



THE UNIVERSITY
of ADELAIDE

Undergraduate and Postgraduate

2015 Calendar

Faculty of Sciences

The University of Adelaide

Undergraduate and postgraduate calendar

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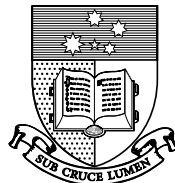
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Graduate Attributes

The University of Adelaide

The University of Adelaide is a research-intensive university that seeks to develop graduates of international distinction by providing high quality education. The University defines the philosophy underpinning its teaching programs through the Graduate Attributes. These describe the qualities, knowledge and capabilities that students are encouraged to take responsibility for developing throughout their studies at the University. The Graduate Attributes are not a list of skills to be mastered; rather, they encapsulate for both students and the wider community the defining characteristics of a student's university degree program(s), and describe a set of characteristics that are designed to be transferable beyond the particular disciplinary context in which they have been developed. While Graduate Attributes are fostered in the context of the curriculum, they are also developed within the total university experience as they encourage students to reflect on the broader purpose of their university education.

The University of Adelaide Graduate Attributes are:

1. Deep discipline knowledge
2. Critical thinking and problem solving
3. Teamwork and communication skills
4. Career and leadership readiness
5. Intercultural and ethical competency
6. Self-awareness and emotional intelligence.

The Arms of the University

The heraldic description of the Coat of Arms is as follows:

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

Sub Cruce Lumen

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

Student Study Commitment for Coursework Students

To successfully complete courses, students will need to allocate an appropriate time commitment to their study. In addition to the formal contact—the time required for each course (e.g. lectures, tutorials, practicals)—students will need to allocate non-contact time. Non-contact time will be required for a range of activities which may include, but are not limited to, assessment tasks, reading, researching, note-taking, revision, writing, consultation with staff, and informal discussion with other students. While the relative proportion of contact and non-contact time may vary from course to course, as a guide, a full-time student would expect to spend, on average, a total of 48 hours per week on their studies during teaching periods. The workload for undergraduate and postgraduate coursework programs is 24 units per year (full-time).

Faculty of Sciences

2015 Undergraduate and Postgraduate Program Rules

CONTENTS

Undergraduate Program Rules

| | |
|---|-----|
| Bachelor of Agricultural Sciences..... | 613 |
| Bachelor of Applied Biology | 615 |
| Bachelor of Applied Biology (Honours) | 617 |
| Bachelor of Food and Nutrition Science..... | 620 |
| Bachelor of Food and Nutrition Science (Honours)..... | 622 |
| Bachelor of Science..... | 623 |
| Bachelor of Science (Advanced)..... | 628 |
| Bachelor of Science (Animal Science)..... | 632 |
| Bachelor of Science (Biomedical Science)..... | 634 |
| Bachelor of Science (Biotechnology) | 636 |
| Bachelor of Science (Ecochemistry)..... | 638 |
| Bachelor of Science (Evolutionary Biology)..... | 640 |
| Bachelor of Science (Laser Physics and Technology) | 642 |
| Bachelor of Science (Marine Biology) | 644 |
| Bachelor of Science (Mineral Geoscience)..... | 646 |
| Bachelor of Science (Molecular and Drug Design) | 647 |
| Bachelor of Science (Molecular Biology)..... | 649 |
| Bachelor of Science (Nanoscience and Materials)..... | 651 |
| Bachelor of Science (Natural Resources)..... | 653 |
| Bachelor of Science (Petroleum Geoscience)..... | 655 |
| Bachelor of Science (Space Science and Astrophysics)..... | 657 |
| Bachelor of Science (Veterinary Bioscience)..... | 659 |
| Bachelor of Science (Honours)..... | 661 |
| Bachelor of Science (High Performance Computational Physics) (Honours)..... | 665 |
| Bachelor of Viticulture and Oenology..... | 667 |
| Bachelor of Viticulture and Oenology (Honours)..... | 669 |
| Bachelor of Arts and Bachelor of Science..... | 671 |
| Bachelor of Laws and Bachelor of Science..... | 672 |
| Bachelor of Teaching and Bachelor of Science..... | 673 |

Postgraduate Program Rules

| | |
|--|-----|
| Graduate Certificate in Biotechnology (Biomedical) | 675 |
| Graduate Diploma in Biotechnology (Biomedical)..... | 676 |

| | |
|---|------------|
| Master of Biotechnology (Biomedical) | 677 |
| Graduate Certificate in Biotechnology (Plant Biotechnology) | 678 |
| Graduate Diploma in Biotechnology (Plant Biotechnology) | 679 |
| Master of Biotechnology (Plant Biotechnology)..... | 680 |
| Graduate Diploma in Oenology | 681 |
| Graduate Certificate in Physics | 682 |
| Graduate Diploma in Physics..... | 683 |
| Graduate Certificate in Plant Health and Biosecurity | 684 |
| Graduate Diploma in Plant Health and Biosecurity | 685 |
| Master of Plant Health and Biosecurity..... | 686 |
| Graduate Certificate in Radiation Management..... | 687 |
| Graduate Diploma in Viticulture..... | 688 |
| Graduate Diploma in Viticulture and Oenology..... | 689 |
| Master of Viticulture and Oenology | 690 |
| Doctor of Veterinary Medicine..... | 691 |
| | |
| Postgraduate Research Degrees | 693 |

Notes on Delegated Authority

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

Undergraduate Program Rules

Bachelor of Agricultural Sciences (BAgricSci)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program will provide students with skills and knowledge in the physical, biological, technological and economic bases of modern agricultural systems and is designed to demonstrate how scientific and economic principles are applied to manage agricultural systems and the natural resources on which these systems depend. The first year develops basic skills in chemistry, biology and statistics as well as offering core courses in soils and agriculture. In the second and third years students enrol in courses in crop science, livestock science, soil science and agribusiness. Some specialisation is possible in the third year. Field trips and excursions are incorporated into the first and third year programs to expose students to best practice in industry. Practical skills are developed through a professional internship during the second half of the program. While the majority of the degree is based at the Waite campus, education in livestock production and the practical component of agronomy is based at the Roseworthy campus.

This program requires a total of twelve weeks (approximately 450 hours) of professional work experience and this should be undertaken during the University vacations and completed by the start of Semester 2 of the third year of the program. Students with relevant professional experience may be exempted.

The Bachelor of Agricultural Sciences is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Agricultural Sciences

There shall be a Bachelor of Agricultural Sciences.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Agricultural Sciences, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

2.1.1 Core Courses

Level I

| | |
|---|---|
| AGRIC 1510WT Agricultural Systems IA..... | 3 |
| AGRIC 1520WT Agricultural Systems IB..... | 3 |
| BIOLOGY 1101 Biology I: Molecules, Genes and Cells..... | 3 |
| or | |
| BIOLOGY 1401 Concepts in Biology I..... | 3 |
| BIOLOGY 1202 Biology I: Organisms..... | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB*..... | 3 |
| or | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| SOIL&WAT 1000WT Soils and Landscapes I..... | 3 |
| STATS 1000 Statistical Practice I..... | 3 |

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

| | |
|---|---|
| AGRIBUS 2520WT Agribusiness II..... | 3 |
| AGRIC 2500WT Animal and Plant Biochemistry II..... | 3 |
| AGRIC 2505RW Crop & Pasture Production II..... | 3 |
| ANIML SC 2503RW Livestock Production Sciences II..... | 3 |
| ANIML SC 2501WT Genes and Inheritance II..... | 3 |
| PLANT SC 2510WT Foundations in Plant Science II..... | 3 |
| PLANT SC 2500WT Microbiology and Invertebrate Biology II..... | 3 |
| SOIL&WAT 2500WT Soil and Water Resources II..... | 3 |

Level III

| | |
|---|---|
| AGRIBUS 3500WT Agricultural Economics & Policy III..... | 3 |
| AGRIC 3515WT Research Methodology in Agricultural Sciences III..... | 3 |
| AGRIC 3510WT Agricultural Resource Management III..... | 3 |
| AGRIC 3500WT Professional Skills in Agricultural Science III..... | 3 |

2.1.2 Electives

Courses to the value of 12 units from the following:

Level III

Livestock Science and Production

| | |
|---|---|
| ANIML SC 3045RW Animal Breeding & Genetics III | 3 |
| ANIML SC 3046RW Animal Reproduction and Development III | 3 |
| ANIML SC 3015RW Animal Nutrition & Metabolism III | 3 |
| ANIML SC 3016RW Animal Health III | 3 |

Soil Science

| | |
|---|---|
| SOIL&WAT 3004WT Environmental Toxicology and Remediation | 3 |
| SOIL&WAT 3017WT Soil & Water: Management and Conservation III..... | 3 |
| SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III | 3 |
| SOIL&WAT 3020WT GIS for Agriculture & Natural Resource Management III | 3 |

Crop and Pasture Science

| | |
|--|---|
| AGRONOMY 3012RW Agronomy III..... | 3 |
| PLANT SC 3510WT Plant Health III..... | 3 |
| PLANT SC 3200WT Plant Breeding III..... | 3 |
| PLANT SC 3515WT Plant Biotechnology III | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |

or

other Level III courses from the Faculty of Sciences with the approval of the Program Coordinator.

2.1.3 Work Based Training / Extra Mural Studies

Students must complete a total of 12 weeks of professional work experience to the value of approximately 450 hours which will be assessed within AGRIC 3500WT Professional Skills in Agricultural Science III.

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Applied Biology (BApplBiol)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program offers a unique combination of theoretical learning and professional practice in the discipline of applied biology. It focuses on both biological knowledge and on the multitude of ways in which biology contributes to employment and productivity. Students will start from a broad base in their first year with fundamental knowledge and skills in biology, chemistry, quantitative and generic science literacy skills. In second year, students will begin to specialise with a focus on their area of interest and will have the opportunity to undertake a semester of study abroad in the second half of the year. In third year, students will choose a major in one of Agribiotechnology, Biochemistry, Genetics, and Microbiology and Immunology and will have the opportunity to complete an industry or research placement. In fourth year, a capstone experience will be offered to students in the form of a 'flipped placement' in which industry personnel will work alongside students within the university, developing solutions to real-world problems.

The Bachelor of Applied Biology is an AQF Level 7 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Applied Biology

There shall be a Bachelor of Applied Biology.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Applied Biology, the student must complete satisfactorily a program of study consisting of the following courses with a combined total of not less than 96 units:

- courses to the value of 24 units at each of Level I and II, plus a total of 48 units at Level III and IV
- a major chosen from:
 - Agribiotechnology
 - Biochemistry
 - Genetics
 - Microbiology and Immunology

2.1.1 Core Courses

Level I

SCIENCE 1101WT Principles and Practice of Science for Applied Biology..... 3

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

or

BIOLOGY 1401 Concepts in Biology I..... 3

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

or

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

CHEM 1100 Chemistry IA..... 3

or

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

CHEM 1200 Chemistry IB*..... 3

or

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

plus

Courses to the value of 3 units from the following:

APP BIOL 1000WT Quantitative Skills for Applied Biology..... 3

MATHS 1013 Mathematics IM..... 3

MATHS 1011 Mathematics IA..... 3

STATS 1004 Statistical Practice I (Life Sciences)..... 3

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

APP BIOL XXXXWT Research Methods for Applied Biology II..... 3

Level III

APP BIOL XXXXWT Professional Practice for Applied Biology III..... 3

APP BIOL XXXXWT Applied Biology Industry Placement..... 12

or

APP BIOL XXXXWT Applied Biology Research Placement..... 12

Level IV

APP BIOL XXXXWT Research Practice for Applied Biology..... 3

APP BIOL XXXXWT Applied Biology Capstone..... 9

2.1.2 Majors

The requirements for each major are specified as follows:

Agribiotechnology

Level II

| | |
|---|---|
| AGRIC 2500RW Animal and Plant Biochemistry II | 3 |
| PLANT SC 2510WT Foundations of Plant Science..... | 3 |

Level III

| | |
|--|---|
| PLANT SC XXXXWT Foundations in Plant Biotechnology III | 6 |
| PLANT SC 3009WT Plant Molecular Biology III | 6 |

Biochemistry

Level II

| | |
|--|---|
| BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology | 3 |
| BIOCHEM 2501 Biochemistry II: Metabolism | 3 |

Level III

| | |
|---|---|
| BIOCHEM 3000 Molecular and Structural Biology III | 6 |
| BIOCHEM 3001 Cancer, Stem Cells & Developmental Biology III | 6 |

Genetics

Level II

| | |
|----------------------------------|---|
| GENETICS 2510 Genetics IIA | 3 |
| GENETICS 2520 Genetics IIB | 3 |

Level III

| | |
|---|---|
| GENETICS 3111 Genes, Genomes & Molecular Evolution III | 6 |
| GENETICS 3211 Genetic Expression & Human and Developmental Genetics III | 6 |

Microbiology and Immunology

Level II

| | |
|---|---|
| MICRO 2500 Microbiology II..... | 3 |
| MICRO 2501 Immunology & Virology II | 3 |

Level III

| | |
|---|---|
| MICRO 3000 Infection and Immunity IIIA..... | 6 |
| MICRO 3001 Infection and Immunity IIIB..... | 6 |

2.1.3 Electives

Level I

Courses to the value of 6 units from the following:

| | |
|---|---|
| ABORIG 1001 Indigenous People, Country and Protocols..... | 3 |
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| PHYSICS 1002 Astronomy I | 3 |

or

other Level I courses from other programs in the Faculty of Arts or the Faculty of Engineering, Computer and Mathematical

Sciences with the approval of the Faculty of Sciences.

Level II

Courses to the value of 15 units may be taken from the following:

| | |
|---|----|
| APP BIOL XXXXWT Study Abroad in Applied Biology II..... | 12 |
| ANIML SC 2501WT Genes and Inheritance II | 3 |

or

additional Level II courses from Academic Program Rule 2.1.3.3 of the Bachelor of Science as approved by the Program Coordinator.

Level III / Level IV

Courses to the value of 9 units from the following:

| | |
|---|---|
| AGRIBUS 3017WT Business Management for Applied Sciences III..... | 3 |
| ENV BIOL 3009 Ecophysiology of Plants III | 3 |
| PLANT SC 3500WT Biotechnology in the Food and Wine Industries III..... | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |
| PLANT SC 3510WT Plant Health III..... | 3 |
| PLANT SC 3515WT Plant Biotechnology III | 3 |
| SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III | 3 |
| SOIL&WAT 3017WT Soil & Water: Management and Conservation III..... | 3 |
| SOIL&WAT 3020WT GIS for Agriculture & Natural Resource Management III | 3 |

and / or

additional Level III courses from Academic Program Rule 2.1.3 of the Bachelor of Science as approved by the Program Coordinator.

2.1.4 Work Based Training / Extra Mural Studies

Students must complete a total of 10 weeks of professional work experience to the value of approximately 375 hours which will be assessed within APP BIOL XXXXWT Applied Biology Industry Placement or APP BIOL XXXXWT Applied Biology Research Placement.

2.1.5 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Applied Biology (Honours) (BApplBiol(Hons))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program offers a unique combination of theoretical learning and professional practice in the discipline of applied biology. It focuses on both biological knowledge and on the multitude of ways in which biology contributes to employment and productivity. Students will start from a broad base in their first year with fundamental knowledge and skills in biology, chemistry, quantitative and generic science literacy skills. In second year, students will begin to specialise with a focus on their area of interest and will have the opportunity to undertake a semester of study abroad in the second half of the year. In third year, students will choose a major in one of Agribiotechnology, Biochemistry, Genetics, and Microbiology and Immunology and will have the opportunity to complete an industry or research placement. In fourth year, students will undertake a 12 unit research project.

The Bachelor of Applied Biology (Honours) is an AQF Level 8 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Applied Biology (Honours)

There shall be a Bachelor of Applied Biology (Honours).

2. Qualification requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Applied Biology (Honours), the student must complete satisfactorily a program of study consisting of the following courses with a combined total of not less than 96 units:

- courses to the value of 24 units at each of Level I and II, plus a total of 48 units at Level III and IV
- a major chosen from:
 - Agribiotechnology
 - Biochemistry
 - Genetics
 - Microbiology and Immunology

2.1.1 Core courses

Level I

SCIENCE 1101WT Principles and Practice of Science for Applied Biology..... 3

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

or

BIOLOGY 1401 Concepts in Biology I..... 3

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

or

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

CHEM 1100 Chemistry IA..... 3

or

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

CHEM 1200 Chemistry IB*..... 3

or

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

plus

Courses to the value of 3 units from the following:

APP BIOL 1000WT Quantitative Skills for Applied Biology..... 3

MATHS 1013 Mathematics IM..... 3

MATHS 1011 Mathematics IA..... 3

STATS 1004 Statistical Practice I (Life Sciences)..... 3

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

APP BIOL XXXXWT Research Methods for Applied Biology II..... 3

Level III

APP BIOL XXXXWT Professional Practice for Applied Biology III..... 3

APP BIOL XXXXWT Applied Biology Industry Placement..... 12

or

APP BIOL XXXXWT Applied Biology Research Placement..... 12

Level IV

APP BIOL XXXXWT Research Practice for Applied Biology..... 3

APP BIOL XXXXWT Honours in Applied Biology Project A..... 6

APP BIOL XXXXWT Honours in Applied Biology Project B..... 6

2.1.2 Majors

The requirements for each major are specified as follows:

Agribiotechnology

Level II

| | |
|---|---|
| AGRIC 2500RW Animal and Plant Biochemistry II | 3 |
| PLANT SC 2510WT Foundations of Plant Science..... | 3 |

Level III

| | |
|--|---|
| PLANT SC XXXXWT Foundations in Plant Biotechnology III | 6 |
| PLANT SC 3009WT Plant Molecular Biology III | 6 |

Biochemistry

Level II

| | |
|--|---|
| BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology | 3 |
| BIOCHEM 2501 Biochemistry II: Metabolism | 3 |

Level III

| | |
|---|---|
| BIOCHEM 3000 Molecular and Structural Biology III | 6 |
| BIOCHEM 3001 Cancer, Stem Cells & Developmental Biology III | 6 |

Genetics

Level II

| | |
|----------------------------------|---|
| GENETICS 2510 Genetics IIA | 3 |
| GENETICS 2520 Genetics IIB | 3 |

Level III

| | |
|---|---|
| GENETICS 3111 Genes, Genomes & Molecular Evolution III | 6 |
| GENETICS 3211 Genetic Expression & Human and Developmental Genetics III | 6 |

Microbiology and Immunology

Level II

| | |
|---|---|
| MICRO 2500 Microbiology II..... | 3 |
| MICRO 2501 Immunology & Virology II | 3 |

Level III

| | |
|---|---|
| MICRO 3000 Infection and Immunity IIIA..... | 6 |
| MICRO 3001 Infection and Immunity IIIB..... | 6 |

2.1.3 Electives

Level I

Courses to the value of 6 units from the following:

| | |
|---|---|
| ABORIG 1001 Indigenous People, Country and Protocols..... | 3 |
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| PHYSICS 1002 Astronomy I | 3 |

or

other Level I courses from other programs in the Faculty of Arts or the Faculty of Engineering, Computer and Mathematical

Sciences with the approval of the Faculty of Sciences.

Level II

Courses to the value of 15 units may be taken from the following:

| | |
|---|----|
| APP BIOL XXXXWT Study Abroad in Applied Biology II..... | 12 |
| ANIML SC 2501WT Genes and Inheritance II | 3 |

or

additional Level II courses from Academic Program Rule 2.1.3.3 of the Bachelor of Science as approved by the Program Coordinator.

Level III / Level IV

Courses to the value of 6 units from the following:

| | |
|---|---|
| AGRIBUS 3017WT Business Management for Applied Sciences III..... | 3 |
| ENV BIOL 3009 Ecophysiology of Plants III | 3 |
| PLANT SC 3500WT Biotechnology in the Food and Wine Industries III..... | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |
| PLANT SC 3510WT Plant Health III..... | 3 |
| PLANT SC 3515WT Plant Biotechnology III.... | 3 |
| SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III | 3 |
| SOIL&WAT 3017WT Soil & Water: Management and Conservation III..... | 3 |
| SOIL&WAT 3020WT GIS for Agriculture & Natural Resource Management III | 3 |

and / or

additional Level III courses from Academic Program Rule 2.1.3 of the Bachelor of Science as approved by the Program Coordinator.

2.1.4 Work Based Training / Extra Mural Studies

Students must complete a total of 10 weeks of professional work experience to the value of approximately 375 hours which will be assessed within APP BIOL XXXXWT Applied Biology Industry Placement or APP BIOL XXXXWT Applied Biology Research Placement.

2.1.5 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

2.1.6 Honours

To be eligible to be admitted to the Honours degree program, a student shall complete Levels I, II and III as set out in Academic Program Rule 2.1 to a standard that is acceptable to the Faculty for the purpose of

admission to the Honours degree. A student who wishes to proceed to the Honours degree must obtain the approval of the Head of School.

The work of the Honours program shall normally be completed in the final year of study. The Faculty may permit a student to present the work over a period of not more than two years on such conditions as it may determine.

Bachelor of Food and Nutrition Science (BFoodNutrSci)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program provides students with skills and knowledge in food science and human nutrition. Students will learn how to design, formulate, produce and package everyday and specialty foods with specific functional and nutritional properties. They will learn the importance of developing a sustainable, nutritious and healthy food supply and complete a placement in food industry or a nutrition/health related organization. Career opportunities range from food industry, quality auditing, new product development and public health nutrition. A pre-dietetics pathway is included in the program.

The Bachelor of Food and Nutrition Science is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Food and Nutrition Science

There shall be a Bachelor of Food and Nutrition Science.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Food and Nutrition Science, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- a. Level I courses to the value of not more than 30 units

2.1.1 Core Courses

Level I

| | |
|--|---|
| BIOLOGY 1101ND Biology I: Molecules, Genes and Cells | 3 |
| BIOLOGY 1201 Biology I: Human Perspectives..... | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB*..... | 3 |
| or | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| FOOD SC 1001WT Food and Nutrition I | 3 |
| FOOD SC 1000RG Introduction to Food Technology I..... | 3 |

| | |
|--|---|
| FOOD SC 1002RG Practical Food Production I..... | 3 |
| STATS 1004 Statistical Practice I (Life Sciences)..... | 3 |
| *Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB. | |

Level II

| | |
|--|---|
| BIOCHEM 2501 Biochemistry II: Metabolism | 3 |
| FOOD SC 2505RG Food Quality & Regulation II | 3 |
| FOOD SC 2502RG Food Microbiology II..... | 3 |
| FOOD SC 2510WT Nutrition II..... | 3 |
| PLANT SC 2520WT Microbiology & Biotechnology II..... | 3 |

Level III

| | |
|---|---|
| FOOD SC 3510RG Food Science Industry Placement III | 3 |
| or | |
| FOOD SC 3520WT Nutrition Industry Placement III | 3 |
| FOOD SC 3503RG Food Processing Technology III | 3 |
| FOOD SC 3502WT Nutrition III..... | 3 |
| FOOD SC 3021RG Food Product Development III..... | 3 |
| FOOD SC 3027RG Sensory Evaluation of Foods III..... | 3 |
| FOOD SC 3505WT Public Health Nutrition III | 3 |
| FOOD SC 3530RG Food Preservation and Packaging Techniques III | 3 |
| FOOD SC 3540RG Food Chemistry III | 3 |

2.1.2 Electives

Courses to the value of up to 9 units may be taken from the following:

Level I

| | |
|---|---|
| ABORIG 1001 Indigenous People, Country & Protocols | 3 |
| ABORIG 1002 Indigenous Scholarship & Interplay of Knowledges..... | 3 |
| PUB HLTH 1001 Public Health IA | 3 |
| PUB HLTH 1002 Public Health IB | 3 |
| MARKETNG 1001 Introduction to Marketing I..... | 3 |
| COMMGMT 1001 Introduction to Management I..... | 3 |

| | |
|---|---|
| ACCTING 1002 Accounting for Decision Makers I | 3 |
| PSYCHOL 1000 Psychology IA..... | 3 |
| PSYCHOL 1001 Psychology IB..... | 3 |

Level II

| | |
|---|---|
| PHYSIOL 2520 Physiology IIB: Systems & Homeostasis..... | 3 |
| PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular Physiology | 3 |
| BIOCHEM 2500 Biochemistry II: Molecular & Cell Biology | 3 |
| CHEM 2530 Environmental & Analytical Chemistry II..... | 3 |
| CHEM 2540 Medicinal & Biological Chemistry II..... | 3 |

Level III

| | |
|---|---|
| MARKETNG 3500 Marketing Communications III..... | 3 |
| MARKETNG 3501 International Marketing III..... | 3 |

or

other undergraduate courses offered by the University that are available to the student.

2.1.3 Work Based Training/Extra Mural Studies

Students must complete a total of 7 weeks (part-time) of professional work experience to the value of approximately 150 hours which will be assessed within FOOD SC 3510RG Food Science Industry Placement III or FOOD SC 3520WT Nutrition Industry Placement III.

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Food and Nutrition Science (Honours) (BFoodNutrSc(Hons))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program comprises a substantial research project and provides professional training and an opportunity to experience scientific research in a chosen area of specialisation. During this program students will learn new techniques, broaden their skill base and further develop their time management skills. Students can pursue pathways in Food Science, Food Technology and Nutrition.

The Bachelor of Food and Nutrition Science (Honours) is an AQF Level 8 qualification with a standard full-time duration of 1 year.

1 Academic Program Rules for Bachelor of Food and Nutrition Science (Honours)

There shall be a Bachelor of Food and Nutrition Science (Honours).

2 Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Food and Nutrition Science (Honours) the student must complete satisfactorily the following program of study with a combined total of not less than 24 units:

2.1.1 Core Courses

FOOD SC 4010AWT/BWT Advanced Food and Nutrition Science (Hons) 3

2.1.2 Research Project

Students must complete a research project:

FOOD SC 4020AWT/BWT Honours Food and Nutrition Science Project..... 21

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (BSc)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program allows students to explore diverse areas of science and encourages them to follow their emerging interests and scientific curiosity. Students design their own degree, choosing from a wide range of science courses according to their interests and strengths. In third year, students have the opportunity to choose at least one area of science to specialise in, which involves developing an in-depth understanding of this field. The program also provides students with the opportunity to acquire extensive transferable skills, including critical thinking, analytical methods, laboratory and field techniques, teamwork, science communication and information technology.

The Bachelor of Science is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science

There shall be a Bachelor of Science.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- a. Core courses to the value of 3 units from Academic Program Rule 2.1.1
- b. Level I courses to the value of not more than 30 units
- c. may include up to 9 units across Level I or Level II courses (with no more than 6 units at Level I) offered by the Faculty of Arts and the Faculty of Engineering, Computer and Mathematical Sciences. 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
- d. Level III courses to the value of at least 24 units
- e. a major chosen from:
Anatomical Sciences
Biochemistry

Botany
Chemistry
Ecology
Geology
Geophysics and Applied Geology
Genetics
Microbiology and Immunology
Molecular and Biomedical Science
Pharmacology
Physics
Theoretical Physics
Physiology
Soil Science
Zoology
or a double major from:
Chemistry
Ecology and Spatial Science
Experimental and Theoretical Physics

A student who has completed a major in a Science discipline and also completes courses that fulfil requirements for a major as specified under the Academic Program Rules for the degree of Bachelor of Mathematical and Computer Sciences, shall be awarded that Mathematical and Computer Sciences major in addition to the Science major.

2.1.1 Core Course

SCIENCE 1100 Principles and Practice of Science I..... 3

2.1.2 Majors and Double Majors

The requirements for each major or double major are specified as follows:

Anatomical Sciences

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

Biochemistry

BIOCHEM 3000 Molecular & Structural Biology III 6
BIOCHEM 3001 Cancer, Stem Cells & Developmental Biology III 6

Botany

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

plus

Courses to the value of 6 units from the following:

ENV BIOL 3230 Evolution of Australian Vegetation..... 3

ENV BIOL 3009 Ecophysiology of Plants III3

PLANT SC 3505WT Soil and Plant Nutrition.....3

Chemistry

CHEM 3111 Chemistry III 6

plus

Courses to the value of 6 units from the following:

CHEM 3211 Synthesis of Materials III 3

CHEM 3212 Fundamentals of Materials III 3

CHEM 3213 Advanced Synthetic Methods III 3

CHEM 3214 Medicinal & Biological Chemistry III 3

CHEM 3560 Molecular Structure Determination III 6

Chemistry - Double Major

CHEM 3111 Chemistry III 6

plus

Courses to the value of 12 units from the following:

CHEM 3213 Advanced Synthetic Methods III 3

CHEM 3211 Synthesis of Materials III 3

CHEM 3212 Fundamentals of Materials III 3

CHEM 3214 Medicinal & Biological Chemistry III 3

CHEM 3560 Molecular Structure Determination III 6

Ecology

ENV BIOL 3121 Concepts in Ecology III 3

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

plus

Courses to the value of 6 units from the following:

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

ENV BIOL 3008 Conservation & Restoration III..... 3

ENV BIOL 3010 Marine Ecology III 3

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

Ecology and Spatial Science – Double Major

ENV BIOL 3121 Concepts in Ecology III 3

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

SOIL&WAT 3010 Remote Sensing III 3

SOIL&WAT 3007WT GIS for Environmental Management III..... 3

plus

Courses to the value of 6 units from the following:

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

ENV BIOL 3008 Conservation & Restoration III..... 3

ENV BIOL 3010 Marine Ecology III 3

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

Geology

GEOLOGY 3013 Tectonics III..... 3

GEOLOGY 3016 Igneous & Metamorphic Geology III..... 3

GEOLOGY 3019 Field Geoscience Program III..... 3

GEOLOGY 3505 Earth Systems History III..... 3

Geophysics and Applied Geology

GEOLOGY 3008 Geophysics III 3

GEOLOGY 3502 Mineral and Energy Resources III 3

GEOLOGY 3500 Exploration Methods III..... 3

and

SOIL&WAT 3010 Remote Sensing III 3

or

SOIL&WAT 3007WT GIS for Environmental Management 3

Genetics

GENETICS 3111 Genes, Genomes & Molecular Evolution III 6

GENETICS 3211 Genetic Expression & Human and Developmental Genetics III 6

Microbiology and Immunology

MICRO 3000 Infection and Immunity IIIA..... 6

MICRO 3001 Infection and Immunity IIIB..... 6

Molecular and Biomedical Science

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 students wishing to undertake study overseas. Students wishing to take this major must apply in writing to the Faculty and have their program of study approved prior to commencing study overseas.)

Pharmacology

PHARM 3010 Pharmacology: Drug Action and Discovery 6

PHARM 3011 Pharmacology: Drug Development & Therapeutics 6

Physics

| | |
|---|---|
| PHYSICS 3002 Experimental Physics III | 3 |
| PHYSICS 3542 Physics III | 6 |

plus

Courses to the value of 3 units from the following:

| | |
|---|---|
| PHYSICS 3006 Advanced Dynamics and Relativity III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |
| PHYSICS 3532 Atmospheric & Astrophysics III | 3 |
| PHYSICS 3534 Computational Physics III | 3 |
| PHYSICS 3540 Optics & Photonics III | 3 |

Experimental and Theoretical Physics – Double Major

| | |
|---|---|
| PHYSICS 3002 Experimental Physics III | 3 |
| PHYSICS 3542 Physics III | 6 |

| | |
|---|---|
| PHYSICS 3006 Advanced Dynamics and Relativity III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |

plus

Courses to the value of 3 units from the following:

| | |
|---|---|
| PHYSICS 3532 Atmospheric & Astrophysics III | 3 |
| PHYSICS 3534 Computational Physics III | 3 |
| PHYSICS 3540 Optics & Photonics III | 3 |

Theoretical Physics

| | |
|---|---|
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3006 Advanced Dynamics and Relativity III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |

Physiology

| | |
|---|---|
| PHYSIOL 3000 Integrative and Applied Systems Physiology | 6 |
| PHYSIOL 3001 Cellular & Systems Neurobiology | 6 |

Soil Science

| | |
|---|---|
| SOIL&WAT 3017WT Soil & Water: Management & Conservation III | 3 |
| SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III | 3 |

plus

Courses to the value of 3 units from the following:

| | |
|--|---|
| GEOLOGY 3505 Earth Systems History III | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |
| SOIL&WAT 3004WT Environmental Toxicology & Remediation | 3 |

Zoology

| | |
|--|---|
| ENV BIOL 3003 Ecophysiology of Animals III | 3 |
|--|---|

| | |
|---|---|
| ENV BIOL 3006 Research Methods in Environmental Biology III | 3 |
| ENV BIOL 3011 Evolution and Diversity of Insects III | 3 |
| ENV BIOL 3122 Evolution and Palaeobiology of Animals III | 3 |

2.1.3 Electives

2.1.3.1 Level I Sciences

| | |
|---|---|
| BIOLOGY 1101 Biology I: Molecules, Genes & Cells* | 3 |
| BIOLOGY 1401 Concepts in Biology I* | 3 |
| BIOLOGY 1201 Biology I: Human Perspectives# | 3 |
| BIOLOGY 1202 Biology I: Organisms# | 3 |
| CHEM 1100 Chemistry IA | 3 |
| CHEM 1101 Foundations of Chemistry IA | 3 |
| CHEM 1200 Chemistry IB | 3 |
| CHEM 1201 Foundations of Chemistry IB | 3 |
| CHEM 1311 Chemistry IB(S) | 3 |
| CHEM 1312 Foundations of Chemistry IS | 3 |
| ENV BIOL 1002 Ecological Issues I | 3 |
| FOOD SC 1001WT Food and Nutrition I | 3 |
| GEOLOGY 1103 Earth Systems I | 3 |
| GEOLOGY 1100 Earth's Interior I | 3 |
| PHYSICS 1008 Physical Aspects of Nature I | 3 |
| PHYSICS 1100 Physics IA | 3 |
| PHYSICS 1101 Physics for the Life & Earth Sciences IA | 3 |
| PHYSICS 1002 Astronomy I | 3 |
| PHYSICS 1200 Physics IB | 3 |
| PHYSICS 1201 Physics for the Life & Earth Sciences IB | 3 |

*Only one of BIOLOGY 1101 Biology I: Molecules, Genes & Cells and BIOLOGY 1401 Concepts in Biology I may be presented towards the B.Sc.

#Only one of BIOLOGY 1201 Biology I: Human Perspectives and BIOLOGY 1202 Biology I: Organisms may be presented towards the B.Sc.

2.1.3.2 Level I Mathematical and Computer Sciences

| | |
|---|---|
| COMP SCI 1101 Introduction to Programming | 3 |
| COMP SCI 1102 Object Orientated Programming | 3 |
| MATHS 1011 Mathematics IA | 3 |
| MATHS 1012 Mathematics IB | 3 |
| MATHS 1013 Mathematics IM | 3 |
| STATS 1000 Statistical Practice I | 3 |
| STATS 1004 Statistical Practice (Life Sciences) I | 3 |

STATS 1005 Statistical Analysis and Modelling I 3
 Note: COMP SCI 1003 Internet Computing cannot be presented towards the Bachelor of Science.

2.1.3.3 Level II Science

ANAT SC 2500 Cells and Tissues II 3
 ANAT SC 2501 Comparative Anatomy of Body Systems II 3
 BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology 3
 BIOCHEM 2501 Biochemistry II: Metabolism 3
 CHEM 2510 Chemistry IIA 3
 CHEM 2530 Environmental & Analytical Chemistry II 3
 CHEM 2520 Chemistry IIB 3
 CHEM 2540 Medicinal & Biological Chemistry II 3
 ENV BIOL 2500 Botany II 3
 ENV BIOL 2503 Zoology II 3
 ENV BIOL 2501 Evolutionary Biology II 3
 ENV BIOL 2502 Ecology II 3
 GENETICS 2510 Genetics IIA 3
 GENETICS 2520 Genetics IIB 3
 GEOLOGY 2500 Sedimentary Geology II 3
 GEOLOGY 2501 Structural Geology II 3
 GEOLOGY 2502 Igneous and Metamorphic Geology II 3
 GEOLOGY 2505 Geochemistry II 3
 MICRO 2500 Microbiology II 3
 MICRO 2501 Immunology & Virology II 3
 PHYSICS 2510 Physics IIA 3
 PHYSICS 2520 Physics IIB 3
 PHYSICS 2530 Astrophysics II 3
 PHYSICS 2532 Classical Physics II 3
 PHYSICS 2534 Electromagnetism II 3
 PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular Systems 3
 PHYSIOL 2520 Physiology IIB: Systems & Homeostasis 3
 SOIL&WAT 2500WT Soil & Water Resources II 3
 SOIL&WAT 2501 Spatial Information and Land Evaluation II 3

2.1.3.4 Level II Mathematical and Computer Sciences

All Level II Mathematical and Computer Sciences courses, in the disciplines of Applied Mathematics, Computer Science, Mathematics, Pure Mathematics and Statistics, as listed under Academic Program Rule 2.1.2 of the degree of Bachelor of Mathematical and Computer Sciences.

2.1.3.5 Level III Science

AGRONOMY 3000RW Agroforestry III 3
 ANAT SC 3102 Comparative Reproductive Biology of Mammals III 3
 ANAT SC 3103 Integrative and Comparative Neuroanatomy III 3
 ANAT SC 3101 Anthropological and Forensic Anatomy III 3
 ANAT SC 3104 Structural Cell Biology III 3
 BIOCHEM 3000 Molecular and Structural Biology III 6
 BIOCHEM 3001 Cancer, Stem Cells & Developmental Biology III 6
 CHEM 3111 Chemistry III 6
 CHEM 3560 Molecular Structure Determination III 6
 CHEM 3211 Synthesis of Materials III 3
 CHEM 3212 Fundamentals of Materials III 3
 CHEM 3213 Advanced Synthetic Methods III 3
 CHEM 3214 Medicinal and Biological Chemistry III 3
 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 III 3
 ENV BIOL 3121 Concepts in Ecology III 3
 ENV BIOL 3230 Evolution of Australian Vegetation 3
 ENV BIOL 3003 Ecophysiology of Animals III 3
 ENV BIOL 3008 Conservation & Restoration III 3
 ENV BIOL 3009 Ecophysiology of Plants III 3
 ENV BIOL 3010 Marine Ecology III 3
 ENV BIOL 3012WT Integrated Catchment Management III 3
 ENV BIOL 3122 Evolution and Palaeobiology of Animals III 3
 GENETICS 3111 Genes, Genomes and Molecular Evolution III 6
 GENETICS 3211 Gene Expression & Human and Developmental Genetics III 6
 GEOLOGY 3013 Tectonics III 3
 GEOLOGY 3016 Igneous & Metamorphic Geology III 3
 GEOLOGY 3500 Exploration Methods III 3
 GEOLOGY 3008 Geophysics III 3
 GEOLOGY 3502 Mineral and Energy Resources III 3
 GEOLOGY 3505 Earth Systems History III 3
 GEOLOGY 3019 Field Geoscience Program III 3

| | |
|---|---|
| MICRO 3000 Infection and Immunity IIIA..... | 6 |
| MICRO 3001 Infection and Immunity IIIB..... | 6 |
| PHARM 3010 Pharmacology: Drug Action and Discovery | 6 |
| PHARM 3011 Pharmacology: Drug Development & Therapeutics | 6 |
| PHYSIOL 3001 Cellular & Systems Neurobiology | 6 |
| PHYSIOL 3000 Integrative and Applied Systems Physiology | 6 |
| PHYSICS 3006 Advanced Dynamics & Relativity III | 3 |
| PHYSICS 3532 Astrophysics & Atmospheric Physics III | 3 |
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3002 Experimental Physics III | 3 |
| PHYSICS 3534 Computational Physics III..... | 3 |
| PHYSICS 3540 Optics & Photonics III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |
| PLANT SC 3200WT Plant Breeding III..... | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |
| PLANT SC 3515WT Plant Biotechnology III | 3 |
| SCIENCE 3200 Communicating Science III | 3 |
| SCIENCE 3500 International Science Experience | 3 |
| SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III | 3 |
| SOIL&WAT 3022WT Soil Management & Conservation III | 3 |
| SOIL&WAT 3010 Remote Sensing III | 3 |
| SOIL&WAT 3017WT Soil & Water: Management & Conservation III..... | 3 |
| SOIL&WAT 3004WT Environmental Toxicology and Remediation III | 3 |
| SOIL&WAT 3007WT GIS for Environmental Management III..... | 3 |
| SOIL&WAT 3020WT GIS for Agriculture & Natural Resource Management..... | 3 |

2.1.3.6 Level III Mathematical and Computer Sciences

All Level III Mathematical and Computer Sciences courses, in the disciplines of Applied Mathematics, Computer Science, Pure Mathematics and Statistics, as listed under the Academic Program Rule 2.1.2 of the degree of Bachelor of Mathematical and Computer Sciences.

2.1.3.7 Other Level III Courses

Under certain circumstances, and only with prior approval from the Faculty, the following course may be presented towards the degree of Bachelor of Science in lieu of Level III courses:

| | |
|---|---|
| PATHOL 3003 Essentials of Pathology | 6 |
|---|---|

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Advanced) (BSc(Adv))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Note: These rules should be read in conjunction with the Academic Program Rules of the degree of Bachelor of Science.

Overview

The Bachelor of Science (Advanced) is designed for high-achieving students who wish to develop their knowledge and understanding of science, with a strong emphasis on research skill development. Students design their own degree from a broad range of study options and have flexibility to select areas of specific interest. In first year, students enrol in a combination of courses that prepare them to follow pathways through to major study areas. In third year, students choose at least one area of science in which to specialise and undertake a research placement. This program provides students with the early opportunity to participate in the academic and research culture of the scientific areas they are most interested in, while still providing the choice and flexibility of a Bachelor of Science. Bachelor of Science (Advanced) students participate in program specific courses that will introduce topics on processes, communication and methods used in science research. Students will also participate in structured research activities and research seminars, normally only available to Honours and postgraduate students. In addition, a semester long research placement and lab attachments will provide breadth of experience. These activities will allow associations with academic staff in major research areas, providing early access to research laboratories/projects that can be further developed for an Honours year and postgraduate study (Masters or PhD).

Students enrolled in this program must maintain a minimum semester GPA of 5.0 throughout their enrolment or will be required to transfer to the Bachelor of Science. Students who have maintained this GPA will automatically be eligible for a place in the Bachelor of Science (Honours) program upon completion of the Bachelor of Science (Advanced).

The Bachelor of Science (Advanced) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Advanced)

There shall be a Bachelor of Science (Advanced).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Advanced), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- a. Core courses to the value of 9 units from Academic Program Rule 2.1.1
- b. Level I courses to the value of not more than 30 units
- c. may include up to 9 units of Level I or Level II courses (with no more than 6 units at Level I) offered by the Faculty of Arts and the Faculty of Engineering, Computer and Mathematical Sciences. 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
- d. Level III courses to the value of at least 24 units
- e. a major chosen from:
Biochemistry
Botany
Chemistry
Ecology
Geology
Geophysics and Applied Geology
Genetics
Microbiology and Immunology
Physics
Theoretical Physics
Soil Science
Zoology
or a double major from:
Chemistry
Ecology and Spatial Science
Geology, Geophysics and Applied Geology
Experimental and Theoretical Physics

2.1.1 Core Courses

Level I

SCIENCE 1200 Principles and Practice of Science (Adv) I 3

Level II

SCIENCE 2300 Principles and Practice of Research (Adv) II..... 3

Level III

SCIENCE 3100 Principles and Practice of Research (Adv) III..... 3

2.1.2 Majors and Double Majors

The requirements for each major or double major are specified as follows:

Biochemistry

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

BIOCHEM 3520 Cancer, Stem Cells & Developmental Biology (Theory) III..... 3

Botany

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

Courses to the value of 6 units from the following:

ENV BIOL 3230 Evolution of Australian Vegetation III..... 3

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

PLANT SC 3505WT Soil & Plant Nutrition III.....3

Chemistry

CHEM 3111 Chemistry III..... 6
plus

Courses to the value of 3 units from the following:

CHEM 3211 Synthesis of Materials III..... 3

CHEM 3212 Fundamentals of Materials III..... 3

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

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

Chemistry – Double Major

CHEM 3111 Chemistry III..... 6
plus

Courses to the value of 9 units from the following:

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

CHEM 3211 Synthesis of Materials III..... 3

CHEM 3212 Fundamentals of Materials III.....3

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

CHEM 3560 Molecular Structure Determination III..... 6

Ecology

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

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

Courses to the value of 3 units from the following:

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

ENV BIOL 3008 Conservation & Restoration III..... 3

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

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

Ecology and Spatial Science – Double Major

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

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

SOIL&WAT 3007WT GIS for Environmental Management..... 3

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

Courses to the value of 3 units from the following:

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

ENV BIOL 3008 Conservation & Restoration III..... 3

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

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

Geology

GEOLOGY 3013 Tectonics III..... 3

GEOLOGY 3016 Igneous & Metamorphic Geology III..... 3

GEOLOGY 3019 Field Geoscience Program III..... 3

GEOLOGY 3505 Earth Systems History III.....3

Geophysics and Applied Geology

GEOLOGY 3008 Geophysics III..... 3

GEOLOGY 3500 Exploration Methods III..... 3

GEOLOGY 3502 Mineral and Energy Resources III..... 3

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

SOIL&WAT 3007WT GIS for Environmental Management..... 3

Geology, Geophysics and Applied Geology – Double Major

GEOLOGY 3013 Tectonics III..... 3

GEOLOGY 3016 Igneous & Metamorphic Geology III..... 3

GEOLOGY 3019 Field Geoscience Program III..... 3

GEOLOGY 3008 Geophysics III..... 3

GEOLOGY 3500 Exploration Methods III..... 3

GEOLOGY 3502 Mineral and Energy Resources III..... 3
or

GEOLOGY 3505 Earth Systems History III..... 3

Genetics

| | |
|--|---|
| GENETICS 3111 Genes, Genomes & Molecular Evolution III | 6 |
| GENETICS 3520 Genetic Expression & Human and Developmental Genetics (Theory) III | 3 |

Microbiology and Immunology

| | |
|--|---|
| MICRO 3000 Infection and Immunity IIIA..... | 6 |
| MICRO 3520 Infection and Immunity (Theory) III | 3 |

Physics

| | |
|---|---|
| PHYSICS 3002 Experimental Physics III | 3 |
| PHYSICS 3542 Physics III | 6 |

Experimental and Theoretical Physics – Double Major

| | |
|---|---|
| PHYSICS 3002 Experimental Physics III | 3 |
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3006 Advanced Dynamics and Relativity III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |

Theoretical Physics

| | |
|---|---|
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3006 Advanced Dynamics and Relativity III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |

Soil Science

| | |
|---|---|
| SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III..... | 3 |
| SOIL&WAT 3017WT Soil & Water: Management & Conservation | 3 |

plus

Courses to the value of 3 units from the following:

| | |
|--|---|
| GEOLOGY 3505 Earth Systems History III | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |
| SOIL&WAT 3004WT Environmental Toxicology & Remediation | 3 |

Zoology

| | |
|--|---|
| ENV BIOL 3006 Research Methods in Environmental Biology III..... | 3 |
| ENV BIOL 3003 Ecophysiology of Animals III..... | 3 |
| ENV BIOL 3122 Evolution & Palaeobiology of Animals III | 3 |

2.1.3 Electives

2.1.3.1 Level I Sciences

Courses to the value of at least 12 units from the following:

| | |
|---|---|
| BIOLOGY 1101 Biology I: Molecules, Genes & Cells* | 3 |
| BIOLOGY 1401 Concepts in Biology I* | 3 |

| | |
|---|---|
| BIOLOGY 1201 Biology I: Human Perspectives# | 3 |
| BIOLOGY 1202 Biology I: Organisms# | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB..... | 3 |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| CHEM 1311 Chemistry IB(S) | 3 |
| CHEM 1312 Foundations of Chemistry IS..... | 3 |
| GEOLOGY 1103 Earth Systems I | 3 |
| GEOLOGY 1100 Earth's Interior I | 3 |
| MATHS 1013 Mathematics IM..... | 3 |
| MATHS 1011 Mathematics IA..... | 3 |
| MATHS 1012 Mathematics IB..... | 3 |
| PHYSICS 1008 Physical Aspects of Nature I..... | 3 |
| PHYSICS 1100 Physics IA..... | 3 |
| PHYSICS 1101 Physics for the Life & Earth Sciences IA | 3 |
| PHYSICS 1200 Physics IB..... | 3 |
| PHYSICS 1201 Physics for the Life & Earth Sciences IB | 3 |

*Only one of BIOLOGY 1101 Biology I: Molecules, Genes & Cells and BIOLOGY 1401 Concepts in Biology I may be presented towards the B.Sc (Advanced).

#Only one of BIOLOGY 1201 Biology I: Human Perspectives and BIOLOGY 1202 Biology I: Organisms may be presented towards the B.Sc (Advanced).

If required, courses from the following:

| | |
|--|---|
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| PHYSICS 1002 Astronomy I | 3 |
| STATS 1000 Statistical Practice I | 3 |
| STATS 1004 Statistical Practice (Life Sciences) I..... | 3 |
| FOOD SC 1001WT Food and Nutrition I | 3 |

or

Courses from Academic Program Rule 2.1.3.2 for the degree of Bachelor of Science.

2.1.3.2 Level II Sciences

Courses to the value of at least 12 units from the following:

| | |
|--|---|
| BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology | 3 |
| BIOCHEM 2501 Biochemistry II: Metabolism | 3 |
| CHEM 2510 Chemistry IIA..... | 3 |
| CHEM 2520 Chemistry IIB..... | 3 |
| ENV BIOL 2500 Botany II..... | 3 |
| ENV BIOL 2503 Zoology II | 3 |
| ENV BIOL 2501 Evolutionary Biology II..... | 3 |

| | |
|--|---|
| ENV BIOL 2502 Ecology II | 3 |
| GENETICS 2510 Genetics IIA: Foundation of Genetics..... | 3 |
| GENETICS 2520 Genetics IIB: Function & Diversity of Genomes | 3 |
| GEOLOGY 2500 Sedimentary Geology II..... | 3 |
| GEOLOGY 2501 Structural Geology II..... | 3 |
| GEOLOGY 2502 Igneous and Metamorphic Geology II | 3 |
| GEOLOGY 2505 Geochemistry II | 3 |
| MICRO 2500 Microbiology II..... | 3 |
| MICRO 2501 Immunology & Virology II | 3 |
| PHYSICS 2510 Physics IIA..... | 3 |
| PHYSICS 2520 Physics IIB..... | 3 |
| PHYSICS 2530 Astrophysics II | 3 |
| PHYSICS 2532 Classical Physics II..... | 3 |
| PHYSICS 2534 Electromagnetism II | 3 |
| SOIL&WAT 2500WT Soil & Water Resources II | 3 |
| SOIL&WAT 2501 Spatial Information and Land Evaluation II..... | 3 |

and
Level II courses to the value of 6 units in
accord with Academic Program Rule 2.1.3.4
for the degree of Bachelor of Science.

If required, additional Level II courses in
accord with Academic Program Rules 2.1.3.3
and 2.1.3.4 for the degree of Bachelor of
Science.

2.1.3.3 Level III Sciences

Additional Level III courses (which may
include a major) in accord with Academic
Program Rules 2.1e, 2.1.3.5 and 2.1.3.6 for
the degree for Bachelor of Science.

2.1.4 Repeating Courses

A student who has failed a course twice
may not enrol in that course again except by
special permission of the Faculty and then
only under such conditions as the Faculty
may prescribe.

Bachelor of Science (Animal Science) (BSc(AnimalSc))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program offers a broad range of animal science courses that cover wildlife, livestock and companion animal species. The program has a strong emphasis on the practical skills utilised in the area of animal science. In the first year level, students undertake foundation science courses which form the background for later studies in areas such as animal physiology, nutrition, breeding and management. Level I involves studies at both North Terrace and Roseworthy campuses, while the core elements of the rest of the program will be based at Roseworthy campus. Students within the program are encouraged to undertake work placements in relevant industries.

The Bachelor of Science (Animal Science) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Animal Science)

There shall be a Bachelor of Science (Animal Science).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Animal Science), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

2.1.1 Core Courses

Level I

| | |
|---|---|
| ANIML SC 1015RW Animal Handling & Husbandry I..... | 3 |
| ANIML SC 1016RW Principles in Animal Behaviour, Welfare & Ethics I..... | 3 |
| BIOLOGY 1101 Biology I: Molecules, Genes and Cells..... | 3 |
| or | |
| BIOLOGY 1401 Concepts in Biology I..... | 3 |
| BIOLOGY 1202 Biology I: Organisms..... | 3 |
| STATS 1004 Statistical Practice 1 (Life Sciences)..... | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |

CHEM 1200 Chemistry IB* 3
or

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

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

| | |
|--|---|
| AGRIC 2500RW Animal and Plant Biochemistry II..... | 3 |
| ANIML SC 2500RW Companion Animal and Equine Studies II..... | 3 |
| ANIML SC 2502RW Wildlife Management II.... | 3 |
| ANIML SC 2506RW Comparative Animal Anatomy & Physiology IIA..... | 3 |
| ANIML SC 2501RW Genes and Inheritance II..... | 3 |
| ANIML SC 2503RW Livestock Production Science II..... | 3 |
| ANIML SC 2507RW Comparative Animal Anatomy & Physiology IIB..... | 3 |
| ANIML SC 2520RW Research Methodology for Animal Sciences II..... | 3 |

Level III

| | |
|--|---|
| ANIML SC 3045RW Animal Breeding and Genetics III..... | 3 |
| ANIML SC 3046RW Animal Reproduction III.... | 3 |
| ANIML SC 3020RW Animal Microbiology and Invertebrates III..... | 3 |
| ANIML SC 3100RW Laboratory Animal Science III..... | 3 |
| ANIML SC 3015RW Animal Nutrition & Metabolism III..... | 3 |
| ANIML SC 3016RW Animal Health III..... | 3 |

2.1.2 Electives

Level I

| | |
|---|---|
| Courses to the value of 3 units from the following: | |
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| PHYSICS 1008 Physical Aspects of Nature I..... | 3 |
| or | |
| PHYSICS 1101 Physics for the Life and Earth Sciences IA..... | 3 |
| or | |
| Academic Program Rule 2.1.3.1 for the degree of Bachelor of Science | |
| or | |
| other undergraduate courses offered by the Faculty of Arts or Faculty of Engineering, Computer and Mathematical Sciences or | |

other Faculties, provided that, in the case of the latter, the enrolment is approved both by the Faculty of Sciences and the other School / Faculty.

Level III

Courses to the value of 6 units from the following:

| | |
|--|---|
| AGRIC 3500WT Professional Skills In Agricultural Science III | 3 |
| ANIML SC 3019RW Ecology & Management of Vertebrate Pests III | 3 |
| ANIML SC 3043RW Animal Biotechnology III | 3 |
| ANIML SC 3018RW Pig Production - Science into Management III | 3 |
| ANIML SC 3240RW Introduction to Aquaculture and Disease Management III | 3 |
| ANIML SC 3250RW Animals and the Law III | 3 |

or

other Level III courses with the approval of the Program Coordinator.

2.1.3 Work Based Training / Extra Mural Studies

If students take AGRIC 3500WT Professional Skills In Agricultural Science III they must complete a total of 12 weeks of professional work experience to the value of approximately 450 hours.

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Biomedical Science) (BSc(BiomedSc))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program focuses on the biomedical aspects of biology, including the normal and abnormal function of the human body. The emphasis is on modern biomedical knowledge and the research approaches used to gain that knowledge. Students will start from a broad base in their first year that includes biology and chemistry and will begin to specialise in their second year with a focus on biochemistry, genetics and microbiology and immunology. In their third year, students will choose a major in one of biochemistry, genetics or microbiology and immunology. The third year has a substantial research focus.

The Bachelor of Science (Biomedical Science) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Biomedical Science)

There shall be a Bachelor of Science (Biomedical Science).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Biomedical Science), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- courses to the value of 24 units at each of Level I, II and III
- a major chosen from:
 - Biochemistry
 - Genetics
 - Microbiology and Immunology

2.1.1 Core Courses

Level I

| | |
|---|---|
| BIOLOGY 1101ND Biology I: Molecules, Genes and Cells..... | 3 |
| BIOLOGY 1201 Biology I: Human Perspectives..... | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |

| | |
|---|---|
| CHEM 1200 Chemistry IB* | 3 |
| or | |
| CHEM 1201 Foundations of Chemistry IB | 3 |

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

| | |
|--|---|
| BIOMED 2510 Biomedical Science IIA | 3 |
| BIOMED 2520 Biomedical Science IIB | 3 |

Level III

Major in Biochemistry

| | |
|---|---|
| BIOCHEM 3230 Molecular and Structural Biology III (Biomedical Science)..... | 6 |
| BIOCHEM 3235 Cancer, Stem Cells & Developmental Biology III (Biomedical Science)..... | 6 |

Major in Genetics

| | |
|---|---|
| GENETICS 3111 Genes, Genomes and Molecular Evolution III | 6 |
| GENETICS 3212 Gene Expression and Human and Developmental Genetics (Biomedical Science) III | 6 |

Major in Microbiology and Immunology

| | |
|---|---|
| MICRO 3102 Infection and Immunity IIIA (Biomedical Science) | 6 |
| MICRO 3202 Infection and Immunity IIIB (Biomedical Science) | 6 |

2.1.2 Electives

Level I

Additional Level I courses to the value of 12 units (which may include BIOLOGY 1202 Biology I: Organisms) in accord with Academic Program Rules 2.1.c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses to the value of at least 12 units from the following:

| | |
|--|---|
| BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology | 3 |
| BIOCHEM 2501 Biochemistry II: Metabolism | 3 |
| GENETICS 2510 Genetics IIA: Foundation of Genetics..... | 3 |
| GENETICS 2520 Genetics IIB: Function & Diversity of Genomes..... | 3 |
| MICRO 2500 Microbiology II..... | 3 |
| MICRO 2501 Immunology and Virology II | 3 |
| Additional Level II courses to the value of up to 6 units in accord with Academic Program Rules 2.1.3.3 and 2.1.3.4 for the degree | |

of Bachelor of Science, or in accord with Academic Program Rule 2.1c for the degree of Bachelor of Science including approved courses* in the Faculty of Health Sciences that are not already covered by Academic Program Rule 2.1.3.3.

*Approved courses will be determined by agreement between the Faculty of Sciences and the Faculty of Health Sciences; contact the Program Coordinator for a list of such courses.

Level III

Additional Level III courses to the value of 12 units (which may include a major) in the disciplines of Anatomical Sciences, Biochemistry, Chemistry, Genetics, Microbiology and Immunology, Pharmacology or Physiology selected in consultation with the Program Coordinator in accord with Academic Program Rules 2.1e and 2.1.3.5 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Biotechnology) (BSc(Biotech))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

The field of biotechnology is constantly evolving and utilises current technologies such as protein separation technologies, genomics and proteomics to produce foods, drugs and other products. This program provides training in both the molecular basis for biotechnology and the bioprocess technology, which are required for the development of biotechnology products. This program is based on the areas of molecular biology, animal, plant and microbial biotechnology, structural biology and bioprocess engineering. It provides students with a unique cross disciplinary approach, which incorporates expertise from the Faculty of Sciences, and the Faculty of Engineering, Computer and Mathematical Sciences.

The Bachelor of Science (Biotechnology) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Biotechnology)

There shall be a Bachelor of Science (Biotechnology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Biotechnology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- a. courses to the value of 24 units at each of Level I, II and III

2.1.1 Core Courses

Level I

| | |
|---|---|
| BIOLOGY 1101ND Biology I: Molecules, Genes and Cells..... | 3 |
| BIOLOGY 1201 Biology I: Human Perspectives..... | 3 |
| and / or | |
| BIOLOGY 1202 Biology I: Organisms | 3 |
| BIOTECH 1000 Introduction to Biotechnology I | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |

CHEM 1200 Chemistry IB*

3

or

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

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

BIOCHEM 2502 Biochemistry II: Molecular & Cell Biology (Biotechnology)

3

CHEM ENG 2015 Principles of Biotechnology II

3

MICRO 2504 Microbiology II (Biotechnology).....

3

Level III

For a Major in Biochemistry

BIOCHEM 3000 Molecular and Structural Biology III

6

BIOTECH 3000 Biotechnology Practice III

6

2.1.2 Electives

Level I

Courses to the value of up to 9 units from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Level II courses to the value of 15 units from the following:

BIOCHEM 2503 Biochemistry II: Metabolism (Biotechnology)

3

CHEM 2510 Chemistry IIA.....

3

CHEM 2530 Environmental & Analytical Chemistry II

3

CHEM 2520 Chemistry IIB.....

3

CHEM 2540 Medicinal & Biological Chemistry II.....

3

ENV BIOL 2503 Zoology II.....

3

ENV BIOL 2501 Evolutionary Biology II.....

3

GENETICS 2510 Genetics IIA Foundation of Genetics.....

3

GENETICS 2520 Genetics IIB Function & Diversity of Genomes

3

MICRO 2505 Immunology & Virology II (Biotechnology).....

3

PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular Systems

3

PHYSIOL 2520 Physiology IIB: Systems & Homeostasis.....

3

or

Courses from Academic Program Rules 2.1c, 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science.

Level III

Courses to the value of 12 units (which may include a major - see Academic Program Rules 2.1e and 2.1.3.5 for the degree of Bachelor of Science) from the following:

| | |
|--|---|
| BIOCHEM 3001 Cancer, Stem Cells & Developmental Biology III | 6 |
| CHEM 3111 Chemistry III | 6 |
| CHEM 3211 Synthesis of Materials III | 3 |
| CHEM 3212 Fundamentals of Materials III | 3 |
| CHEM 3213 Advanced Synthetic Methods III | 3 |
| CHEM 3214 Medicinal & Biological Chemistry III | 3 |
| GENETICS 3111 Genes, Genomes and Molecular Evolution III | 6 |
| GENETICS 3211 Gene Expression & Human & Developmental Genetics | 6 |
| MICRO 3000 Infection and Immunity IIIA | 6 |
| MICRO 3001 Infection and Immunity IIIB | 6 |

or

additional Level III courses from Academic Program Rules 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Ecochemistry) (BSc(EcoChem))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Note: This program will not be offered in 2015.

Overview

This program trains students in how to address environmental issues such as the greenhouse effect, ozone layer depletion, the use of pesticides and air, water and soil pollution using core training in chemistry. Students are introduced to emerging areas including green (environmentally benign) chemistry and the environmental implications of traditional and modern chemical industries. First year involves core studies in chemistry, biology and earth sciences. Second year has a strong focus on chemistry, including specialist studies in environmental, biological and analytical chemistry, but students also supplement their studies with optional courses in related environmental or ecological areas. Field-based collection and measurement is a popular feature of second year. In third year, students focus on advanced topics that examine the relationship between chemistry and the environment. In particular, students develop expertise in chemical synthesis and gain an understanding of the physical and chemical properties of compounds of contemporary environmental significance. Students also undertake investigative and research activities into contemporary eco-chemical problems.

The Bachelor of Science (Ecochemistry) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Ecochemistry)

There shall be a Bachelor of Science (Ecochemistry).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Ecochemistry), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- courses to the value of 24 units at each of Level I, II and III
- a major in Ecochemistry as set out in Academic Program Rule 2.1.1

A student may also complete a major as set out in Academic Program Rule 2.1e for the degree of Bachelor of Science.

2.1.1 Core Courses

Level I

| | |
|---|---|
| BIOLOGY 1101 Biology I: Molecules, Genes and Cells..... | 3 |
| BIOLOGY 1202 Biology I: Organisms 3 and / or | 3 |
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| and | |
| CHEM 1200 Chemistry IB* | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| and | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| and | |
| CHEM 1312 Foundations of Chemistry IS..... | 3 |
| GEOLOGY 1103 Earth Systems I | 3 |
| GEOLOGY 1100 Earth's Interior I | 3 |

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

| | |
|---|---|
| CHEM 2512 Chemistry IIA (Ecochemistry)..... | 3 |
| CHEM 2530 Environmental & Analytical Chemistry II | 3 |
| CHEM 2522 Chemistry IIB (Ecochemistry)..... | 3 |
| CHEM 2540 Medicinal & Biological Chemistry II | 3 |

Level III

| | |
|--|---|
| CHEM 3111 Chemistry III | 6 |
| CHEM 3211 Synthesis of Materials III | 3 |
| CHEM 3212 Fundamentals of Materials III..... | 3 |

2.1.2 Electives

Courses to the value of at least 24 units from the following:

Level I

Courses to the value of up to 6 units, if required, from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science but not including BIOLOGY 1201 Biology I: Human Perspectives.

Level II

Courses to the value of at least 6 units from the following:

| | |
|-------------------------------|---|
| ENV BIOL 2500 Botany II..... | 3 |
| ENV BIOL 2502 Ecology II..... | 3 |

| | |
|--|---|
| GEOLOGY 2500 Sedimentary Geology II..... | 3 |
| GEOLOGY 2505 Geochemistry II | 3 |
| SOIL&WAT 2500WT Soil & Water Resources II | 3 |

and

Courses to the value of 6 units from Academic Program Rules 2.1c and 2.1.3.3 for the degree of Bachelor of Science.

Level III

Courses to the value of at least 12 units from the following:

| | |
|---|---|
| CHEM 3213 Advanced Synthetic Methods III | 3 |
| CHEM 3214 Medicinal & Biological Chemistry III | 3 |
| CHEM 3542 Research Methods in Chemistry III (ND)..... | 3 |
| ENV BIOL 3004 Freshwater Ecology III..... | 3 |
| ENV BIOL 3121 Concepts in Ecology II | 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 3505 Earth Systems History III..... | 3 |
| SOIL&WAT 3004WT Environmental Toxicology and Remediation III | 3 |
| SOIL&WAT 3017WT Soil & Water: Management and Conservation III..... | 3 |
| SOIL&WAT 3016WT Soil Ecology and Nutrient Cycling III | 3 |
| SOIL&WAT 3010 Remote Sensing III | 3 |

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Evolutionary Biology) (BSc(EvolBiol))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program, which provides access to staff and collections of the South Australian Museum, involves the study of information contained in living plants and animals and their fossils to determine how they evolved. This knowledge assists in understanding biodiversity and planning for its conservation. After the first year level, students have the opportunity to pursue more advanced level courses that focus on the origins of the Australian biota, evolutionary genetics, systematics, phylogenetics, ancient DNA, and the fossil record. Students are exposed to high quality, cutting-edge research and conduct a research project in their field of interest.

The Bachelor of Science (Evolutionary Biology) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Evolutionary Biology)

There shall be a Bachelor of Science (Evolutionary Biology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Evolutionary Biology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- Level I courses to the value of not more than 30 units
- Level III courses to the value of at least 24 units
- a major chosen from:
 - Palaeontology
 - Systematic and Molecular Evolution

2.1.1 Core Courses

Level I

| | |
|--|---|
| BIOLOGY 1101 Biology I: Molecules, Genes & Cells | 3 |
| or | |
| BIOLOGY 1401 Concepts in Biology I..... | 3 |
| BIOLOGY 1202 Biology I: Organisms | 3 |
| GEOLOGY 1103 Earth Systems | 3 |

| | |
|--|---|
| GEOLOGY 1100 Earth's Interior I | 3 |
| SCIENCE 1100 Principles & Practice of Science I..... | 3 |

Major in Palaeontology

Level II

| | |
|--|---|
| ENV BIOL 2500 Botany II..... | 3 |
| ENV BIOL 2503 Zoology II..... | 3 |
| ENV BIOL 2501 Evolutionary Biology II..... | 3 |

Level III

| | |
|--|---|
| ENV BIOL 3230 Evolution of Australian Vegetation III | 3 |
| ENV BIOL 3122 Evolution & Palaeobiology of Animals III | 3 |
| ENV BIOL 3123 Issues in Evolutionary Biology III | 3 |

Major in Systematic and Molecular Evolution

Level II

| | |
|--|---|
| ENV BIOL 2500 Botany II..... | 3 |
| ENV BIOL 2503 Zoology II..... | 3 |
| ENV BIOL 2501 Evolutionary Biology II..... | 3 |
| GENETICS 2510 Genetics IIA: Foundations of Genetics..... | 3 |
| GENETICS 2520 Genetics IIB: Function & Diversity of Genomes..... | 3 |

Level III

| | |
|--|---|
| ENV BIOL 3230 Evolution of Australian Vegetation III | 3 |
| ENV BIOL 3122 Evolution & Palaeobiology of Animals III | 3 |
| ENV BIOL 3123 Issues in Evolutionary Biology III | 3 |
| GENETICS 3111 Genes, Genomes & Molecular Evolution III | 6 |

2.1.2 Electives

Level I

| | |
|---|---|
| Courses to the value of 9 units from the following: | |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB..... | 3 |
| or | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| MATHS 1011 Mathematics IA..... | 3 |
| or | |

| | |
|--|---|
| MATHS 1013 Mathematics IM..... | 3 |
| MATHS 1012 Mathematics IB..... | 3 |
| STATS 1004 Statistical Practice I (Life Sciences)..... | 3 |

or

additional courses selected in consultation with the Program Coordinator and in accord with Academic Program Rules 2.1.c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Major in Palaeontology

Courses to the value of 15 units from the following:

| | |
|--|---|
| ENV BIOL 2502 Ecology II..... | 3 |
| GENETICS 2510 Genetics IIA: Foundations of Genetics..... | 3 |
| GENETICS 2520 Genetics IIB: Function & Diversity of Genomes..... | 3 |
| GEOLOGY 2500 Sedimentary Geology II..... | 3 |
| GEOLOGY 2501 Structural Geology II..... | 3 |
| GEOLOGY 2505 Geochemistry II..... | 3 |

or

additional Level II / III courses selected in consultation with the Program Coordinator and in accord with Academic Program Rules 2.1.3.3 and 2.1.3.5 for the degree of Bachelor of Science.

Major in Systematic and Molecular Evolution

Courses to the value of 9 units from the following:

| | |
|--|---|
| ENV BIOL 2502 Ecology II..... | 3 |
| GEOLOGY 2500 Sedimentary Geology II..... | 3 |
| GEOLOGY 2505 Geochemistry II..... | 3 |

or

Level II / III courses selected in consultation with the Program Coordinator and in accord with Academic Program Rules 2.1.3.3 and 2.1.3.5 for the degree of Bachelor of Science.

Level III

Major in Palaeontology

Courses to the value of at least 15 units from the following:

| | |
|--|---|
| ENV BIOL 3006 Research Methods in Environmental Biology III..... | 3 |
| ENV BIOL 3011 Evolution and Diversity of Insects III..... | 3 |
| ENV BIOL 3121 Concepts in Ecology III..... | 3 |
| ENV BIOL 3003 Ecophysiology of Animals III..... | 3 |
| ENV BIOL 3008 Conservation & Restoration III..... | 3 |
| ENV BIOL 3009 Ecophysiology of Plants III..... | 3 |
| ENV BIOL 3010 Marine Ecology III..... | 3 |

| | |
|---|---|
| GENETICS 3111 Genes, Genomes & Molecular Evolution III..... | 6 |
| GENETICS 3211 Gene Expression & Human Developmental Genetics III..... | 6 |
| SOIL&WAT 3010 Remote Sensing III..... | 3 |

or

additional Level III courses selected in consultation with the Program Coordinator and in accord with Academic Program Rule 2.1.3.5 for the degree of Bachelor of Science.

Major in Systematic and Molecular Evolution

Courses to the value of 9 units from the following:

| | |
|---|---|
| ENV BIOL 3006 Research Methods in Environmental Biology III..... | 3 |
| ENV BIOL 3011 Evolution and Diversity of Insects III..... | 3 |
| ENV BIOL 3121 Concepts in Ecology III..... | 3 |
| ENV BIOL 3003 Ecophysiology of Animals III..... | 3 |
| ENV BIOL 3008 Conservation & Restoration III..... | 3 |
| ENV BIOL 3009 Ecophysiology of Plants III..... | 3 |
| ENV BIOL 3010 Marine Ecology III..... | 3 |
| GENETICS 3211 Gene Expression & Human Developmental Genetics III..... | 6 |
| GEOLOGY 3505 Earth Systems History III..... | 3 |
| SOIL&WAT 3010 Remote Sensing..... | 3 |

or

additional Level III courses selected in consultation with the Program Coordinator and in accord with Academic Program Rule 2.1.3.5 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Laser Physics and Technology) (BSc(LaserPhysTech))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program introduces students to the field of laser physics and technology. Laser physics and technology underlie a diverse array of fields, ranging from fundamental physics to engineering, environmental studies, chemistry, biology and medicine.

The program consists of core theory and laboratory training in physics, with emphasis on electromagnetic radiation, optics, quantum mechanics and lasers. Students are able to supplement this core with a range of courses including mathematics, computing and electrical engineering. A key feature of the program is the inclusion of cross-disciplinary tutorials from academic staff as well as tutoring sessions by guest presenters from photonics and defence industries. This direct exposure provides the opportunity for mentoring relationships to be formed, which enhances student participation in research projects alongside established scientists in industry and physics discipline laboratories.

The Bachelor of Science (Laser Physics and Technology) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Laser Physics and Technology)

There shall be a Bachelor of Science (Laser Physics and Technology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Laser Physics and Technology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- a. courses to the value of 24 units at each of Level I, II and III.

2.1.1 Core Courses

Level I

| | |
|---------------------------------|---|
| MATHS 1011 Mathematics IA..... | 3 |
| MATHS 1012 Mathematics IB..... | 3 |
| PHYSICS 1100 Physics IA..... | 3 |
| PHYSICS 1200ND Physics IB | 3 |

Level II

| | |
|--|---|
| MATHS 2101 Multivariable and Complex Calculus II..... | 3 |
| MATHS 2102 Differential Equations II..... | 3 |
| PHYSICS 2510 Physics IIA..... | 3 |
| PHYSICS 2525 Physics IIB (Laser Physics and Technology)..... | 3 |
| PHYSICS 2532 Classical Physics II..... | 3 |
| PHYSICS 2534 Electromagnetism II | 3 |

Level III

| | |
|--|---|
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3537 Experimental Physics III (Laser Physics and Technology) | 3 |
| PHYSICS 3540 Optics and Photonics III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |

2.1.2 Electives

Level I

Courses to the value of 12 units from the following:

| | |
|---|---|
| CHEM 1100 Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB..... | 3 |
| COMP SCI 1012 Scientific Computing I | 3 |
| COMP SCI 1101 Introduction to Programming | 3 |
| ELEC ENG 1009 Electrical & Electronic Engineering IA..... | 3 |
| ELEC ENG 1010 Electrical & Electronic Engineering IB..... | 3 |
| STATS 1005 Statistical Analysis and Modelling I | 3 |

or

Courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses to the value of 6 units from the following:

| | |
|---|---|
| CHEM 2510 Chemistry IIA..... | 3 |
| CHEM 2520 Chemistry IIB..... | 3 |
| ELEC ENG 2008 Electronics II..... | 3 |
| ELEC ENG 2007 Signals and Systems II..... | 3 |
| MATHS 2103 Probability & Statistics..... | 3 |
| MATHS 2100 Real Analysis II | 3 |
| PHYSICS 2530 Astrophysics II | 3 |
| PURE MTH 2106 Algebra | 3 |

or

Courses from Academic Program Rules 2.1.c, 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science.

Level III

Courses to the value of 9 units from the following:

| | |
|--|---|
| ELEC ENG 3016 Control III | 3 |
| ELEC ENG 3018 RF Engineering III | 3 |
| ELEC ENG 3019A/B Practical Electrical and Electronic Design III..... | 3 |
| PHYSICS 3532 Atmospheric and Astrophysics III | 3 |
| PHYSICS 3006 Advanced Dynamics and Relativity III | 3 |
| PHYSICS 3534 Computational Physics III..... | 3 |

or

Courses from Academic Program Rules 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Marine Biology) (BSc(MarineBiol))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program prepares students for careers in marine biology via training in use of coherent, logical procedures and rigorous experimental planning for practical work in the field and laboratory. There is a strong emphasis on experiential learning environments, and thus students gain experience with research equipment used in research across the northern and southern hemispheres. The first year involves core studies in biology, geology and statistics. In subsequent years, students study ecological and evolutionary biology courses, which include marine biology components, as well as coastal management and specialised research methodology. At third year, there are three specific marine courses that cover the theoretical, practical and fieldwork aspects of marine biology.

The Bachelor of Science (Marine Biology) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Marine Biology)

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

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Marine Biology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- Level I courses to the value of not more than 30 units
- Level III courses to the value of at least 24 units

A student may also complete a major as set out in Academic Program Rule 2.1e for the degree of Bachelor of Science.

2.1.1 Core Courses

Level I

| | |
|--|---|
| BIOLOGY 1101 Biology I: Molecules, Genes & Cells | 3 |
| or | |
| BIOLOGY 1401 Concepts in Biology I..... | 3 |
| BIOLOGY 1202 Biology I: Organisms | 3 |

| | |
|--|---|
| ENV BIOL 1002 Ecological Issues I..... | 3 |
| GEOLOGY 1103 Earth Systems I | 3 |
| STATS 1004 Statistical Practice I (Life Sciences)..... | 3 |
| SCIENCE 1100 Principles & Practice of Science I..... | 3 |

Level II

| | |
|-------------------------------|---|
| ENV BIOL 2500 Botany II..... | 3 |
| ENV BIOL 2503 Zoology II..... | 3 |
| ENV BIOL 2502 Ecology II..... | 3 |

Level III

| | |
|--|---|
| ENV BIOL 3006 Research Methods in Environmental Biology III..... | 3 |
| ENV BIOL 3121 Concepts in Ecology III | 3 |
| ENV BIOL 3124 Frontiers in Marine Biology III | 3 |
| ENV BIOL 3010 Marine Ecology III | 3 |
| ENV BIOL 3221 Research Methods in Marine Biology III..... | 3 |

2.1.2 Electives

Level I

Level I courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses to the value of 15 units from the following:

| | |
|---|---|
| GEOG 2143 Introduction to Environmental Impact Assessment#..... | 3 |
| GEOG 2130 Managing Coastal Environments@ | 3 |
| GEOG 2139 Environmental Management | 3 |
| SOIL&WAT 2501 Spatial Information & Land Evaluation II..... | 3 |

or

additional courses from Academic Program Rule 2.1.3.3 for the degree of Bachelor of Science.

available even years

@ available odd years

Level III

Courses to the value of 9 units from the following:

| | |
|---|---|
| ENV BIOL 3004 Freshwater Ecology III..... | 3 |
| GEOG 2130 Managing Coastal Environments#..... | 3 |
| GEOG 2143 Introduction to Environmental Impact Assessment#..... | 3 |

| | |
|---|---|
| SOIL&WAT 3007WT GIS for Environmental Management III..... | 3 |
| SOIL&WAT 3010 Remote Sensing III | 3 |

or

additional courses from Academic Program Rule 2.1.3.5 for the degree of Bachelor of Science.

‡ available alternate years

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Mineral Geoscience) (BSc(MineralGeosc))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

The Bachelor of Science (Mineral Geoscience) integrates and extends courses in geology & geophysics, mining engineering, geography & environmental studies, chemistry, mathematics and physics. This program has extensive field work and is specifically designed to meet the industry demand for high-calibre graduates in the mineral resources sector. The first year of this program provides a foundation in sciences such as geology and maths or statistics, with a choice of additional courses in chemistry, physics and science electives. Second year develops this foundation by providing more in-depth study in the areas of geology. In third year, students will focus on advanced topics including mineral exploration, tectonics and geophysics. Students will benefit from direct exposure to professionals in the mineral geoscience industry that will enable them to form mentoring relationships.

The Bachelor of Science (Mineral Geoscience) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Mineral Geoscience)

There shall be a Bachelor of Science (Mineral Geoscience).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Mineral Geoscience), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- Level I courses to the value of not more than 30 units
- Level III courses to the value of at least 24 units

2.1.1 Core Courses

Level I

| | |
|--|---|
| GEOLOGY 1103 Earth Systems I | 3 |
| GEOLOGY 1100 Earth's Interior I | 3 |
| SCIENCE 1100 Principles & Practice of Science I..... | 3 |
| MATHS 1011 Mathematics IA..... | 3 |

or

MATHS 1013 Mathematics IM..... 3

or

STATS 1004 Statistical Practice (Life Sciences) I..... 3

Level II

GEOLOGY 2500 Sedimentary Geology II..... 3

GEOLOGY 2501 Structural Geology II..... 3

GEOLOGY 2502 Igneous & Metamorphic Geology II..... 3

GEOLOGY 2505 Geochemistry II..... 3

GEOLOGY 2504 Economic and Mine Geology..... 3

Level III

GEOLOGY 3013 Tectonics III..... 3

GEOLOGY 3016 Igneous and Metamorphic Geology III..... 3

GEOLOGY 3500 Exploration Methods III..... 3

GEOLOGY 3502 Mineral and Energy Resources III..... 3

GEOLOGY 3019 Field Geoscience Program III..... 3

2.1.2 Electives

Level I

Level I courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Level II courses from the following:

Level II GEOG courses to the value of 6 units (chosen in consultation with the Program Coordinator)

and / or

Level II courses from Academic Program Rules 2.1c and 2.1.3.3 for the degree of Bachelor of Science.

Level III

Level III courses to the value of 9 units from Academic Program Rule 2.1.3.5 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Molecular and Drug Design) (BSc(MolDrugDes))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

Rapid advances are currently being made in new areas of science such as structure-based drug design, proteomics, and pharmaco-genetics. Students will gain an understanding of how proteins work and how their function can be influenced as well as their role and potential uses in pharmaceuticals and the treatment of human diseases.

This program consists of core training in chemistry and biochemistry that will provide students with expertise in understanding how proteins interact with each other and with other small molecules, such as enzyme inhibitors and pharmaceuticals (drugs). A number of case studies will be considered to help understand the process of drug development within the pharmaceutical industry. A focus of the program is to develop an understanding of the molecular aspects of these processes. Students will develop an advanced understanding of chemical synthesis and areas of chemistry that impact on biological systems.

The Bachelor of Science (Molecular and Drug Design) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Molecular and Drug Design)

There shall be a Bachelor of Science (Molecular and Drug Design).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Molecular and Drug Design), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- Level I courses to the value of not more than 27 units
- Level III courses to the value of at least 24 units

2.1.1 Core Courses

Level I

| | |
|--|---|
| BIOLOGY 1101ND Biology I: Molecules, Genes & Cells | 3 |
| BIOLOGY 1201 Biology I: Human Perspectives..... | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| and | |
| CHEM 1200ND Chemistry IB* | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| and | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| and | |
| CHEM 1312 Foundations of Chemistry IS..... | 3 |
| STATS 1004 Statistical Practice I (Life Sciences)..... | 3 |

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200ND Chemistry IB.

Level II

| | |
|--|---|
| BIOCHEM 2500 Biochemistry II: Molecular and Cell Biology | 3 |
| BIOCHEM 2501 Biochemistry II: Metabolism | 3 |
| CHEM 2514 Chemistry IIA (Molecular and Drug Design)..... | 3 |
| CHEM 2530 Environmental & Analytical Chemistry II | 3 |
| CHEM 2524 Chemistry IIB (Molecular and Drug Design)..... | 3 |
| CHEM 2540 Medicinal and Biological Chemistry II | 3 |

Level III

| | |
|---|---|
| BIOCHEM 3000 Molecular & Structural Biology III | 6 |
| CHEM 3111 Chemistry III | 6 |
| CHEM 3213 Advanced Synthetic Methods III | 3 |
| CHEM 3214 Medicinal & Biological Chemistry III | 3 |

2.1.2 Electives

Courses to the value of up to 21 units from the following:

Level I

Courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses from Academic Program Rule 2.1.3.3 for the degree of Bachelor of Science.

Level III

Courses to the value of at least 6 units from Academic Program Rule 2.1.3.5 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Molecular Biology) (BSc(MolBiol))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

Molecular Biology explores the fundamental processes of life at the molecular level. It is applied to the synthesis, regulation and function of important genes, proteins and related biological molecules, and also to the synthesis and manipulation of genes both in the test-tube and in living organisms. This program involves core training in biochemistry, chemistry and genetics. Students are also given the flexibility to supplement this core with other science courses of their choice. In later years ample opportunities exist to participate in research projects alongside established scientists in laboratories from the disciplines of biochemistry, chemistry, genetics, microbiology and immunology.

The Bachelor of Science (Molecular Biology) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Molecular Biology)

There shall be a Bachelor of Science (Molecular Biology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Molecular Biology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- Level I courses to the value of not more than 30 units
- Level III courses to the value of at least 24 units
- a major chosen from
Biochemistry
Genetics

2.1.1 Core Courses

Level I

| | |
|--|---|
| BIOLOGY 1101ND Biology I: Molecules, Genes & Cells | 3 |
| BIOLOGY 1201 Biology I: Human Perspectives..... | 3 |

| | |
|--|---|
| CHEM 1100 Chemistry IA..... | 3 |
| and | |
| CHEM 1200 Chemistry IB* | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| and | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| and | |
| CHEM 1312 Foundations of Chemistry IS | 3 |
| *Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB. | |

Level II

| | |
|---|---|
| BIOCHEM 2510 Advanced Molecular Biology IIA..... | 3 |
| CHEM 2510 Chemistry IIA..... | 3 |
| and either | |
| BIOCHEM 2504 Biochem II (Mol Biol): Molecular and Cell Biology..... | 3 |
| or | |
| GENETICS 2510 Genetics IIA: Foundation of Genetics..... | 3 |
| BIOCHEM 2520 Advanced Molecular Biology IIB..... | 3 |
| and | |
| CHEM 2520 Chemistry IIB..... | 3 |
| or | |
| CHEM 2540 Medicinal and Biological Chemistry II..... | 3 |
| and either | |
| BIOCHEM 2505 Biochemistry II (Mol Biol): Metabolism | 3 |
| or | |
| GENETICS 2520 Genetics IIB: Function and Diversity of Genomes..... | 3 |

Level III

Major in Biochemistry

| | |
|---|---|
| BIOCHEM 3125 Advanced Molecular Biology IIIA (Biochemistry) | 6 |
| BIOCHEM 3225 Advanced Molecular Biology IIIB (Biochemistry) | 6 |

Major in Genetics

| | |
|--|---|
| GENETICS 3110 Advanced Molecular Biology IIIA (Genetics) | 6 |
| GENETICS 3210 Advanced Molecular Biology IIIB (Genetics) | 6 |

2.1.2 Electives

Courses to the value of up to 30 units from the following:

Level I

Courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses from Academic Program Rules 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science.

Level III

Courses to the value of 12 units (which may include a major) in the disciplines of Anatomical Sciences, Biochemistry, Chemistry, Genetics, Microbiology and Immunology, Pharmacology or Physiology selected in consultation with the Program Coordinator in accord with Academic Program Rules 2.1e and 2.1.3.5 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Nanoscience and Materials) (BSc(NanoMat))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

Nanoscience is an emerging area of science which involves the study of materials on an ultra-small scale and the novel properties that these materials demonstrate. This program consists of core training in chemistry, with additional emphasis on examining and quantifying the relationship between chemistry and functional materials. The program will cover a wide range of contemporary nanoscience issues including the design of molecular devices with application in the food industry, human and animal health (e.g. drug delivery), communications and chemical industries. Students will develop an understanding of the design requirements for a range of advanced materials such as polymers, catalysts, optical switches, sensors and solar cells.

In first year, students receive core training in chemistry and physics with optional courses chosen from offerings such as biology and maths. In later year levels, there is an emphasis on examining and quantifying the relationship between chemistry and functional materials. Students can develop advanced expertise in a wide range of related disciplines, depending upon study choices in second year. A feature of third year chemistry studies is that students will undertake investigative and research activities into contemporary issues in nanoscience and functional materials.

The Bachelor of Science (Nanoscience and Materials) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Nanoscience and Materials)

There shall be a Bachelor of Science (Nanoscience and Materials).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Nanoscience and Materials), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- a. Level I courses to the value of not more than 27 units

- b. Level III courses to the value of at least 24 units.

2.1.1 Core Courses

Level I

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

or

BIOLOGY 1401 Concepts in Biology I..... 3

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

or

BIOLOGY 1202 Biology I: Organisms 3

CHEM 1100 Chemistry IA..... 3

and

CHEM 1200ND Chemistry IB* 3

or

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

and

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

and

CHEM 1312 Foundations of Chemistry IS 3

PHYSICS 1100 Physics IA..... 3

or

PHYSICS 1101 Physics for the Life & Earth Sciences IA 3

or

PHYSICS 1008 Physical Aspects of Nature I..... 3

PHYSICS 1200 Physics IB..... 3

or

PHYSICS 1201 Physics for the Life & Earth Sciences IB 3

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200ND Chemistry IB.

Level II

CHEM 2516 Chemistry IIA (Nanoscience & Materials) 3

CHEM 2530 Environmental & Analytical Chemistry II 3

or

PHYSICS 2510 Physics IIA..... 3

CHEM 2526 Chemistry IIB (Nanoscience & Materials) 3

CHEM 2540 Medicinal and Biological Chemistry II 3

Level III

| | |
|--|---|
| CHEM 3111 Chemistry III | 6 |
| CHEM 3211 Synthesis of Materials III | 3 |
| CHEM 3212 Fundamentals of Materials III..... | 3 |
| CHEM 3213 Advanced Synthetic Methods III..... | 3 |

2.1.2 Electives

Courses to the value of up to 27 units from the following:

Level I

Courses from Academic Program Rules 2.1.c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses from Academic Program Rules 2.1.c, 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science.

Level III

Courses to the value of at least 9 units from Academic Program Rules 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Natural Resources) (BSc(NatRes))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program provides students with the opportunity to specialise in the areas of Conservation and Wildlife Ecology and Land and Water Management while also acquiring a broad education in the natural resource sciences.

In the first and second year students enrol in courses in biology, ecology, geology, practical statistics, botany, soil and water, spatial information systems and also have a choice of elective courses in areas of wildlife, environmental management and other science courses. In third year students choose to specialise in the thematic areas that focus on our native animals, plants and ecosystems or our land, soil and water resources. Students will develop skills in systematic methods of collection, analysis and reporting of field and laboratory data and basic experimental design, surveying resources, integrated resource planning and monitoring and re-vegetation and landscape restoration. Practicals and fieldwork are a key feature of the program.

The Bachelor of Science (Natural Resources) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Natural Resources)

There shall be a Bachelor of Science (Natural Resources).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Natural Resources), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- Level I courses to the value of not more than 30 units
- Level III courses to the value of at least 24 units.

2.1.1 Core Courses

Level I

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

or

BIOLOGY 1401 Concepts in Biology I..... 3

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

ENV BIOL 1002 Ecological Issues I..... 3

GEOLOGY 1103 Earth Systems I..... 3

STATS 1004 Statistical Practice I (Life Sciences)..... 3

SCIENCE 1100 Principles & Practice of Science I..... 3

Level II

ENV BIOL 2500 Botany II..... 3

ENV BIOL 2502 Ecology II..... 3

SOIL&WAT 2500WT Soil & Water Resources II..... 3

SOIL&WAT 2501 Spatial Information and Land Evaluation II..... 3

Level III

ENV BIOL 3220 Issues in Sustainable Environments III..... 3

SOIL&WAT 3007WT GIS for Environmental Management III..... 3

or

SOIL&WAT 3020WT GIS for Agriculture & Natural Resource Management III..... 3

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

ENV BIOL 3008 Conservation and Restoration III..... 3

2.1.2 Electives

Level I

Courses to the value of at least 6 units from the following:

CHEM 1100 Chemistry IA..... 3

or

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

PHYSICS 1008 Physical Aspects of Nature I..... 3

or

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

GEOG 1102 Footprints on a Fragile Planet..... 3

CHEM 1200 Chemistry 1B..... 3

or

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

or

Courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses from the following:

| | |
|--|---|
| GEOG 2143 Introduction to Environmental Impact Assessment..... | 3 |
| GEOG 2139 Environmental Management | 3 |
| ANIML SC 2502 Wildlife Management II..... | 3 |
| ENV BIOL 2503 Zoology II..... | 3 |
| ENV BIOL 2501 Evolutionary Biology II | 3 |
| GEOLOGY 2500 Sedimentary Geology II..... | 3 |

and

Level II courses from Academic Program Rules 2.1c, 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science.

Level III

Courses to the value of at least 12 units from the following groupings (with at least 3 units from each):

Land and Water Management

| | |
|---|---|
| AGRONOMY 3026RW Ecology & Management of Rangelands III | 3 |
| ENV BIOL 3012WT Integrated Catchment Management III..... | 3 |
| SOIL&WAT 3004WT Environmental Toxicology & Remediation III..... | 3 |
| SOIL&WAT 3017WT Soil & Water: Management & Conservation III | 3 |
| SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III..... | 3 |
| SOIL&WAT 3010 Remote Sensing III | 3 |

Conservation and Wildlife Ecology

| | |
|--|---|
| ANIML SC 3019RW Ecology and Management of Vertebrate Pests III | 3 |
| ENV BIOL 3004 Freshwater Ecology III..... | 3 |
| ENV BIOL 3121 Concepts in Ecology III | 3 |
| ENV BIOL 3010 Marine Ecology III | 3 |

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Petroleum Geoscience) (BSc(PetrolGeosc))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

NOTE: This program will not be offered in 2015.

Overview

This program will provide students with a coherent understanding of the areas of science that relate to the Earth's petroleum resources including their nature, origin, distribution, discovery and exploitation. Students will gain the ability to communicate with a diverse array of people and will have an understanding of the geological and technological complexity of the petroleum systems with which they are working. The first year of this program provides a foundation in sciences such as geology and maths, with a choice of additional courses in chemistry, physics and a science elective. Second year develops this foundation by providing more in-depth study in the areas of Petroleum Engineering and Geology. In third year, students will focus on advanced topics including Petroleum Exploration, Reservoir Characterisation and Modelling and Structural Geology and Seismic Methods. Students will benefit from direct exposure to professionals in the Petroleum Geoscience Industry that will enable them to form mentoring relationships.

The Bachelor of Science (Petroleum Geoscience) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Petroleum Geoscience)

There shall be a Bachelor of Science (Petroleum Geoscience).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Petroleum Geoscience), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- courses to the value of no more than 30 units at Level I
- courses to the value of 24 units at Level III

2.1.1 Core Courses

Level I

| | |
|---|---|
| GEOLOGY 1103 Earth Systems I | 3 |
| GEOLOGY 1100 Earth's Interior I | 3 |
| MATHS 1013 Mathematics IM | 3 |
| and | |
| MATHS 1011 Mathematics IA | 3 |
| or | |
| MATHS 1011 Mathematics IA | 3 |
| and | |
| MATHS 1012 Mathematics IB | 3 |
| Courses to the value of 6 units from the following: | |
| CHEM 1100 Chemistry IA | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA | 3 |
| CHEM 1200 Chemistry IB* | 3 |
| or | |
| CHEM 1201 Foundations of Chemistry IB | 3 |
| PHYSICS 1100 Physics IA | 3 |
| or | |
| PHYSICS 1101 Physics for the Life & Earth Sciences IA | 3 |
| or | |
| PHYSICS 1008 Physical Aspects of Nature I | 3 |
| PHYSICS 1200 Physics IB | 3 |
| or | |
| PHYSICS 1201 Physics for the Life & Earth Sciences IB | 3 |

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

| | |
|--|---|
| GEOLOGY 2500 Sedimentary Geology II | 3 |
| GEOLOGY 2501 Structural Geology II | 3 |
| GEOLOGY 2502 Igneous & Metamorphic Geology II | 3 |
| GEOLOGY 2505 Geochemistry II | 3 |
| PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry | 3 |
| PETROENG 2010 Drilling Engineering | 3 |
| PETROENG 1006 Introduction to Petroleum Engineering | 3 |
| PETROENG 2009 Formation Evolution, Petrophysics & Rock Properties | 3 |

Level III

| | |
|--|---|
| GEOLOGY 3013 Tectonics III..... | 3 |
| GEOLOGY 3020 Reservoir Geoscience Project III | 3 |
| GEOLOGY 3008 Geophysics III | 3 |
| GEOLOGY 3500 Exploration Methods..... | 3 |
| GEOLOGY 3019 Field Geoscience Program III..... | 3 |
| GEOLOGY 3505 Earth Systems History III | 3 |
| SOIL&WAT 3010 Remote Sensing III | 3 |
| and either: | |
| GEOLOGY 3502 Mineral and Energy Resources III | 3 |
| or | |
| PETROENG 3019 Structural Geology & Seismic Methods..... | 3 |

2.1.2 Electives**Level I**

Courses to the value of 6 units from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Space Science and Astrophysics) (BSc(SpacScAstrophys))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program explores the fundamental processes of our universe from the upper atmosphere of the Earth to the most distant regions. It consists of core training in the disciplines of astronomy and space science, with a strong emphasis on physics. Students are given the flexibility to supplement this core with their choice of other science, geoscience, and mathematically based work and students will have direct exposure to professionals in the fields of space science and astrophysics, which enables them to form professional mentoring relationships. There are also opportunities to take part in project work with established scientists in the field.

The Bachelor of Science (Space Science and Astrophysics) is an AQF Level 7 program with a standard full-time duration of 3 years.

1. Academic Program Rules for Bachelor of Science (Space Science and Astrophysics)

There shall be a Bachelor of Science (Space Science and Astrophysics).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Space Science and Astrophysics), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

- courses to the value of not more than 30 units at Level I
- courses to the value of at least 24 units at Level III

2.1.1 Core Courses

Level I

| | |
|---|---|
| MATHS 1011 Mathematics IA..... | 3 |
| MATHS 1012 Mathematics IB..... | 3 |
| PHYSICS 1100 Physics IA..... | 3 |
| PHYSICS 1200ND Physics IB | 3 |
| PHYSICS 1007 Space Science & Astrophysics I | 3 |

Level II

| | |
|---|---|
| MATHS 2101 Multivariable and Complex Calculus II..... | 3 |
| MATHS 2102 Differential Equations II..... | 3 |
| PHYSICS 2510 Physics IIA..... | 3 |
| PHYSICS 2520 Physics IIB..... | 3 |
| PHYSICS 2534 Electromagnetism II | 3 |
| PHYSICS 2536 Space Science and Astrophysics II | 3 |

Level III

| | |
|---|---|
| PHYSICS 3532 Atmospheric and Astrophysics III | 3 |
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3002 Experimental Physics III | 3 |

2.1.2 Electives

Level I

Courses to the value of at least 9 units from the following:

| | |
|---|---|
| COMP SCI 1101 Introduction to Programming | 3 |
| COMP SCI 1102 Object Orientated Programming | 3 |
| GEOLOGY 1103 Earth Systems | 3 |
| GEOLOGY 1100 Earth's Interior I | 3 |
| PHYSICS 1005 Physics, Ideas and Society I | 3 |
| STATS 1000 Statistical Practice I | 3 |
| STATS 1005 Statistical Analysis and Modelling I | 3 |

or

Courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses from the following:

| | |
|--|---|
| PHYSICS 2532 Classical Physics II..... | 3 |
|--|---|

or

Courses from Academic Program Rules 2.1c, 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science

or

Courses from the Academic Program Rules for the degree of Bachelor of Engineering (Honours) (Mechanical and Aerospace) in consultation with the Program Coordinator.

Level III

Courses to the value of at least 12 units from the following:

PHYSICS 3534 Computational Physics III 3

PHYSICS 3540 Optics and Photonics III 3

or

Courses from Academic Program Rules 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science

or

Courses from the Academic Program Rules for the degree of Bachelor of Engineering (Honours) (Mechanical and Aerospace) in consultation with the Program Coordinator.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Veterinary Bioscience) (BSc(VetBiosc))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

The Bachelor of Veterinary Science (Veterinary Bioscience) forms the first part of the veterinary science program. Students satisfactorily completing this program (including the 12 weeks of extra mural experience) will gain direct entry into the Doctor of Veterinary Medicine program with students who complete both programs being eligible to register and practice as veterinarians. The first year of the program involves studies at both North Terrace and Roseworthy campuses of the University, while later year levels of the program will be based at the Roseworthy campus.

The Bachelor of Science (Veterinary Bioscience) is an AQF Level 7 program with a standard full-time duration of 3 years.

Condition of Admission

Q Fever Vaccinations: Students in the Bachelor of Science (Veterinary Bioscience) are required to be vaccinated against Q Fever (unless initial skin test indicates pre-existing immunity).

Physical fitness: There is an extensive practical component that requires students to have the physical capacity to handle a range of large and small animals. To satisfactorily undertake these activities, students need to be physically fit and capable of animal handling procedures.

Condition of Continuing Enrolment

Minimum GPA: A student must maintain a minimum cumulative GPA of 4.00 or greater.

1. Academic Program Rules for Bachelor of Science (Veterinary Bioscience)

There shall be a Bachelor of Science (Veterinary Bioscience).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Veterinary Bioscience), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units.

2.1.1 Core Courses

Level I

| | |
|---|---|
| ANIML SC 1017RW Animal Handling & Husbandry I (Vet Bio)..... | 3 |
| ANIML SC 1018RW Principles in Animal Behaviour, Welfare and Ethics I (Vet Bio)..... | 3 |
| BIOLOGY 1510 Biology I: Molecules, Genes and Cells (Vet Bio)..... | 3 |
| BIOLOGY 1520 Biology I: Organisms (Vet Bio)..... | 3 |
| CHEM 1510 Chemistry IA (Vet Bio)..... | 3 |
| or | |
| CHEM 1511 Foundations of Chemistry IA (Vet Bio)..... | 3 |
| CHEM 1520 Chemistry IB (Vet Bio)..... | 3 |
| or | |
| CHEM 1521 Foundations of Chemistry IB (Vet Bio)..... | 3 |
| PHYSICS 1501 Physics for the Life and Earth Sciences I (Vet Bio)..... | 3 |
| or | |
| PHYSICS 1508 Physical Aspects of Nature I (Vet Bio)..... | 3 |
| STATS 1504 Statistical Practice I (Life Sciences) (Vet Bio)..... | 3 |

Level II

| | |
|--|---|
| AGRIC 2501RW Animal & Plant Biochemistry II (Vet Bio)..... | 3 |
| ANIML SC 2505RW Animal Nutrition & Metabolism II (Vet Bio)..... | 3 |
| ANIML SC 2508RW Genes and Inheritance II (Vet Bio)..... | 3 |
| VET SC 2500RW Professional Skills in Veterinary Bioscience II..... | 3 |
| VET SC 2510ARW Veterinary Anatomy & Physiology II..... | 6 |
| VET SC 2510BRW Veterinary Anatomy & Physiology II..... | 6 |

Level III

| | |
|--|---|
| VET SC 3520ARW Veterinary Anatomy & Physiology III..... | 6 |
| VET SC 3512RW Veterinary Immunology, Microbiology & Public Health III..... | 6 |
| VET SC 3520BRW Veterinary Anatomy & Physiology III..... | 3 |
| VET SC 3514RW Professional Skills in Veterinary Bioscience III..... | 3 |
| VET SC 3515RW Veterinary Parasitology III..... | 3 |

2.1.2 Work Based Training / Extra Mural Studies

In order to qualify for the BSc (Veterinary Bioscience) degree students must complete a total of 12 weeks (where 1 week is equivalent to a minimum of 40 hours over 5 working days) of extra mural studies including satisfactorily completing all associated assessment items. Participation in EMS can begin after the successful completion of ANIML SC 1017RW Animal Handling and Husbandry I (Vet Bio) (or equivalent) and must be completed before the end of the mid-semester break in semester 2 of Level III of the program.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (Honours) (BSc(Hons))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program consists of a research project and associated theoretical work and provides professional training and an opportunity to experience scientific research in a chosen area of specialisation. During this program students will learn new techniques and broaden their skill base. Students can pursue pathways in one of the following areas of science: Agricultural Science, Animal Science, Biochemistry, Chemistry, Environmental Biology, Genetics, Geology, Geophysics, Horticulture, Microbiology & Immunology, Petroleum Geology & Geophysics, Physics, Plant Science, Soil Science, Viticulture and Wine Science.

The Bachelor of Science (Honours) is an AQF Level 8 qualification with a standard full-time duration of 1 year.

1 Academic Program Rules for Bachelor of Science (Honours) (BSc(Hons))

There shall be a Bachelor of Science (Honours).

2 Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (Honours) the student must complete satisfactorily a program of study from one of Academic Program Rules 2.1.1–2.1.17 with a combined total of not less than 24 units:

2.1.1 Agricultural Science

To qualify for Honours in Agricultural Science a student shall satisfactorily complete the core courses and thesis:

Core Courses

AGRIC 4010AWT/BWT Advanced Agricultural Science (Hons) 3

Research Project

Students must complete a research project:
AGRIC 4020AWT/BWT Honours Agricultural Science Project 21

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

AGRIC 4030AWT Honours Agricultural Science Project (Part-time) Continuing

and

AGRIC 4030BWT Honours Agricultural Science Project (Part-time) Final 21

2.1.2 Animal Science

To qualify for Honours in Animal Science a student shall satisfactorily complete the core courses and thesis:

Core Courses

ANIML SC 4010ARW/BRW Advanced Animal Science (Hons) 3

Research Project

Students must complete a research project:
ANIML SC 4020ARW/BRW Honours Animal Science Project 21

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

ANIML SC 4030ARW Honours Animal Science Project (Part-time) Continuing and

ANIML SC 4030BRW Honours Animal Science Project (Part-time) Final 21

2.1.3 Biochemistry

To qualify for Honours in Biochemistry a student shall satisfactorily complete the core courses and thesis:

Core Courses

BIOCHEM 4010A/B Advanced Biochemistry (Hons) 6

Research Project

Students must complete a research project:
BIOCHEM 4020A/B Honours Biochemistry Project 18

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

BIOCHEM 4030A Honours Biochemistry Project (Part-time) Continuing and

BIOCHEM 4030B Honours Biochemistry Project (Part-time) Final 18

2.1.4 Chemistry

To qualify for Honours in Chemistry a student shall satisfactorily complete the core courses and thesis:

Core Courses

CHEM 4010A/B Advanced Chemistry (Hons) 9

Research Project

Students must complete a research project:
CHEM 4020A/B Honours Chemistry
Project 15

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:
CHEM 4030A Honours Chemistry
Project (Part-time) Continuing
and
CHEM 4030B Honours Chemistry
Project (Part-time) Final 15

2.1.5 Environmental Biology

To qualify for Honours in Environmental Biology a student shall satisfactorily complete the core courses and thesis:

Core Courses

ENV BIOL 4015A/B Advanced
Environmental Biology (Hons)..... 9

Research Project

Students must complete a research project:
ENV BIOL 4020A/B Honours
Environmental Biology Project 15

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:
ENV BIOL 4030A Honours Environmental
Biology Project (Part-time) Continuing
and
ENV BIOL 4030B Honours Environmental
Biology Project (Part-time) Final..... 15

2.1.6 Genetics

To qualify for Honours in Genetics a student shall satisfactorily complete the core courses and thesis:

Core Courses

GENETICS 4010A/B Advanced Genetics
(Hons)..... 6

Research Project

Students must complete a research project:
GENETICS 4020A/B Honours Genetics
Project 18

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:
GENETICS 4030A Honours Genetics
Project (Part-time) Continuing
and
GENETICS 4030B Honours Genetics
Project (Part-time) Final 18

2.1.7 Geology

To qualify for Honours in Geology a student shall satisfactorily complete the core courses and thesis:

Core Courses

GEOLOGY 4010A/B Advanced Geology
(Hons)..... 9

Research Project

Students must complete a research project:
GEOLOGY 4020A/B Honours Geology
Project 15

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:
GEOLOGY 4050A Honours Geology
Project (Part-time) Continuing
and
GEOLOGY 4050B Honours Geology
Project (Part-time) Final 15

2.1.8 Geophysics

To qualify for Honours in Geophysics a student shall satisfactorily complete the core courses and thesis:

Core Courses

GEOLOGY 4030A/B Advanced Geophysics
(Hons)..... 12

Research Project

Students must complete a research project:
GEOLOGY 4040A/B Honours Geophysics
Project 12

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:
GEOLOGY 4060A Honours Geophysics
Project (Part-time) Continuing
and
GEOLOGY 4060B Honours Geophysics
Project (Part-time) Final 12

2.1.9 Horticulture

To qualify for Honours in Horticulture a student shall satisfactorily complete the core courses and thesis:

Core Courses

HORTICUL 4010AWT/BWT Advanced
Horticulture (Hons)..... 3

Research Project

Students must complete a research project:
HORTICUL 4020AWT/BWT Honours
Horticulture Project..... 21

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:
HORTICUL 4030AWT Honours Horticulture
Project (Part-time) Continuing
and
HORTICUL 4030BWT Honours Horticulture
Project (Part-time) Final 21

2.1.10 Mathematical Physics

To qualify for Honours in Mathematical Physics a student shall satisfactorily complete the core courses and thesis:

Core Courses

| | |
|--|---|
| PHYSICS 4010 Advanced Physics Part 1 | 6 |
| PHYSICS 4015 Advanced Physics Part 2 | 6 |

Research Project

Students must complete a research project:

| | |
|---|----|
| PHYSICS 4020A/B Honours Physics Project | 12 |
|---|----|

2.1.11 Microbiology and Immunology

To qualify for Honours in Microbiology and Immunology a student shall satisfactorily complete the core courses and thesis:

Core Courses

| | |
|---|---|
| MICRO 4010A/B Advanced Microbiology and Immunology (Hons) | 6 |
|---|---|

Research Project

Students must complete a research project:

| | |
|---|----|
| MICRO 4020A/B Honours Microbiology and Immunology Project | 18 |
|---|----|

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

| | |
|---|----|
| MICRO 4030A Honours Microbiology and Immunology Project (Part-time) Continuing and MICRO 4030B Honours Microbiology and Immunology Project (Part-time) Final | 18 |
|---|----|

2.1.12 Petroleum Geology and Geophysics

To qualify for Honours in Petroleum Geology and Geophysics a student shall satisfactorily complete the core courses and thesis:

Core Courses

| | |
|---|---|
| PETROGEO 4010 Fundamentals of Petroleum Geoscience I | 3 |
| PETROGEO 4011 Fundamentals of Petroleum Geoscience II | 3 |
| PETROGEO 4012 Petroleum Resource Evaluation | 3 |
| PETROGEO 4013 Petroleum Systems and Basin Evaluation | 3 |

Research Project

Students must complete a research project:

| | |
|--|---|
| PETROGEO 4020 Petroleum Geoscience: Hons Research Project Part 1 | 6 |
| PETROGEO 4021 Petroleum Geoscience: Hons Research Project Part 2 | 6 |

2.1.13 Physics

To qualify for Honours in Physics a student shall satisfactorily complete the core courses and thesis:

Core Courses

| | |
|--|---|
| PHYSICS 4010 Advanced Physics Part 1 | 6 |
| PHYSICS 4015 Advanced Physics Part 2 | 6 |

Research Project

Students must complete a research project:

| | |
|---|----|
| PHYSICS 4020A/B Honours Physics Project | 12 |
|---|----|

2.1.14 Plant Science

To qualify for Honours in Plant Science a student shall satisfactorily complete the core courses and thesis:

Core Courses

| | |
|--|---|
| PLANT SC 4020AWT/BWT Advanced Plant Science (Hons) | 3 |
|--|---|

Research Project

Students must complete a research project:

| | |
|--|----|
| PLANT SC 4030AWT/BWT Honours Plant Science Project | 21 |
|--|----|

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

| | |
|---|----|
| PLANT SC 4040AWT Honours Plant Science Project (Part-time) Continuing and PLANT SC 4040BWT Honours Plant Science Project (Part-time) Final | 21 |
|---|----|

2.1.15 Soil Science

To qualify for Honours in Soil Science a student shall satisfactorily complete the core courses and thesis:

Core Courses

| | |
|---|---|
| SOIL&WAT 4020AWT/BWT Advanced Soil Science (Hons) | 3 |
|---|---|

Research Project

Students must complete a research project:

| | |
|---|----|
| SOIL&WAT 4030AWT/BWT Honours Soil Science Project | 21 |
|---|----|

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

| | |
|---|----|
| SOIL&WAT 4040AWT Honours Soil Science Project (Part-time) Continuing and SOIL&WAT 4040BWT Honours Soil Science Project (Part-time) Final | 21 |
|---|----|

2.1.16 Viticulture

To qualify for Honours in Viticulture a student shall satisfactorily complete the core courses and thesis:

Core Courses

VITICULT 4020AWT/BWT Advanced
Viticulture (Hons) 3

Research Project

Students must complete a research project:

VITICULT 4030AWT/BWT Honours
Viticulture Project..... 21

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

VITICULT 4040AWT Honours Viticulture
Project (Part-time) Continuing
and
VITICULT 4040BWT Honours Viticulture
Project (Part-time) Final 21

2.1.17 Wine Science

To qualify for Honours in Wine Science a student shall satisfactorily complete the core courses and thesis:

Core Courses

OENOLOGY 4010AWT/BWT Advanced
Wine Science (Hons) 3

Research Project

Students must complete a research project:

OENOLOGY 4020AWT/BWT Honours
Wine Science Project..... 21

In the case of a part-time enrolment the following two courses must be completed in two consecutive years:

OENOLOGY 4030AWT Honours Wine
Science Project (Part-time) Continuing
and
OENOLOGY 4030BWT Honours Wine
Science Project (Part-time) Final..... 21

2.1.18 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Science (High Performance Computational Physics) (Honours) (BSc(HighPerfComputPhys)(Hons))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program introduces students to the sophisticated high performance computing techniques required for the solution of cutting-edge problems in theoretical, computational and mathematical physics. Students will be able to develop skills to program parallel supercomputers using state of the art computer language and gain the mathematical and computational skills necessary to solve challenging problems at the forefront of physics. The program consists of core studies in physics, mathematics and computing science with an electrical engineering option in first year. Second year develops these areas of study further, with a focus on physics and applied mathematics, while third year involves advanced courses in physics. Students undertake the final year Honours program in theoretical physics which includes a research project plus specialised courses in computer science and mathematics, allowing them to underpin skills in high-performance computing.

The Bachelor of Science (High Performance Computational Physics) (Honours) is an AQF Level 7 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Science (High Performance Computational Physics) (Honours)

There shall be a Bachelor of Science (High Performance Computational Physics) (Honours).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Science (High Performance Computational Physics) (Honours), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 96 units:

- courses to the value of 24 units at each of Level I, II, III and IV.

2.1.1 Core Courses

Level I

| | |
|---|---|
| COMP SCI 1101 Introduction to Programming | 3 |
| COMP SCI 1102 Object Orientated Programming | 3 |
| MATHS 1011 Mathematics IA..... | 3 |
| MATHS 1012 Mathematics IB..... | 3 |
| PHYSICS 1100 Physics IA..... | 3 |
| PHYSICS 1200ND Physics IB | 3 |

Level II

| | |
|---|---|
| MATHS 2101 Multivariable and Complex Calculus II..... | 3 |
| MATHS 2102 Differential Equations II..... | 3 |
| PHYSICS 2510 Physics IA..... | 3 |
| MATHS 2104 Numerical Methods II | 3 |
| PHYSICS 2532 Classical Physics II..... | 3 |
| PHYSICS 2534 Electromagnetism II | 3 |

Level III

| | |
|--|---|
| PHYSICS 3006 Advanced Dynamics and Relativity III..... | 3 |
| PHYSICS 3542 Physics III | 6 |
| PHYSICS 3534 Computational Physics III | 3 |
| PHYSICS 3544 Quantum Mechanics III | 3 |

Level IV

| | |
|--|---|
| PHYSICS 4010 Advanced Physics Part 1 | 6 |
| PHYSICS 4015 Advanced Physics Part 2 | 6 |

Research Project

| | |
|---|----|
| Students must complete a research project: | |
| PHYSICS 4020A/B Honours Physics Project | 12 |

2.1.2 Electives

Level I

Courses to the value of 6 units from the following:

| | |
|---|---|
| COMP SCI 1012 Scientific Computing I | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB..... | 3 |
| ELEC ENG 1009 Electrical & Electronic Engineering IA..... | 3 |
| STATS 1005 Statistical Analysis and Modelling I | 3 |

or

Courses from Academic Program Rules 2.1c, 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses to the value of 6 units from the following:

| | |
|--|---|
| COMP SCI 2000 Computer Systems | 3 |
| COMP SCI 2005 Systems Programming | 3 |
| MATHS 2103 Probability and Statistics..... | 3 |
| MATHS 2100 Real Analysis II | 3 |
| PHYSICS 2520 Physics IIB..... | 3 |

or

Courses from Academic Program Rules 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science in the disciplines of Applied Mathematics, Computer Science, Physics and Pure Mathematics.

Level III

Courses to the value of 9 units from the following:

| | |
|---|---|
| APP MTH 3002 Fluid Mechanics III..... | 3 |
| PHYSICS 3532 Atmospheric and Astrophysics III | 3 |
| PHYSICS 3002 Experimental Physics III | 3 |
| PHYSICS 3540 Optics and Photonics III | 3 |
| PURE MTH 3012 Fields & Geometry III..... | 3 |
| PURE MTH 3019 Complex Analysis III..... | 3 |

or

Courses from Academic Program Rules 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science in the disciplines of Applied Mathematics, Computer Science, Physics and Pure Mathematics.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Viticulture and Oenology (BVitOenol)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program incorporates courses in both viticulture and oenology and qualifies graduates to work as either a viticulturalist, oenologist (winemaker) or in related professions (e.g. hospitality and tourism, and the food and beverage industry). Viticulture is the study of grape vines and their cultivation and includes site selection, vineyard establishment, management of pests and diseases and the informed application of irrigation and fertiliser to optimise vineyard yield and grape quality. The viticulturalist typically works closely with the winemaker to achieve the desired winemaking outcome. The winemaker utilises their training in the science of winemaking (oenology), to process grapes for the production of white, red, still and sparkling and fortified wines. The viticulturalist / winemaker often contributes to in-house research, sales and promotion of the finished product.

Throughout this program, there is an emphasis on the key technical methods and sensory (wine tasting) skills required for a career in viticulture and oenology. The first year level teaches both basic sciences and foundations of wine science at the North Terrace campus and the National Wine Centre. In second, third and fourth year levels the emphasis is on the scientific and technological aspects of winemaking and viticulture, with courses taught in the winery at the Waite campus. In fourth year students will have the opportunity to complete an industry experience placement in either viticulture and / or oenology to enhance personal and career objectives.

The Bachelor of Viticulture and Oenology is an AQF Level 7 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Viticulture and Oenology

There shall be a Bachelor of Viticulture and Oenology.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Viticulture and Oenology, the student must complete satisfactorily a program of study

consisting of the following requirements with a combined total of not less than 96 units:

- a. courses to the value of 24 units at each of Level I, II, III and IV.

2.1.1 Core Courses

Level I

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

or

BIOLOGY 1401 Concepts in Biology I..... 3

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

CHEM 1100 Chemistry IA..... 3

or

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

CHEM 1200 Chemistry IB*..... 3

or

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

OENOLOGY 1018NW Foundations of Wine Science I..... 3

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

or

PHYSICS 1008 Physical Aspects of Nature I..... 3

SOIL&WAT 1000WT Soils and Landscapes I..... 3

STATS 1004 Statistical Practice I (Life Sciences)..... 3

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

ANIML SC 2501WT Genes & Inheritance II..... 3

AGRIC 2500WT Animal & Plant Biochemistry II..... 3

OENOLOGY 2501WT Microbiology for Viticulture and Oenology II..... 3

OENOLOGY 2503WT Introductory Winemaking II..... 3

OENOLOGY 2502WT Sensory Studies II..... 3

PLANT SC 2510WT Foundations in Plant Science..... 3

SOIL&WAT 2500WT Soil and Water Resources II..... 3

VITICULT 2500WT Viticultural Science II..... 3

Level III

OENOLOGY 3007WT Stabilisation and Clarification III..... 3

| | |
|---|---|
| OENOLOGY 3047WT Winemaking at Vintage III | 3 |
| OENOLOGY 3037WT Distillation, Fortified & Sparkling Winemaking III | 3 |
| OENOLOGY 3046WT Fermentation Technology III | 3 |
| OENOLOGY 3530WT Engineering for Viticulture and Oenology III | 3 |
| PLANT SC 3510WT Plant Health III | 3 |
| VITICULT 3021WT Viticultural Science III | 3 |
| VITICULT 3044WT Viticultural Methods & Procedures III | 3 |

Level IV

| | |
|---|---|
| OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III | 3 |
| OENOLOGY 3016WT Cellar & Winery Waste Management III | 3 |
| OENOLOGY 3520WT Advances in Wine Science III | 3 |
| OENOLOGY 3003WT Wine Packaging and Quality Management III | 3 |

2.1.2 Electives

Courses to the value of 12 units from the following:

| | |
|--|---|
| AGRIBUS 3017WT Business Management for Applied Sciences III | 3 |
| ENV BIOL 3009 Ecophysiology of Plants III | 3 |
| PLANT SC 3500 Biotechnology in the Food and Wine Industries III | 3 |
| PLANT SC 3505WT Soil and Plant Nutrition III | 3 |
| PLANT SC 3515WT Plant Biotechnology III | 3 |
| SOIL&WAT 3017WT Soil & Water: Management & Conservation III | 3 |
| SOIL&WAT 3016WT Soil Ecology & Nutrient Cycling III | 3 |
| SOIL&WAT 3020WT GIS for Agriculture & Natural Resource Management | 3 |
| VITICULT 3500WT Grape Industry Practice, Policy & Communication III | 3 |

2.1.3 Work Based Training / Extra Mural Studies

Students will complete an industry experience placement in either viticulture and / or oenology as part of OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III.

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Viticulture and Oenology (Honours) (BVitOenol(Hons))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program incorporates courses in both viticulture and oenology and qualifies graduates to work as either a viticulturalist, oenologist (winemaker) or in related professions (e.g. hospitality and tourism, and the food and beverage industry). Viticulture is the study of grape vines and their cultivation and includes site selection, vineyard establishment, management of pests and diseases and the informed application of irrigation and fertiliser to optimise vineyard yield and grape quality. The viticulturalist typically works closely with the winemaker to achieve the desired winemaking outcome. The winemaker utilises their training in the science of winemaking (oenology), to process grapes for the production of white, red, still and sparkling and fortified wines. The viticulturalist / winemaker often contributes to in-house research, sales and promotion of the finished product.

Throughout this program, there is an emphasis on the key technical methods and sensory (wine tasting) skills required for a career in viticulture and oenology. The first year level teaches both basic sciences and foundations of wine science at the North Terrace campus and the National Wine Centre. In second, third and fourth year levels the emphasis is on the scientific and technological aspects of winemaking and viticulture, with courses taught in the winery at the Waite campus. In fourth year students will undertake an Honours project over two semesters and have the opportunity to complete an industry experience placement in either viticulture and / or oenology to enhance personal and career objectives.

The Bachelor of Viticulture and Oenology (Honours) is an AQF Level 8 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Viticulture and Oenology (Honours)

There shall be a Bachelor of Viticulture and Oenology (Honours).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Bachelor of Viticulture and Oenology (Honours), the student must complete satisfactorily a

program of study consisting of the following requirements with a combined total of not less than 96 units:

- a. courses to the value of 24 units at each of Level I, II, III and IV.

2.1.1 Core Courses

Level I

| | |
|--|---|
| BIOLOGY 1101 Biology I: Molecules, Genes and Cells..... | 3 |
| or | |
| BIOLOGY 1401 Concepts in Biology I..... | 3 |
| BIOLOGY 1202 Biology I: Organisms | 3 |
| CHEM 1100 Chemistry IA..... | 3 |
| or | |
| CHEM 1101 Foundations of Chemistry IA..... | 3 |
| CHEM 1200 Chemistry IB*..... | 3 |
| or | |
| CHEM 1201 Foundations of Chemistry IB..... | 3 |
| OENOLOGY 1018NW Foundations of Wine Science I..... | 3 |
| PHYSICS 1101 Physics for the Life and Earth Sciences IA..... | 3 |
| or | |
| PHYSICS 1008 Physical Aspects of Nature I..... | 3 |
| SOIL&WAT 1000WT Soils and Landscapes I..... | 3 |
| STATS 1004 Statistical Practice I (Life Sciences)..... | 3 |

*Note: CHEM 1311 Chemistry IB(S) may be presented in lieu of CHEM 1200 Chemistry IB.

Level II

| | |
|---|---|
| ANIML SC 2501WT Genes & Inheritance II..... | 3 |
| AGRIC 2500WT Animal & Plant Biochemistry II..... | 3 |
| OENOLOGY 2501WT Microbiology for Viticulture and Oenology II..... | 3 |
| OENOLOGY 2503WT Introductory Winemaking II..... | 3 |
| OENOLOGY 2502WT Sensory Studies II..... | 3 |
| PLANT SC 2510WT Foundations in Plant Science..... | 3 |
| SOIL&WAT 2500WT Soil and Water Resources II..... | 3 |
| VITICULT 2500WT Viticultural Science II..... | 3 |

Level III

| | |
|--|---|
| OENOLOGY 3007WT Stabilisation and Clarification III..... | 3 |
|--|---|

| | |
|---|---|
| OENOLOGY 3047WT Winemaking at Vintage III | 3 |
| OENOLOGY 3037WT Distillation, Fortified & Sparkling Winemaking III | 3 |
| OENOLOGY 3046WT Fermentation Technology III | 3 |
| OENOLOGY 3530WT Engineering for Viticulture and Oenology III | 3 |
| PLANT SC 3510WT Plant Health III | 3 |
| VITICULT 3021WT Viticultural Science III | 3 |
| VITICULT 3044WT Viticultural Methods & Procedures III | 3 |

Level IV

| | |
|---|---|
| OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III | 3 |
| OENOLOGY 3016WT Cellar & Winery Waste Management III | 3 |
| OENOLOGY 3520WT Advances in Wine Science III | 3 |
| OENOLOGY 3003WT Wine Packaging & Quality Management III | 3 |
| VITICULT 4010AWT Honours in Viticulture and Oenology Project A | 6 |
| VITICULT 4010BWT Honours in Viticulture and Oenology Project B | 6 |

2.1.3 Work Based Training / Extra Mural Studies

Students will complete an industry experience placement in either viticulture and / or oenology as part of OENOLOGY 3500WT Industry Experience (Viticulture & Oenology) III.

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

2.1.5 Honours

To be eligible to be admitted to the Honours degree program, a student shall complete Levels I, II and III as set out in Academic Program Rule 2.1 to a standard that is acceptable to the Faculty for the purpose of admission to the Honours degree. A student who wishes to proceed to the Honours degree must obtain the approval of the Head of School.

The work of the Honours program shall normally be completed in the final year of study. The Faculty may permit a student to present the work over a period of not more than two years on such conditions as it may determine.

Bachelor of Arts and Bachelor of Science (BA BSc)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This double degree enables students to expand their interests in both Science and Arts. It aims to produce graduates who are skilled in scientific method for experimentation and research, and who are also socially and critically engaged, innovative and creative thinkers and communicators. The program has been developed in recognition of the importance of science being studied in its social context as part of a broader liberal education. The links between the two areas can be explored through a range of pathways. In the first two years the program is divided between the two areas, satisfying the requirements for the first two years of both degrees concurrently. In the following two years, students complete the equivalent of a full year of study each for Science and Arts. Full-time students are encouraged to take advantage of the study abroad and student exchange program available to students. Students will complete at least one major, and possibly two, in both Arts and Science, making it possible to apply for entry to Honours in a number of fields.

The Bachelor of Arts and Bachelor of Science is an AQF Level 7 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Arts and Bachelor of Science

There shall be a Bachelor of Arts and Bachelor of Science.

2. Qualification Requirements

2.1 Academic Program

To qualify for the double degree of Bachelor of Arts and Bachelor of Science, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 96 units. A student must concurrently qualify for both awards.

2.1.1 Science Component

To qualify for the award of the degree of Bachelor of Science students must pass courses listed in Academic Program Rules 2.1.3.1, 2.1.3.2, 2.1.3.3, 2.1.3.4, 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science to a minimum value of 48 units from the following:

- 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
- 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 Academic Program Rule 2.1e for the degree of Bachelor of Science.

2.1.2 Arts Component

To qualify for the Bachelor of Arts degree, in addition to completion of the Bachelor of Science, students must complete the following:

- a. Level I courses to the value of 12 units, including ARTS 1007 The Enquiring Mind: Arts of Engagement
- b. Advanced Level / Level II courses to the value of 12 units
- c. Advanced Level / Level III courses to the value of 24 units.

Students must complete all of the Level III requirements and satisfy the requirement for a major in accord with the relevant Academic Program Rules for the degree of Bachelor of Arts.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Laws and Bachelor of Science (LLB BSc)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

Students are able to undertake a Bachelor of Science and Bachelor of Laws concurrently. Students enrolled in these programs will be granted credit towards each program in accordance with University policy.

1. Academic Program Rules for Bachelor of Laws and Bachelor of Science

There shall be a Bachelor of Laws and Bachelor of Science.

2. Qualification Requirements

2.1 Academic Program

To qualify for the double degree of Bachelor of Laws and Bachelor of Science, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 120 units. A student must concurrently qualify for both awards:

2.1.1 Science Component

To qualify for the award of the degree of Bachelor of Science students must pass courses listed in Academic Program Rules 2.1.3.1, 2.1.3.2, 2.1.3.3, 2.1.3.4, 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science to a minimum value of 48 units from the following:

- 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
- 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 Academic Program Rule 2.1e for the degree of Bachelor of Science.

2.1.2 Law Component

To qualify for the degree of Bachelor of Laws, students must pass courses in accord with the Academic Program Rules for the degree of Bachelor of Laws to a minimum value of 72 units.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Bachelor of Teaching and Bachelor of Science (BTeach BSc)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

The Bachelor of Teaching degree program prepares students for teaching in middle and senior secondary schools. It is also suitable for students intending to work with adult learners. The program is offered as a double degree only and is designed for students who are beginning tertiary study. The primary focus in the first three years of the degree is on completing a major in two different subject areas usually taught at senior secondary level. A major consists of courses taken over three consecutive years of study. Six semesters of study in a subject area is the general requirement for teaching a subject up to Year 12 level.

The Bachelor of Teaching and Bachelor of Science is an AQF Level 7 program with a standard full-time duration of 4 years.

1. Academic Program Rules for Bachelor of Teaching and Bachelor of Science

There shall be a Bachelor of Teaching and Bachelor of Science.

2. Qualification Requirements

2.1 Academic Program

To qualify for the double degree of Bachelor of Teaching and Bachelor of Science, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 96 units.

2.1.1 Core Courses - Education studies

Level I

| | |
|--|---|
| EDUC 1001 Schools and Policies..... | 3 |
| EDUC 1002 Primary School Interaction | 3 |

Level II

| | |
|--|---|
| EDUC 2001 Issues in Contemporary Education | 3 |
| EDUC 2002 Professional Practice and Research | 3 |

Level III

| | |
|--|---|
| EDUC 3002 Secondary School Interaction | 3 |
|--|---|

Level IV

Students must successfully complete courses to the value of 24 units from the following:

Professional experience

Courses to the value of 6 units from the following:

| | |
|---|---|
| EDUC 4205 Teaching Practice Part I (UG) | 3 |
| EDUC 4206 Teaching Practice Part II (UG) | 3 |
| EDUC 4505 Professional experience International | 3 |

Education Studies

Courses to the value of 6 units from the following:

| | |
|--|---|
| EDUC 4201 Education Culture & Diversity (UG) | 3 |
| EDUC 4202 Student Teacher Interaction (UG) | 3 |

Curriculum and Methodology

Courses to the value of 12 units from the following:

| | |
|--|---|
| EDUC 4510A Biology Curriculum & Methodology (UG) | 3 |
| EDUC 4510B Biology Curriculum & Methodology (UG) | 3 |
| EDUC 4512A Chemistry Curriculum & Methodology (UG) | 3 |
| EDUC 4512B Chemistry Curriculum & Methodology (UG) | 3 |
| EDUC 4531A Physics Curriculum and Methodology (UG) | 3 |
| EDUC 4531B Physics Curriculum and Methodology (UG) | 3 |
| EDUC 4540A Psychology Curriculum & Methodology | 3 |
| EDUC 4540B Psychology Curriculum & Methodology | 3 |

Science

Level I

Courses to the value of 18 units from Academic Program Rules 2.1.3.1 and 2.1.3.2 for the degree of Bachelor of Science.

Level II

Courses to the value of 18 units from Academic Program Rules 2.1.3.3 and 2.1.3.4 for the degree of Bachelor of Science.

Level III

Courses to the value of 21 units from Academic Program Rules 2.1.3.5 and 2.1.3.6 for the degree of Bachelor of Science including a major in a Science discipline.

2.1.2 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Postgraduate Program Rules

Graduate Certificate in Biotechnology (Biomedical) (GCertBiotech(Biomed))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program explores the full spectrum of the biotechnology sector, spanning the discovery, research and development phases. Students will be exposed to a range of technology platforms, and develop highly competitive laboratory, research and project management skills. In addition, students will examine many of the contemporary issues related to biotechnology, including compliance and regulation, commercialisation and risk management strategies.

Biomedical research and its applications are a key focus of the curriculum, particularly as they relate to career opportunities in the Asia Pacific region.

The Graduate Certificate in Biotechnology (Biomedical) is an AQF Level 8 program with a standard full-time duration of 0.5 years.

1. Academic Program Rules for Graduate Certificate in Biotechnology (Biomedical)

There shall be a Graduate Certificate in Biotechnology (Biomedical).

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Certificate in Biotechnology (Biomedical), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 12 units:

2.1.1 Core Courses

| | |
|---|---|
| BIOTECH 7000 Advanced Research Platforms..... | 3 |
| EDUC 7055 Research Communication..... | 3 |
| TECHCOMM 5016 Entrepreneurship and Innovation | 3 |

2.1.2 Electives

Courses to the value of 3 units from the following:

| | |
|--|---|
| BIOTECH 7001 Drug Discovery and Development | 3 |
| BIOTECH 7002 Stem Cells and Advanced Tissue Culture..... | 3 |

| | |
|--|---|
| BIOTECH 7006 Biomarkers, Detection and Diagnostics | 3 |
| BIOTECH 7003 Advanced Research Techniques..... | 3 |
| BIOTECH 7004 Molecular Microbiology and Vaccines..... | 3 |
| BIOTECH 7005 Bioinformatics and Systems Modelling | 3 |

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Biotechnology (Biomedical) (GDipBiotech(Biomed))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program explores the full spectrum of the biotechnology sector, spanning the discovery, research and development phases. Students will be exposed to a range of technology platforms, and develop highly competitive laboratory, research and project management skills. In addition, students will examine many of the contemporary issues related to biotechnology, including compliance and regulation, commercialisation and risk management strategies.

Biomedical research and its applications are a key focus of the curriculum, particularly as they relate to career opportunities in the Asia Pacific region.

The Graduate Diploma in Biotechnology (Biomedical) is an AQF Level 8 program with a standard full-time duration of 1 year.

1. Academic Program Rules for Graduate Diploma in Biotechnology (Biomedical)

There shall be a Graduate Diploma in Biotechnology (Biomedical).

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Biotechnology (Biomedical), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 24 units:

2.1.1 Core Courses

| | |
|---|---|
| BIOTECH 7000 Advanced Research Platforms..... | 3 |
| BIOTECH 7003 Advanced Research Techniques..... | 3 |
| EDUC 7054 Research Design | 3 |
| EDUC 7055 Research Communication..... | 3 |
| TECHCOMM 5016 Entrepreneurship and Innovation | 3 |

2.1.2 Electives

Courses to the value of at least 6 units from the following:

| | |
|---|---|
| BIOTECH 7001 Drug Discovery and Development | 3 |
|---|---|

| | |
|---|---|
| BIOTECH 7002 Stem Cells and Advanced Tissue Culture | 3 |
| BIOTECH 7006 Biomarkers, Detection and Diagnostics | 3 |
| BIOTECH 7004 Molecular Microbiology and Vaccines..... | 3 |
| BIOTECH 7005 Bioinformatics and Systems Modelling | 3 |
| plus | |
| Courses to the value of 3 units from the following: | |
| EDUC 7058 Research Processes | 3 |
| TECHCOMM 5021 Applied Project Management 1 | 3 |
| TECHCOMM 5006 Technology Management and Transfer | 3 |
| TECHCOMM 5011 Creating Wealth Through Internationalisation..... | 3 |
| TECHCOMM 5004 Managing Risk | 3 |
| or | |

other postgraduate coursework courses offered by the University with the approval of the Program Coordinator.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Master of Biotechnology (Biomedical) (MBiotech(Biomed))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program explores the full spectrum of the biotechnology sector, spanning the discovery, research and development phases. Students will be exposed to a range of technology platforms, and develop highly competitive laboratory, research and project management skills. In addition, students will examine many of the contemporary issues related to biotechnology, including compliance and regulation, commercialisation and risk management strategies.

Biomedical research and its applications are a key focus of the curriculum, particularly as they relate to career opportunities in the Asia Pacific region.

The Master of Biotechnology (Biomedical) is an AQF Level 9 program with a standard full-time duration of 2 years.

Condition of Continuing Enrolment

Research project: A student must complete at least 24 units of the coursework before commencing the research project.

1. Academic Program Rules for Master of Biotechnology (Biomedical)

There shall be a Master of Biotechnology (Biomedical).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Master of Biotechnology (Biomedical), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 48 units which must include a research project (18 units):

2.1.1 Core Courses

| | |
|---|---|
| BIOTECH 7000 Advanced Research Platforms..... | 3 |
| BIOTECH 7003 Advanced Research Techniques..... | 3 |
| EDUC 7054 Research Design | 3 |
| EDUC 7055 Research Communication..... | 3 |
| TECHCOMM 5016 Entrepreneurship and Innovation | 3 |

2.1.2 Electives

Courses to the value of 9 units from the following:

| | |
|--|---|
| BIOTECH 7001 Drug Discovery and Development | 3 |
| BIOTECH 7002 Stem Cells and Advanced Tissue Culture..... | 3 |
| BIOTECH 7006 Biomarkers, Detection and Diagnostics | 3 |
| BIOTECH 7004 Molecular Microbiology and Vaccines..... | 3 |
| BIOTECH 7005 Bioinformatics and Systems Modelling | 3 |

plus

Courses to the value of 6 units from the following:

| | |
|---|---|
| EDUC 7058 Research Processes | 3 |
| TECHCOMM 5006 Technology Management and Transfer | 3 |
| TECHCOMM 5011 Creating Wealth Through Internationalisation..... | 3 |
| TECHCOMM 5004 Managing Risk | 3 |
| TECHCOMM 5021 Applied Project Management 1 | 3 |

or

other postgraduate coursework courses offered by the University with the approval of the Program Coordinator.

2.1.3 Research Project

Students must complete a research project with a written thesis of not longer than 15,000 words:

| | |
|--|----|
| BIOTECH 7010A Research Project, Part 1 | 6 |
| BIOTECH 7010B Research Project, Part 2..... | 12 |

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Certificate in Biotechnology (Plant Biotechnology) (GCertBiotech(PlantBiotech))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program has a strong emphasis on understanding plant form and function from molecular, genetic and biochemical perspectives. It extends this understanding from fundamental science to applications in plant production, human and animal health, biofuels, and ultimately to commercialisation of plant biotechnology. The program is designed as a series of short courses, integrating scientific communication, critical thinking, problem solving and bioinformatics into the curriculum.

The Graduate Certificate in Biotechnology (Plant Biotechnology) is an AQF Level 8 program with a standard full-time duration of 0.5 years.

1. Academic Program Rules for Graduate Certificate in Biotechnology (Plant Biotechnology)

There shall be a Graduate Certificate in Biotechnology (Plant Biotechnology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Certificate in Biotechnology (Plant Biotechnology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 12 units:

2.1.1 Core Courses

| | |
|---|---|
| PLANT SC 7225WT Foundations of Plant Biotechnology..... | 6 |
| PLANT SC 7226WT Molecular Plant Breeding..... | 3 |
| PLANT SC 7227WT Plant Genomics..... | 3 |

2.1.2 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Biotechnology (Plant Biotechnology) (GDipBiotech(PlantBiotech))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program has a strong emphasis on understanding plant form and function from molecular, genetic and biochemical perspectives. It extends this understanding from fundamental science to applications in plant production, human and animal health, biofuels, and ultimately to commercialisation of plant biotechnology. The program is designed as a series of short courses, integrating scientific communication, critical thinking, problem solving and bioinformatics into the curriculum.

The Graduate Diploma in Biotechnology (Plant Biotechnology) is an AQF Level 8 program with a standard full-time duration of 1 year.

1. Academic Program Rules for Graduate Diploma in Biotechnology (Plant Biotechnology)

There shall be a Graduate Diploma in Biotechnology (Plant Biotechnology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Biotechnology (Plant Biotechnology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 24 units:

2.1.1 Core Courses

| | |
|---|---|
| PLANT SC 7225WT Foundations of Plant Biotechnology..... | 6 |
| PLANT SC 7226WT Molecular Plant Breeding..... | 3 |
| PLANT SC 7227WT Plant Genomics..... | 3 |
| PLANT SC 7123WT Applications of Plant Biotechnology in Production | 3 |
| PLANT SC 7126WT Techniques in Plant Biotechnology..... | 3 |
| PLANT SC 7250WT Regulatory Approval for GM Plants | 3 |
| PLANT SC 7255WT Principles and Practice of GM Crop Regulation..... | 3 |

2.1.2 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Master of Biotechnology (Plant Biotechnology) (MBiotech(PlantBiotech))

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program has a strong emphasis on understanding plant form and function from molecular, genetic and biochemical perspectives. It extends this understanding from fundamental science to applications in plant production, human and animal health, biofuels, and ultimately to commercialisation of plant biotechnology. The program is designed as a series of short courses, integrating scientific communication, critical thinking, problem solving and bioinformatics into the curriculum.

The Master of Biotechnology (Plant Biotechnology) is an AQF Level 9 program with a standard full-time duration of 2 years.

Condition of Continuing Enrolment

Research project: A student must complete all of the coursework before commencing the research project.

1. Academic Program Rules for Master of Biotechnology (Plant Biotechnology)

There shall be a Master of Biotechnology (Plant Biotechnology).

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Master of Biotechnology (Plant Biotechnology), the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 48 units which must include a research project (24 units):

2.1.1 Core Courses

| | |
|---|---|
| PLANT SC 7225WT Foundations of Plant Biotechnology..... | 6 |
| PLANT SC 7226WT Molecular Plant Breeding..... | 3 |
| PLANT SC 7227WT Plant Genomics..... | 3 |
| PLANT SC 7123WT Applications of Plant Biotechnology in Production | 3 |
| PLANT SC 7126WT Techniques in Plant Biotechnology | 3 |
| PLANT SC 7250WT Regulatory Approval for GM Plants | 3 |

| | |
|--|---|
| PLANT SC 7255WT Principles and Practice of GM Crop Regulation..... | 3 |
|--|---|

2.1.2 Research Project

Students must complete a research project of not longer than 20,000 words:

| | |
|---|----|
| PLANT SC 7229WT Research Project (Plant Biotechnology) F/T..... | 24 |
|---|----|

or

| | |
|--|----|
| PLANT SC 7231WT Research Project (Plant Biotechnology) P/T | 24 |
|--|----|

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Oenology (GDipOenol)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program provides advanced knowledge in all aspects of modern winemaking. It employs an integrated 'from grape to the glass' approach, covering the global marketing of wine and an understanding of viticulture. The Waite campus is co-located with a number of research partners, providing a stimulating and unique environment for training, exposing students to the latest technologies and enabling them to learn from leaders in their field.

The Graduate Diploma in Oenology is an AQF Level 8 program with a standard full-time duration of 1 year.

1. Academic Program Rules for Graduate Diploma in Oenology

There shall be a Graduate Diploma in Oenology.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Oenology, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 24 units:

2.1.1 Core Courses

| | |
|---|---|
| OENOLOGY 7019WT Sensory Studies..... | 3 |
| OENOLOGY 7028WT Introductory Winemaking..... | 3 |
| VITICULT 7002WT Viticultural Science A..... | 3 |
| OENOLOGY 7047WT Winemaking at Vintage..... | 3 |
| OENOLOGY 7022WT Cellar and Winery Waste Management..... | 3 |
| OENOLOGY 7010WT Stabilisation and Clarification..... | 3 |

2.1.2 Electives

Courses to the value of 6 units from the following:

| | |
|---|---|
| OENOLOGY 7038WT Distillation, Fortified and Sparkling Winemaking..... | 3 |
| VITICULT 7038WT Viticultural Methods and Procedures..... | 3 |
| VITICULT 7021WT Viticultural Science B..... | 3 |

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Certificate in Physics (GCertPhys)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

Programs are tailored to an individual's background, interests and career objectives. Students will obtain and extend fundamental competencies in Physics, and study the latest advances in their specialisation under the supervision of academic and research staff.

Applicants who have not studied at an Australian institution within the last 10 years, must provide a summary, in their own words, of the syllabus (including laboratory) for each of the most advanced physics and mathematics courses on their academic record (up to 4 pages overall).

The Graduate Certificate in Physics is an AQF Level 8 program with a standard full-time duration of 0.5 years.

1. Academic Program Rules for Graduate Certificate in Physics

There shall be a Graduate Certificate in Physics.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Certificate in Physics, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 12 units:

2.1.1 Core Courses

Courses to the value of at least 6 units from the following:

| | |
|---|---|
| PHYSICS 7007 Experimental Methods..... | 3 |
| PHYSICS 7010 Non-Linear Optics..... | 3 |
| PHYSICS 7011 Nuclear and Radiation Physics..... | 3 |
| PHYSICS 7013 Quantum Field Theory..... | 3 |
| PHYSICS 7014 Relativistic Quantum Mechanics and Particle Physics..... | 3 |
| PHYSICS 7104 Electronic Data Acquisition..... | 3 |
| PHYSICS 7551 Radiotherapy Physics..... | 3 |
| PHYSICS 7002 Advanced Astrophysics..... | 3 |
| PHYSICS 7004 Advanced Electromagnetism..... | 3 |
| PHYSICS 7003 Advanced Atmospheric and Environmental Physics..... | 3 |
| PHYSICS 7008 Gauge Theory..... | 3 |

| | |
|--|---|
| PHYSICS 7009 General Relativity..... | 3 |
| PHYSICS 7012 Nuclear Theory and Particle Physics..... | 3 |
| PHYSICS 7015 Statistical Mechanics and Many Body Theory..... | 3 |
| PHYSICS 7549 Physics of Medical Imaging..... | 3 |

2.1.2 Electives

Courses to the value of not more than 6 units from the following:

| | |
|--|---|
| PHYSICS 7032 Advanced Dynamics & Relativity..... | 3 |
| PHYSICS 7532 Atmospheric and Astrophysics..... | 3 |
| PHYSICS 7536 Electromagnetism..... | 3 |
| or | |
| PHYSICS 7542 Quantum Mechanics A..... | 3 |
| or | |
| PHYSICS 7546 Statistical Mechanics..... | 3 |
| PHYSICS 7548 Human Biology for Medical Physics..... | 3 |
| PHYSICS 7534 Computational Physics..... | 3 |
| PHYSICS 7028 Experimental Physics..... | 3 |
| PHYSICS 7540 Optics & Photonics..... | 3 |
| PHYSICS 7209 Photonics P..... | 3 |
| PHYSICS 7544 Quantum Mechanics B..... | 3 |
| PHYSICS 7550 Radiation Biology, Protection & Epidemiology..... | 3 |
| or | |

other postgraduate coursework courses from other programs in the Faculty of Sciences or the Faculty of Engineering, Computer and Mathematical Sciences.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Physics (GDipPhys)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

Programs are tailored to an individual's background, interests and career objectives. Students will obtain and extend fundamental competencies in Physics, and study the latest advances in their specialisation under the supervision of academic and research staff.

Applicants who have not studied at an Australian institution within the last 10 years, must provide a summary, in their own words, of the syllabus (including laboratory) for each of the most advanced physics and mathematics courses on their academic record (up to 4 pages overall).

The Graduate Diploma in Physics is an AQF Level 8 program with a standard full-time duration of 1 year.

1. Academic Program Rules for Graduate Diploma in Physics

There shall be a Graduate Diploma in Physics.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Physics, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 24 units:

2.1.1 Core Courses

Courses to the value of at least 9 units from the following:

| | |
|---|---|
| PHYSICS 7007 Experimental Methods | 3 |
| PHYSICS 7010 Non-Linear Optics..... | 3 |
| PHYSICS 7011 Nuclear & Radiation Physics..... | 3 |
| PHYSICS 7013 Quantum Field Theory..... | 3 |
| PHYSICS 7014 Relativistic Quantum Mechanics and Particle Physics..... | 3 |
| PHYSICS 7104 Electronic Data Acquisition | 3 |
| PHYSICS 7002 Advanced Astrophysics..... | 3 |
| PHYSICS 7004 Advanced Electromagnetism | 3 |
| PHYSICS 7003 Advanced Atmospheric and Environmental Physics | 3 |
| PHYSICS 7008 Gauge Theory | 3 |
| PHYSICS 7009 General Relativity..... | 3 |

| | |
|---|---|
| PHYSICS 7012 Nuclear Theory and Particle Physics..... | 3 |
| PHYSICS 7015 Statistical Mechanics and Many Body Theory | 3 |

2.1.2 Electives

Courses to the value of not more than 9 units from the following:

| | |
|--|---|
| PHYSICS 7032 Advanced Dynamics & Relativity..... | 3 |
| PHYSICS 7532 Atmospheric and Astrophysics | 3 |
| PHYSICS 7536 Electromagnetism | 3 |
| or | |
| PHYSICS 7542 Quantum Mechanics A..... | 3 |
| or | |
| PHYSICS 7546 Statistical Mechanics | 3 |
| PHYSICS 7534 Computational Physics..... | 3 |
| PHYSICS 7028 Experimental Physics | 3 |
| PHYSICS 7540 Optics & Photonics | 3 |
| PHYSICS 7544 Quantum Mechanics B | 3 |
| PHYSICS 7209 Photonics P..... | 3 |
| or | |

other postgraduate coursework courses from other programs in the Faculty of Sciences or the Faculty of Engineering, Computer and Mathematical Sciences.

2.1.3 Research Project

Students must complete a research project of not longer than 7,500 words:

| | |
|--|---|
| PHYSICS 7100 Research Project (Diploma Physics)..... | 6 |
|--|---|

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Certificate in Plant Health and Biosecurity (GCPlantHlthBiosec)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Note: This program will not be offered in 2015.

Overview

This program has a strong emphasis on producing and securing healthy plants, with a focus on biosecurity. It is designed as a series of intensive short courses, integrating scientific communication, critical thinking, problem solving and bioinformatics into the curriculum.

The Graduate Certificate in Plant Health and Biosecurity is an AQF Level 8 program with a standard full-time duration of 0.5 years.

1. Academic Program Rules for Graduate Certificate in Plant Health and Biosecurity

There shall be a Graduate Certificate in Plant Health and Biosecurity.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Certificate in Plant Health and Biosecurity, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 12 units:

2.1.1 Core Courses

| | |
|--|---|
| PLANT SC 7020WT Strategies and Practices for Pest Management & Eradication | 3 |
| PLANT SC 7220WT Foundations of Plant Health | 6 |
| PLANT SC 7222WT Advanced Principles Pest Management & Biosecurity | 3 |

2.1.2 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Plant Health and Biosecurity (GDipPlantHlthBiosec)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Note: This program will not be offered in 2015.

Overview

This program has a strong emphasis on producing and securing healthy plants, with a focus on biosecurity. It is designed as a series of intensive short courses, integrating scientific communication, critical thinking, problem solving and bioinformatics into the curriculum.

The Graduate Diploma in Plant Health and Biosecurity is an AQF Level 8 program with a standard full-time duration of 1 year.

1. Academic Program Rules for Graduate Diploma in Plant Health and Biosecurity

There shall be a Graduate Diploma in Plant Health and Biosecurity.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Plant Health and Biosecurity, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 24 units:

2.1.1 Core Courses

| | |
|--|---|
| PLANT SC 7020WT Strategies & Practices for Pest Management & Eradication | 3 |
| PLANT SC 7120WT Molecular and Biochemical Diagnostic Methods in Plant Health | 3 |
| PLANT SC 7121WT Biosecurity and Incursion Management | 3 |
| PLANT SC 7122WT Management & Regulation of Plant Health | 3 |
| PLANT SC 7220WT Foundations of Plant Health | 6 |
| PLANT SC 7221WT Classical Diagnostic Methods in Plant Health | 3 |
| PLANT SC 7222WT Advanced Principles of Pest Management & Biosecurity | 3 |

2.1.2 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Master of Plant Health and Biosecurity (MPlantHlthBiosec)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Note: This program will not be offered in 2015.

Overview

This program has a strong emphasis on producing and securing healthy plants, with a focus on biosecurity. It is designed as a series of intensive short courses, integrating scientific communication, critical thinking, problem solving and bioinformatics into the curriculum.

The Master of Plant Health and Biosecurity is an AQF Level 9 program with a standard full-time duration of 2 years.

Condition of Continuing Enrolment

Research project: A student must complete all of the coursework before commencing the research project.

1. Academic Program Rules for Master of Plant Health and Biosecurity

There shall be a Master of Plant Health and Biosecurity.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Master of Plant Health and Biosecurity, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 48 units which must include a research project (24 units):

2.1.1 Core Courses

| | |
|---|---|
| PLANT SC 7020WT Strategies & Practices for Pest Management & Eradication | 3 |
| PLANT SC 7120WT Molecular and Biochemical Diagnostic Methods in Plant Health..... | 3 |
| PLANT SC 7121WT Biosecurity and Incursion Management | 3 |
| PLANT SC 7122WT Management and Regulation of Plant Health..... | 3 |
| PLANT SC 7220WT Foundations of Plant Health..... | 6 |
| PLANT SC 7221WT Classical Diagnostic Methods in Plant Health..... | 3 |
| PLANT SC 7222WT Advanced Principles Pest Management & Biosecurity..... | 3 |

2.1.2 Research Project

Students must complete a research project of not longer than 20,000 words:

| | |
|--|----|
| PLANT SC 7223AWT/BWT Research Project (Plant Health) Extended..... | 24 |
|--|----|

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Certificate in Radiation Management (GCertRadMgt)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

The Graduate Certificate in Radiation Management aims to deliver tertiary-qualified graduates with the competence to supervise and manage radiation safety in mining, industrial radiography, security or scientific industries. Graduates are trained to ensure that radiation work is carried out safely and in accordance with national and international requirements.

The Graduate Certificate in Radiation Management is an AQF Level 8 qualification with a standard full-time duration of 0.5 years.

1. Academic Program Rules for the Graduate Certificate in Radiation Management

There shall be a Graduate Certificate in Radiation Management.

2. Qualification requirements

2.1 Academic Program

To qualify for the degree of Graduate Certificate in Radiation Management, the candidate must complete satisfactorily a program of study consisting of the following courses with a combined total of not less than 12 units:

2.1.1 Core courses

| | |
|--|---|
| PHYSICS 7560 Radioactivity, Radiation Detection and Dosimetry | 3 |
| PHYSICS 7561 Ionising Radiation – Biological Effects and Incident Response | 3 |
| PHYSICS 7562 Management and Regulatory Control of Radiation | 3 |
| PHYSICS 7563 Radiation Safety in the Workplace | 3 |

2.1.2 Work Based Training / Extra Mural Studies

Candidates must complete an industry placement to the value of 60 hours over two weeks as part of PHYSICS 7563 Radiation Safety in the Workplace.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Viticulture (GDipVit)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program provides advanced knowledge in all aspects of modern grape-growing including: advanced production techniques, vineyard establishment, mineral nutrition, advanced vine physiology and biotechnology, pest and disease control, efficient water use strategies, and the engineering of production and irrigation. Students may also gain a basic working knowledge of wine production, and some aspects of the global marketing of wine, which reflect trends in the wine industry towards an integrated approach from grape to glass.

The Graduate Diploma in Viticulture is an AQF Level 8 program with a standard full-time duration of 1 year.

1. Academic Program Rules for Graduate Diploma in Viticulture

There shall be a Graduate Diploma in Viticulture.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Viticulture, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 24 units:

2.1.1 Core Courses

| | |
|--|---|
| VITICULT 7002WT Viticultural Science A..... | 3 |
| VITICULT 7021WT Viticultural Science B..... | 3 |
| VITICULT 7038WT Viticultural Methods & Procedures..... | 3 |
| OENOLOGY 7028WT Introductory Winemaking..... | 3 |

2.1.2 Electives

Courses to the value of 12 units from the following:

| | |
|--|---|
| PLANT SC 7245WT Plant Health A..... | 3 |
| SOIL&WAT 7003WT Topics in Soil and Land Systems..... | 3 |
| SOIL&WAT 7027WT Soil & Water: Management & Conservation..... | 3 |
| SOIL&WAT 7030WT GIS for Agriculture & Natural Resource Management..... | 3 |
| OENOLOGY 7019WT Sensory Studies..... | 3 |

| | |
|---|---|
| PLANT SC 7240WT Soil and Plant Nutrition..... | 3 |
| SCIENCE 7020 Communicating Science..... | 3 |
| or | |
| other postgraduate coursework courses available from other programs in the Faculty of Sciences. | |

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Graduate Diploma in Viticulture and Oenology (GDipVitOen)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program incorporates courses in both viticulture and oenology and qualifies graduates to work as either a viticulturalist, oenologist (winemaker) or in related professions (e.g. hospitality and tourism, and the food and beverage industry). Viticulture is the study of grape vines and their cultivation and includes site selection, vineyard establishment, management of pests and diseases and the informed application of irrigation and fertilizer to optimise vineyard yield and grape quality. The viticulturist typically works closely with the winemaker to achieve the desired winemaking outcome. The winemaker utilises their training in the science of winemaking (oenology), to process grapes for the production of white, red, still and sparkling and fortified wines. The viticulturist / winemaker often contributes to in-house research, sales and promotion of the finished product. Throughout this program, there is an emphasis on the key technical methods and sensory (wine tasting) skills required for a career in viticulture and oenology.

The Graduate Diploma in Viticulture and Oenology is an AQF Level 8 program with a standard full-time duration of 1.0 year.

1. Academic Program Rules for Graduate Diploma in Viticulture and Oenology

There shall be a Graduate Diploma in Viticulture and Oenology.

2. Qualification Requirements

2.1 Academic Program

To qualify for the Graduate Diploma in Viticulture and Oenology, the student must complete satisfactorily a program of study consisting of the following courses with a combined total of not less than 24 units.

2.1.1 Core Courses

| | |
|---|---|
| OENOLOGY 7010WT Stabilisation and Clarification | 3 |
| OENOLOGY 7019WT Sensory Studies..... | 3 |
| OENOLOGY 7022WT Cellar and Winery Waste Management..... | 3 |
| OENOLOGY 7028WT Introductory Winemaking..... | 3 |

| | |
|---|---|
| OENOLOGY 7047WT Winemaking at Vintage | 3 |
| VITICULT 7002WT Viticultural Science A | 3 |
| VITICULT 7021WT Viticultural Science B | 3 |
| VITICULT 7038WT Viticultural Methods and Procedures | 3 |

2.1.2 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Master of Viticulture and Oenology (MVitOen)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This program incorporates courses in both viticulture and oenology and qualifies graduates to work as either a viticulturalist, oenologist (winemaker) or in related professions (e.g. hospitality and tourism, and the food and beverage industry). Viticulture is the study of grape vines and their cultivation and includes site selection, vineyard establishment, management of pests and diseases and the informed application of irrigation and fertilizer to optimise vineyard yield and grape quality. The viticulturist typically works closely with the winemaker to achieve the desired winemaking outcome. The winemaker utilises their training in the science of winemaking (oenology), to process grapes for the production of white, red, still and sparkling and fortified wines. The viticulturist / winemaker often contributes to in-house research, sales and promotion of the finished product. Throughout this program, there is an emphasis on the key technical methods and sensory (wine tasting) skills required for a career in viticulture and oenology.

The Master of Viticulture and Oenology is an AQF Level 9 program with a standard full-time duration of 2.0 years.

1. Academic Program Rules for Master of Viticulture and Oenology

There shall be a Master of Viticulture and Oenology.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Master of Viticulture and Oenology, the student must complete satisfactorily a program of study consisting of the following courses with a combined total of not less than 48 units which must include either a research project or a professional experience placement.

2.1.1 Core Courses

| | |
|--|---|
| OENOLOGY 7010WT Stabilisation and Clarification | 3 |
| OENOLOGY 7019WT Sensory Studies..... | 3 |
| OENOLOGY 7022WT Cellar and Winery Waste Management | 3 |
| OENOLOGY 7028WT Introductory Winemaking..... | 3 |

| | |
|---|---|
| OENOLOGY 7047WT Winemaking at Vintage | 3 |
| VITICULT 7002WT Viticultural Science A..... | 3 |
| VITICULT 7021WT Viticultural Science B..... | 3 |
| VITICULT 7038WT Viticultural Methods and Procedures | 3 |
| OENOLOGY 7520WT Advances in Wine Science..... | 3 |

2.1.2 Electives

Courses to the value of up to 9 units from the following:

| | |
|---|---|
| BIOMET 7000WT Research Methodology and Experimentation | 3 |
| OENOLOGY 7038WT Distillation, Fortified and Sparkling Wine Making | 3 |
| OENOLOGY 7046WT Fermentation Technology..... | 3 |
| OENOLOGY 7540WT Engineering for Viticulture and Oenology..... | 3 |
| PLANT SC 7240WT Soil and Plant Nutrition..... | 3 |
| PLANT SC 7245WT Plant Health A | 3 |
| SCIENCE 7020 Communicating Science..... | 3 |
| SOIL&WAT 7003WT Topics in Soil and Land Systems | 3 |
| SOIL&WAT 7030WT GIS for Agriculture & Natural Resource Management..... | 3 |
| OENOLOGY 7004WT Wine Packaging and Quality Management..... | 3 |

or

other postgraduate coursework courses offered by the University with the approval of the Program Coordinator.

2.1.3 Research Project / Professional Experience Placement

Students must complete either:

a research dissertation of not longer than 10,000 words:

| | |
|---------------------------------------|----|
| OENOLOGY 7550WT Research Project..... | 12 |
|---------------------------------------|----|

or
a professional experience placement of at least 10 weeks to the value of at least 375 hours:

| | |
|---|----|
| OENOLOGY 7560WT Experience & Perspectives in the Wine Industry..... | 12 |
|---|----|

2.1.4 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Doctor of Veterinary Medicine (DVM)

These Academic Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

Overview

This is a three year degree in clinical veterinary science that when successfully completed will make graduates eligible for registration as a veterinarian. The program is at the Masters by coursework level. Most students will enter this program after completion of the Bachelor of Science (Veterinary Bioscience) program at the University of Adelaide. However, students with a recognised pre-veterinary or veterinary degree may also be eligible for entry.

The first two years of the program aim to develop the scientific and technical skills needed to become a veterinarian and include a theme of professional development. The final year is made up of a total of six three-week clinical and practical rotations, forming an intern year to consolidate scientific knowledge and technical skills prior to entering practice. There is also a requirement for a further 23 weeks of extra mural practical work during the program that must be completed prior to graduation.

A student must pass all courses in Level I and II before progressing to Level III.

The Doctor of Veterinary Medicine is an AQF Level 9 (Masters Extended) qualification with a standard full-time duration of 3 years.

Condition of Admission

Q Fever Vaccinations: Students in the Doctor of Veterinary Medicine are required to be vaccinated against Q Fever (unless initial skin test indicates pre-existing immunity).

Physical fitness: There is an extensive practical component that requires students to have the physical capacity to handle a range of large and small animals. To satisfactorily undertake these activities, students need to be physically fit and capable of animal handling procedures.

Condition of Continuing Enrolment

Minimum GPA: A student must maintain a minimum cumulative GPA of 4.00.

1. Academic Program Rules for Doctor of Veterinary Medicine

There shall be a Doctor of Veterinary Medicine.

2. Qualification Requirements

2.1 Academic Program

To qualify for the degree of Doctor of Veterinary Medicine, the student must complete satisfactorily a program of study consisting of the following requirements with a combined total of not less than 72 units:

2.1.1 Core Courses

Level I

| | |
|---|---|
| VET SC 7001RW DVM Professional Skills | 3 |
| VET SC 7002RW Fundamentals of Veterinary Anaesthesia, Diagnostic Imaging and Surgery..... | 3 |
| VET SC 7004RW Intensive Production Medicine | 3 |
| VET SC 7006RW Veterinary Pharmacology & Toxicology | 3 |
| VET SC 7008RW Veterinary Practice Fundamentals | 3 |
| VET SC 7005RW Clinical Research Project..... | 3 |
| VET SC 7009RW General Pathology | 3 |
| VET SC 7010RW Systems Pathology..... | 3 |

Level II

| | |
|--|---|
| VET SC 7210RW Companion Animal Practice A | 3 |
| VET SC 7213RW Wildlife and Conservation Practice | 3 |
| VET SC 7212RW Ruminant Practice A..... | 3 |
| VET SC 7223RW Veterinary Public Health | 3 |
| VET SC 7211RW Equine Practice A | 3 |
| VET SC 7221RW Equine Practice B | 3 |
| VET SC 7220RW Companion Animal Practice B | 3 |
| VET SC 7222RW Ruminant Practice B..... | 3 |

Level III

| | |
|---|---|
| VET SC 7300RW Equine Practice Rotation | 3 |
| VET SC 7301RW Production Animal Practice Rotation..... | 3 |
| VET SC 7302RW Companion Animal Practice Rotation..... | 3 |
| VET SC 7303RW Anaesthesia & Analgesia Rotation..... | 3 |
| VET SC 7304RW Pathology & Diagnostic Services Rotation..... | 3 |
| VET SC 7305RW Veterinary Public Health Rotation..... | 3 |

| | |
|---|---|
| VET SC 7306RW DVM Elective Topic | 3 |
| VET SC 7307RW Transition to the Veterinary Profession..... | 3 |

2.1.2 Extra Mural Studies

Students must complete Doctor of Veterinary Medicine extra mural studies (EMS) to the value of 23 weeks. This is broken into three components:

- a. 6 weeks of preparatory extra mural studies (EMS-1)
- b. 4 weeks of Level II EMS (EMS-2)
- c. 12 weeks of Level III EMS (EMS-3) which cannot begin until DVM Level II courses are successfully completed.
- d. 1 week of after-hours roster in the University of Adelaide Veterinary Health Centre (EMS-VHC). This can begin after the successful completion of DVM I and must be finalised by the end of semester 2 in DVM II.

EMS can begin after the successful completion of VET SC 7001RW DVM Professional Skills. In order to be eligible for early conferral and registration as a Veterinarian in January of the year following completion of studies, students must ensure that their EMS have been finalised by early December in their final year of study.

Before beginning a period of extra mural studies, students are required to ensure that the placement will be acceptable by consulting the Extra Mural Coordinator and / or DVM Program Management Committee, and the placement attendance has approval of the Head of School.

Upon completion of each period of extra mural studies, students are required to complete and submit all placement associated documentation and tasks to a satisfactory standard, including certification of attendance by the placement supervisor for approval by the Extra Mural Coordinator or DVM Program Management Committee.

2.1.3 Repeating Courses

A student who has failed a course twice may not enrol in that course again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

Postgraduate Research Degrees

Academic Program Rules for the following Research programs are listed under the Adelaide Graduate Centre.

Master of Philosophy
Professional Doctorates
Doctor of Philosophy
Higher Doctorates

