Marine Ecology III .....3
  - ENV BIOL 3221 Research Methods in Marine Biology .....3
- ii) passes in additional Level III courses to the value of 9 units chosen from:
  - Summer semester**
  - SOIL&WAT 3007WT GIS for Environmental Management .....3

## Semester 1

### *Geographical & Environmental Studies courses:*

Global Change and Coasts .....3

Introduction to Environmental Impact

Assessment .....3

Managing Coastal Environments .....3

or selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 for the degree of Bachelor of Science.

## **2.3 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.

## **2.4 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.

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 below, to the value of 72 units, which satisfy the following requirements:

- a candidate shall present passes in courses to the value of 24 units at each of level I, II and III
- 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
- a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- passes in core courses
  - Semester 1**
  - BIOLOGY 1101 Biology I: Molecules, Genes & Cells .....3
  - CHEM 1100 Chemistry IA .....3
  - or
  - CHEM 1101 Foundations of Chemistry IA.....3
  - Semester 2**
  - BIOLOGY 1201 Biology I: Human Perspectives.....3
  - CHEM 1200 Chemistry IB .....3
  - or
  - CHEM 1201 Foundations of Chemistry IB.....3
  - STATS 1004 Statistical Practice I (Life Sciences) .....3
  - \* STATS 1000 Statistical Practice I (offered in semester 1 and 2) may be taken instead of STATS 1004 Statistical practice I (Life Sciences).
- passes in additional Level I course to the value of 9 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science

### 2.2.2 Level II

Level II courses which shall include:

- passes in core courses
  - Semester 1**
  - BIOCHEM 2100 Biochemistry IIA.....3
  - CHEM 2106 Chemistry IIA (Molecular and Drug Design) .....3
  - Chemistry course:*
  - Environmental & Analytical Chemistry II .....3
  - Semester 2**
  - BIOCHEM 2200 Biochemistry IIB.....3
  - CHEM 2206 Chemistry IIB (Molecular and Drug Design) .....3
  - Chemistry course:*
  - Medicinal and Biological Chemistry II.....3
- passes in additional Level III course to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- passes, not conceded passes, in core courses
  - Semester 1**
  - CHEM 3111 Chemistry III.....6
  - BIOCHEM 3000 Molecular & Structural Biology III .....6
  - Semester 2**
  - CHEM 3213 Advanced Synthetic Methods III .....3
  - CHEM 3214 Medicinal & Biological Chemistry III.....3
- passes in additional Level III course to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 for the degree of Bachelor of Science.

## 2.3 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.

## **2.4 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 (Molecular Biology)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
- (c) a candidate shall complete a major in a discipline as set out in 2.2 below.
- (d) a candidate may also complete a major as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses  
**Semester 1**  
BIOLOGY 1101 Biology I:  
Molecules, Genes & Cells .....3  
CHEM 1100 Chemistry IA .....3  
*or*  
CHEM 1101 Foundations of Chemistry IA .....3  
**Semester 2**  
BIOLOGY 1201 Biology I:  
Human Perspectives.....3  
CHEM 1200 Chemistry IB .....3  
*or*  
CHEM 1101 Foundations of Chemistry IA .....3
- ii passes in additional Level I course to the value of 12 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses  
**Semester 1**  
*Biochemistry course:*  
Advanced Molecular Biology A.....3  
*Chemistry course:*  
Chemistry IIA .....3  
and either  
*Biochemistry course:*  
Biochemistry IIA .....3  
*or*  
*Genetics course:*  
Genetics IIA: Foundation of Genetics.....3  
**Semester 2**  
*Biochemistry course:*  
Advanced Molecular Biology B.....3  
*and*  
*Chemistry courses:*  
Chemistry IIB .....3  
*or*  
Medicinal and Biological Chemistry II.....3  
and either  
*Biochemistry course:*  
Biochemistry IIB .....3  
*or*  
*Genetics course:*  
Genetics IIB: Function and Diversity  
of Genomes.....3
- ii passes in additional Level II course to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.3 and 5.6.4 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses to the value of 12 units  
**For a major in Biochemistry**  
**Semester 1**  
BIOCHEM 3125 Advanced Molecular  
Biology IIIA (Biochemistry) .....6  
**Semester 2**  
BIOCHEM 3225 Advanced Molecular  
Biology IIIB (Biochemistry) .....6

## For a major in Genetics

### Semester 1

GENETICS 3110 Advanced Molecular  
Biology IIIA (Genetics) ..... 6

### Semester 2

GENETICS 3210 Advanced Molecular  
Biology IIIB (Genetics) ..... 6

- ii passes in additional Level II course to the value of 12 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 for the degree of Bachelor of Science in the disciplines of Anatomical Sciences, Biochemistry, Chemistry, Genetics, Microbiology and Immunology, Pharmacology or Physiology.

## 2.3 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.

## 2.4 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

# Bachelor of Science (Nanoscience and Materials)

*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 and Materials)

## 2 Qualification requirements

- 2.1 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
  - (c) a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

### 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses
  - Semester 1**
  - CHEM 1100 Chemistry IA .....3
  - or*
  - CHEM 1101 Foundations of Chemistry IA .....3
  - PHYSICS 1100 Physics IA \* .....3
  - or*
  - PHYSICS 1101 Physics for the Life & Earth Sciences IA.....3
  - or*
  - Physics 1008 Physics Principles & Applications .....3
  - and*
  - BIOLOGY 1101 Biology I: Molecules, Genes and Cells.....3
  - Semester 2**
  - CHEM 1200 Chemistry IB .....3
  - or*
  - CHEM 1201 Foundations of Chemistry IB .....3
  - PHYSICS 1200 Physics IB \*\* .....3

*or*  
PHYSICS 1201 Physics for the Life & Earth Sciences IB .....3

*and*

BIOLOGY 1201 Biology I: Human Perspectives.....3

*or*

BIOLOGY 1202 Biology I: Organisms .....3

- ii passes in additional Level I course to the value of 6 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 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

#### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses
  - Chemistry courses:*
  - Semester 1**
  - Chemistry IIA (Nanoscience & Materials).....3
  - Environmental & Analytical Chemistry II .....3
  - Semester 2**
  - Chemistry IIB (Nanoscience & Materials).....3
  - Medicinal and Biological Chemistry II.....3
- ii passes in additional Level II course to the value of 12 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.3 and 5.6.4 for the degree of Bachelor of Science.

#### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses
  - Semester 1**
  - CHEM 3111 Chemistry III.....6
  - Semester 2**
  - CHEM 3211 Heterocyclic Chemistry & Molecular Devices III.....3
  - CHEM 3212 Materials Chemistry III.....3
  - CHEM 3213 Advanced Synthetic Methods III .....3
- ii passes in additional Level III course to the value of 9 units selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 and 5.6.6 for the degree of Bachelor of Science.

### **2.3 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.

### **2.4 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 (Natural Resources)

*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 Resources)

## 2 Qualification requirements

2.1 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses
    - Semester 1**
    - BIOLOGY 1101 Biology I:  
Molecules, Genes and Cells.....3
    - GEOLOGY 1103 Earth Systems .....3
    - Semester 2**
    - ENV BIOL 1002 Ecological Issues .....3
    - BIOLOGY 1202 Biology I: Organisms .....3
    - GEOLOGY 1100 Earth's Interior .....3
    - STATS 1004 Statistical Practice I (Life Sciences) \* .....3
  - ii passes in additional Level I course to the value of 6 units chosen from:
    - CHEM 1100 Chemistry IA .....3
    - or
    - CHEM 1101 Foundations of Chemistry IA.....3
    - or Level I courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.
- \* STATS 1000 Statistical Practice I (offered in semester 1 & 2) may be taken instead of STATS 1004 Statistical Practice I (Life Sciences).

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses
  - Semester 1**
  - Environmental Biology course:*
  - Botany EBII .....3
  - Geology course:*
  - Sedimentology & Stratigraphy II.....3
  - Soil & Water course:*
  - Soil & Water Resources.....3
  - Semester 2**
  - Environmental Biology course:*
  - Ecology EBII .....3
  - Soil & Water course:*
  - Spatial Information and Land Evaluation .....3
- ii passes in additional Level II course to the value of 9 units chosen from:
  - Semester 1**
  - Geographical & Environmental Studies course:*
  - Introduction to Environmental Impact  
Assessment .....3
  - Semester 2**
  - ENV BIOL 2000 Zoology EBII .....3
  - GEOLOGY 2008 Landscape Processes  
& Environments II .....3
  - or from Level II courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.3 and 5.6.4 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses
  - Semester 1**
  - AGRONOMY 3020RW Principles and Practice  
of Communications .....3
  - Semester 2**
  - ENV BIOL 3220 Issues in Sustainable  
Environments.....3
  - SOIL&WAT 3007WT GIS for Environmental  
Management (Summer Semester).....3
  - or
  - SOIL&WAT 3014WT GIS for Agricultural  
Sciences .....3

- ii passes in additional Level III course to the value of 15 units chosen from at least two of the following thematic groupings (at least 6 units chosen in each of the chosen thematic grouping):

**Land & Water Management**

**Summer semester**

SOIL&WAT 3004WT Environmental Toxicology & Remediation ..... 3

**Semester 1**

SOIL&WAT 3002WT Soil Management & Conservation..... 3

SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling..... 3

**Semester 2**

AGRONOMY 3000RW Agroforestry..... 3

AGRONOMY 3026RW Ecology & Management of Rangelands..... 3

ENV BIOL 3012WT Integrated Catchment Management III ..... 3

**Conservation & Wildlife Ecology**

**Full year**

APP ECOL 3022AEX/BEX Integrated Weed Management ..... 3

**Semester 1**

ENV BIOL 3004 Freshwater Ecology III..... 3

ENV BIOL 3006 Research Methods in Environmental Biology III..... 3

ENV BIOL 3121 Concepts in Ecology ..... 3

**Semester 2**

ENV BIOL 3010 Marine Ecology III ..... 3

ENV BIOL 3008 Conservation & Restoration .. 3

**Environmental Geoscience**

**Semester 1**

GEOLOGY 3015 Environmental Geoscience Processes III ..... 3

SOIL&WAT 3002WT Soil Management & Conservation..... 3

**Semester 2**

SOIL&WAT 3010 Remote Sensing ..... 3

GEOLOGY 3014 Environmental Geoscience Applications III ..... 3

**2.3 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.

**2.4 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 (Optics and Photonics)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 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 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
- (c) a candidate shall complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses
  - Semester 1**
  - PHYSICS 1100 Physics IA ..... 3
  - MATHS 1011 Mathematics IA ..... 3
  - Semester 2**
  - PHYSICS 1200 Physics IB ..... 3
  - MATHS 1012 Mathematics IB ..... 3
- ii passes in additional Level I courses to the value of 12 units chosen from:
  - Semester 1**
  - APP MTH 1000 Scientific Computing I ..... 3
  - CHEM 1100 Chemistry IA ..... 3
  - COMP SCI 1008 Computer Science IA ..... 3
  - COMP SCI 1009 Computer Science IB ..... 3
  - ELEC ENG 1009 Electrical & Electronic Engineering IA ..... 3
  - Semester 2**
  - CHEM 1200 Chemistry IB ..... 3
  - COMP SCI 1008 Computer Science IA ..... 3
  - COMP SCI 1009 Computer Science IB ..... 3

or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses
    - Semester 1**
    - Mathematics courses:*
    - Differential Equations ..... 3
    - Multivariable and Complex Calculus ..... 3
    - Physics course:*
    - Physics IIA ..... 3
    - Semester 2**
    - Physics courses:*
    - Classical Physics II ..... 3
    - Electromagnetism II ..... 3
    - Physics IIB (Optics & Photonics) ..... 3
  - ii passes in additional Level II course to the value of 6 units chosen from:
    - Semester 1**
    - Chemistry course:*
    - Chemistry IIA ..... 3
    - Electrical & Electronic Engineering course:*
    - Electronics II ..... 3
    - Semester 2**
    - Chemistry course:*
    - Chemistry IIB ..... 3
    - Electrical & Electronic Engineering course:*
    - Signals and Systems ..... 3
    - Physics course:*
    - Astrophysics II ..... 3
- or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.3 and 5.6.4 for the degree of Bachelor of Science.

### 2.2.3 Level III

Level III courses which shall include:

- i passes, not conceded passes, in core courses
  - Physics courses:*
  - Semester 1**
  - Physics III ..... 6

## Semester 2

Experimental Physics III (Optics & Photonics).....	3
Optics and Photonics III .....	3
PHYSICS 3022 Quantum Mechanics III .....	3

- ii passes in additional Level III course to the value of 9 units chosen from:

## Semester 1

APP MATHS 3017 Waves III .....	3
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### *Electrical & Electronic Engineering courses:*

Control III .....	3
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RF Engineering III .....	3
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### *Physics course:*

Astrophysics and Atmospheric Physics III.....	3
---	---

PHYSICS 3006 Advanced Dynamics and Relativity .....	3
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## Semester 2

### *Electrical & Electronic Engineering course:*

Practical Electrical and Electronic Design III...3
--

PHYSICS 3000 Computational Physics III .....	3
--	---

or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 and 5.6.6 for the degree of Bachelor of Science.

## 2.3 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.

## 2.4 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 (Petroleum Geoscience)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 below, to the value of 72 units, which satisfy the following requirements:

- (a) a candidate shall present passes in courses to the value of no more than 30 units at Level I
- (b) a candidate shall present passes in courses to the value of no more than 18 units at Level II
- (c) a candidate shall present passes in courses to the value of 24 units at Level III
- (d) 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.

### 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 2.2.1 Level I

Level I courses which shall include:

- i passes in core courses

##### Semester 1

GEOLOGY 1103 Earth Systems .....3

MATHS 1011 Mathematics IA.....3

or

MATHS 1013 Mathematics IMA .....3

##### Semester 2

GEOLOGY 1100 Earth's Interior .....3

MATHS 1011 Mathematics IA.....3

or

MATHS 1012 Mathematics IB.....3

- ii) passes in additional Level I courses to the value of 12 units selected in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science, which must include at least one of the following per semester:

##### Semester 1

CHEM 1100 Chemistry IA .....3

or

CHEM 1101 Foundations of Chemistry IA.....3

PHYSICS 1100 Physics IA .....3

or

PHYSICS 1101 Physics for the Life & Earth Sciences IA.....3

or

PHYSIC 1008 Physics Principles & Applications .....3

##### Semester 2

CHEM 1200 Chemistry IB .....3

or

CHEM 1102 Foundations of Chemistry IB.....3

PHYSICS 1200 Physics IB .....3

or

PHYSICS 1102 Physics for the Life & Earth Sciences IB.....3

#### 2.2.2 Level II

Level II courses which shall include:

- i passes in core courses

##### Semester 1

*Geology courses:*

Structural Geology II.....3

Sedimentology & Stratigraphy II.....3

*Petroleum Engineering course:*

Drilling Engineering .....3

##### Semester 2

*Geology courses:*

Igneous & Metamorphic Geology II .....3

Landscape Processes and Environments II....3

*Petroleum Engineering course:*

Formation Evolution, Petrophysics & Rock Properties .....3

PETROENG 1001 Introduction to Rock & Fluid Properties & Petroleum Geosciences.....3

- ii) passes in additional Level II course to the value of 3 units chosen from:

Summer semester

MATHS 1012 Mathematics IB (or equiv) .....3

##### Semester 1

*Chemistry courses:*

Chemistry IIA .....3

Environmental & Analytical Chemistry .....3

*Mathematics course:*

Maths II.....3  
PETROENG 1005 Introduction to the  
Petroleum Industry & Petroleum Geoscience .. 3

**2.2.3 Level III**

Level III courses which shall include:

- i passes in core courses

**Semester 1**

*Geology course:*

Reservoir Geoscience Project .....3  
GEOLOGY 3013 Tectonics III.....3  
GEOLOGY 3017 Petroleum Exploration III .....3  
PETROENG 3002 Economic Valuation.....3

**Semester 2**

SOIL&WAT 3010 Remote Sensing III.....3  
GEOLOGY 3019 Field Geoscience  
Program III .....3  
PETROENG 3005 Reservoir Characterisation  
& Modelling.....3  
PETROENG 3019 Structural Geology  
& Seismic Methods .....3

**2.3 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.

**2.4 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 (Space Science and Astrophysics)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 below, to the value of 72 units, which satisfy the following requirements:
- a candidate shall present passes in courses to the value of not more than 30 units at Level I
  - candidate shall present passes in courses to the value of at least 24 units at Level III
  - 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
  - a candidate may complete a major in a discipline as set out in Academic Program Rule 5.4 of the degree of Bachelor of Science.

### 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 2.2.1 Level I

Level I courses which shall include:

- passes in core courses
  - Semester 1**
  - MATHS 1011 Mathematics IA.....3
  - PHYSICS 1100 Physics IA .....3
  - PHYSICS 1007 Space Science & Astrophysics I.....3
  - Semester 2**
  - MATHS 1012 Mathematics IB.....3
  - PHYSICS 1200 Physics IB .....3
- passes in additional Level I courses to the value of not more than 15 units chosen from:
  - APP MATH 1000 Scientific Computing I.....3
  - PHYSICS 1005 Physics, Ideas and Society I...3
  - GEOLOGY 1100 Earth's Interior I .....3or selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.1 and 5.6.2 for the degree of Bachelor of Science.

#### 2.2.2 Level II

Level II courses which shall include:

- passes in core courses
  - Semester 1**
  - Mathematics courses:*
  - Differential Equations.....3
  - Multivariable and Complex Calculus.....3
  - Physics course:*
  - Physics IIA.....3
  - Semester 2**
  - Physics courses:*
  - Physics IIB.....3
  - Electromagnetism II .....3
  - Space Science and Astrophysics II.....3
- passes in additional Level II courses chosen from:
  - Semester 2**
  - Physics course:*
  - Classical Physics II .....3or selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.2, 5.6.3 and 5.6.4 for the degree of Bachelor of Science, or selected courses listed for the Bachelor degree of Engineering (Aerospace).

#### 2.2.3 Level III

Level III courses which shall include:

- passes, not conceded passes, in core courses
  - Semester 1**
  - Physics courses:*
  - Atmospheric and Astrophysics Physics III.....3
  - Physics III.....6
  - Semester 2**
  - PHYSICS 3002 Experimental Physics III .....3
- passes in additional Level III course to the value of 12 units chosen from:
  - Semester 2**
  - Physics course:*
  - Optics and Photonics III .....3
  - PHYSICS 3000 Computational Physics III.....3or courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 and 5.6.6 for the degree of Bachelor of Science or selected courses listed for the Bachelor degree of Engineering (Aerospace).

### **2.3 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.

### **2.4 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 (Viticulture)

*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 To qualify for the degree a candidate shall pass courses, listed in 2.2 below, to the value of 72 units, which satisfy the following requirements:

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

## 2.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

### 2.2.1 Level I

Level I courses which shall include:

- passes in core courses  
**Semester 1**  
BIOLOGY 1101 Biology I:  
Molecules, Genes and Cells..... 3  
CHEM 1100 Chemistry IA ..... 3  
*or*  
CHEM 1101 Foundations of Chemistry IA..... 3  
OENOLOGY 1018NW Foundations  
in Wine Science..... 3  
PHYSICS 1101 Physics for the Life and Earth  
Sciences ..... 3  
*or*  
PHYSICS 1008 Physics Principles and  
Applications IA..... 3  
**Semester 2**  
BIOLOGY 1202 Biology I: Organisms ..... 3  
CHEM 1200 Chemistry IB ..... 3  
*or*  
CHEM 1201 Foundations of Chemistry IB..... 3  
GEOLOGY 1200 Earth's Environment ..... 3  
STATS 1004 Statistical Practice I  
(Life Sciences) ..... 3

### 2.2.2 Level II

Level II courses which shall include:

- passes in core courses  
**Semester 1**  
*Biochemistry course:*  
Biochemistry II (Agriculture) A ..... 3  
*Environmental Biology course:*  
Botany EBII ..... 3  
*Oenology course:*  
Microbiology for Viticulture and Oenology..... 3  
*Soil & Water course:*  
Soil and Water Resources ..... 3  
**Semester 2**  
*Animal Science course:*  
Genes and Inheritance ..... 3  
Introductory Winemaking..... 3  
Sensory Studies..... 3  
*Viticulture course:*  
Viticultural Science ..... 3

### 2.2.3 Level III

Level III courses which shall include:

- passes, not conceded passes, in core courses  
**Semester 1**  
AGRONOMY 3130WT Viticultural  
Engineering and Irrigation ..... 3  
PLANT SC 3131WT Integrated Pest  
Management A..... 3  
VITICULT 3021WT Viticultural Production..... 3  
**Semester 2**  
AGRIBUS 3017WT Business Management  
for Applied Science ..... 3  
VITICULT 3043WT Industry Experience  
(Viticulture) A ..... 3  
VITICULT 3044WT Viticultural Methods and  
Procedures..... 3  
  - passes in additional Level III course to the  
value of 6 units chosen from:  
**Full year**  
PLANT SC 3030AEX/BEX Integrated Weed  
Management ..... 3  
**Semester 1**  
HORTICUL 3004WT Olive Production and  
Marketing (a)..... 3  
OENOLOGY 3016WT Cellar & Winery Waste  
Management ..... 3

OENOLOGY 3047WT Winemaking at Vintage.....	3
OENOLOGY 3307WT Stabilisation and Clarification.....	3
PLANT SC 3002WT Biotechnology in the Food and Wine Industries .....	3
PLANT SC 3130WT Plant Pathology .....	3
SOIL&WAT 3002WT Soil Management and Conservation.....	3
SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling .....	3
VITICULT 3005WT Grape Industry Practice, Policy and Communication.....	3
VITICULT 3020WT Table and Drying Grape Production .....	3
<b>Semester 2</b>	
ENV BIOL 3009 Ecophysiology of Plants III....	3
FREN 3103WT Technical French (Oenology)...	3
PLANT SC 3004WT Mineral Nutrition of Plants.....	3
SOIL&WAT 3012WT Soil Water Management .....	3
SOIL&WAT 3014WT GIS for Agricultural Science (b).....	3
or Level III courses selected in consultation with the program coordinator and in accordance with Academic Program Rules 5.6.5 for the degree of Bachelor of Science.	
(a) July	(b) September

### 2.3 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.

### 2.4 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.

## 1 General

- 1.1 There shall be a Bachelor of Wine Marketing and an Honours degree of Bachelor of Wine Marketing.
- 1.2 A candidate may obtain a Bachelor degree, an Honours degree, or both.

## 2 Duration of program

The program for the degree shall extend over three years of full-time study or the part-time equivalent, and that for the Honours degree over one additional year of full-time study or, in exceptional circumstances, over two years of part-time study.

## 3 Admission

### 3.1 Status, exemption and credit transfer

- 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 exceptional cases and on grounds approved by the Faculty.

Note: Partial or full status may be granted on account of International Baccalaureate upon application to 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) status will normally 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.
- (b) the candidate shall present a range of courses which fulfils the requirements of the relevant Academic Program Rules.
- (c) a candidate shall complete a minimum of 24 units towards the award, as defined in 5.2 below which have not been presented for any other degree.

## 4 Assessment and examinations

- 4.1 In determining a candidate's final result in a course the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

- 4.2 There shall be four classifications of pass in any course for the degrees, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. In addition there shall be a classification of Conceded Pass. However, a candidate may only present courses for which a Conceded Pass has been obtained up to an aggregate value of 6 units. Courses for which a result of Conceded Pass has been obtained shall not satisfy any prerequisite requirement.

- 4.3 (a) A candidate who obtains a Pass or higher grade in a course can not repeat the course.
- (b) A candidate who fails to obtain a Pass or higher grade 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 or their delegate, do written and laboratory or other 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 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.

## 5 Qualification requirements

- 5.1 To qualify for the degree a candidate shall pass courses, listed in 5.2 below, to the value of 72 units.

### 5.2 Academic program

Note: Where subject and catalogue numbers are not listed below, this information will be provided for these courses by late 2008.

#### 5.2.1 Level I

Passes in Level I courses:

##### Semester 1

ECON 1004 Principles of Microeconomics I.....	3
<i>or</i>	
WINEMKTG 1026EX Microeconomic Principles ...	3
ECON 1008 Business Data Analysis I .....	3
<i>or</i>	
WINEMKTG 1015EX Data Analysis for Food and Wine Business.....	3
OENOLOGY 1000NW/1000EX Introductory Grape and Wine Knowledge .....	3
WINEMKTG 1013WT/1013EX Wine and Food Marketing Principles .....	3

## Semester 2

ACCTING 1002 Accounting for Decision Makers .....	3
<i>or</i>	
WINEMKTG 1008EX Introduction to Managerial and Financial Accounting .....	3
COMMLAW 1004 Commercial Law I (S).....	3
<i>or</i>	
WINEMKTG 1003EX Legal Issues in Wine Marketing.....	3
ECON 1000 Principles of Macroeconomics I.....	3
<i>or</i>	
WINEMKTG 1063WT Macroeconomic Essentials for Wine and Food Business .....	3
OENOLOGY 1001NW/1001EX Vineyard and Winery Operations I.....	3

### 5.2.2 Level II

Level II courses which shall include:

i passes in core courses:

#### Semester 1

*Agricultural Business course:*

Introduction to Business Management .....

*or*

*Wine Marketing course:*

Applied Management Science.....

*Oenology course:*

Vineyard and Winery Operations II .....

#### Semester 2

*Wine Marketing courses:*

Applied Marketing Research .....

International Marketing of Wine and Agricultural Products .....

ii passes in additional Level II course to the value of 12 units selected in consultation with the Program Coordinator

### 5.2.3 Level III

Level III courses which shall include:

i passes, not conceded passes, in core courses

#### Semester 1

WINEMKTG 3006WT/3006EX Global Wine Market.....

WINEMKTG 3040WT/3040EX Wine Retail and Distribution Management .....

#### Semester 2

WINEMKTG 3028WT/3028EX Winery Business Management III .....

WINEMKTG 3049WT/3049EX Wine and Food Tourism and Festivals.....

ii passes in additional courses to the value of 9 units chosen from:

## Semester 1

WINEMKTG 2002WT/2002EX Wine and Society .....	3
WINEMKTG 2003WT/2003EX International Wine Law.....	3
WINEMKTG 3014WT/3014EX Food Marketing.....	3
WINEMKTG 3047EX Internet Marketing and E-Commerce .....	3

## Semester 2

AGRIBUS 2009WT Issues in Australian Agribusiness .....	3
AGRIBUS 3010WT International Agribusiness Environment .....	3
WINEMKTG 2010EX Strategic Marketing Management .....	3
WINEMKTG 3065WT/3065EX Database Marketing for Food and Wine Business .....	3

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

#### Semester 1

WINEMKTG 3034WT/3034EX Advertising and Promotion III .....

#### Semester 2

MARKETNG 2011 Consumer Behaviour II .....

*or*

WINEMKTG 2033EX Consumer Behavioural Analysis.....

It is recommended that students wishing to specialise in finance, economics and trade include the following courses amongst their electives:

#### Semester 1

*Economics course:*

Intermediate Microeconomics .....

ECON 3021 International Trade III.....

#### Semester 2

*Economics course:*

Intermediate Microeconomics .....

International Trade & Investment Policy I.....

or additional courses offered by the Faculty of Sciences or any courses in the Bachelor of Commerce or Bachelor of Economics for which the student is eligible to enrol.

### 5.3 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.

## **5.4 The Honours degree**

- 5.4.1 Candidates completing the Bachelor of Wine Marketing and 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 Arts and Bachelor of Science

*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 part-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 unit value of 48, 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 12 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.