

BH-SCI Bachelor of Science (Degree with Honours)

Year and Campus:	2011 - Parkville
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	100 credit points taken over 12 months full time. This course is available as full or part time.
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Course Overview:	<p>The Bachelor of Science (Degree with Honours) provides an advanced, specialised year of study that follows students' completion of the requirements of the Bachelor of Science. It extends students' knowledge and skills through a supervised research project together with advanced coursework in related areas of study.</p> <p>The Bachelor of Science (hons) is available in the following programs, which have been grouped into several specialisations.</p> <p>Land and Environment Agricultural Science Animal Science and Management Food Science Forest Science Geography</p> <p>Medicine, Dentistry and Health Sciences Anatomy and Cell Biology Biochemistry and Molecular Biology Hearing Sciences (Otolaryngology) Medical Biology (Walter and Eliza Hall Institute) Medicine (Austin and Northern Health) Medicine (Royal Melbourne Hospital and Western Health) Medicine (St Vincent's Hospital) Microbiology and Immunology Oral Health Science Paediatrics Pathology Pharmacology Physiology Primary Care (General Practice) Psychopharmacology (Psychiatry (Austin and Northern Health)) Surgery (Austin and Northern Health)</p> <p>Psychology Psychology</p> <p>Science Botany Chemistry Earth Sciences Genetics Vision Sciences Zoology</p> <p>Veterinary Science Veterinary Bioscience</p>
Objectives:	<p>The Bachelor of Science honours year provides students with the opportunity to integrate their previous science or technology studies and focus their knowledge, skills and intellect on an exciting piece of original research.</p> <p>Each program within the Bachelor of Science (Hons) comprises two components:</p> <ul style="list-style-type: none"> # The advanced coursework component provides opportunities for increasing students' depth of knowledge in their particular areas of interest and expanding the theoretical basis on

which they will undertake their research work. It provides students with the opportunity to develop expertise in the broad scientific field(s) in which their individual research project is placed, including the methodologies of the relevant field(s), and the use of the scientific literature in their specialist area of study.

- # The research project provides students with the opportunity to apply their knowledge and technical skills in a supervised research project and develop skills in experimental design, project implementation and in the communication of the outcomes of a research project. The project develops students' technical and data acquisition skills, their problem-solving and critical thinking capacities in the context of research, their skills in communicating to a variety of audiences and the application of appropriate risk assessment and ethical approval processes.

Honours also develops students' capacity for independent study and research that will help develop maturity and skills for transition to employment in a range of occupations and industries or a research higher degree.

Course Structure & Available Subjects:

The Bachelor of Science (Honours) programs are prescribed 100-point programs (equivalent to eight 12.5-point subjects) comprising Advanced Coursework and Research Project components as outlined below.

The balance between the advanced coursework and research project components may vary from program to program, with each comprising at least 25 points and no more than 75 points of the 100-point program. The balance specific to each program will be specified in the handbook entry for each program.

1. Advanced coursework:

- # Four to six, 12.5-point science advanced coursework subjects.

The coordinator of the honours program in which the student is enrolled must approve each student's advanced coursework program.

Each student's advanced coursework program will comprise advanced coursework subjects offered by one or more departments teaching into the degree's honours program, which may include cognate subjects offered in relevant Masters degrees where students meet the prerequisite requirements of those subjects.

The honours coordinator may approve a student including one 12.5-point third year level coursework subject. Inclusion of a third-year-level subject will also require approval of the appropriate subject coordinator.

2. Research project:

- # A research project subject or subjects with a total points-value of from 50 to 75 points.

Duration of honours programs

The duration of the Bachelor of Science (honours) programs is approximately 36 weeks within a total duration of 40 weeks for Semester 1 entrants, and approximately 36 weeks within a total duration of 46 weeks for semester 2 entrants.

The dates of the honours programs may vary between programs but in 2011 it will be within the following range.

Semester 1 entry

- # Orientation program (if offered) begins no earlier than Monday 7 February
- Honours project begins Monday 14 February
- Honours assessment will end no later than Friday 19 November

For Semester 1 entrants up to four weeks of leave may be taken within this 40-week period, in negotiation with the supervisor.

Semester 2 entry

- # Orientation program (if offered) begins no earlier than Monday 19 July
- Honours project begins Monday 26 July
- Honours assessment will end no later than Friday 10 June 2012

For Semester 2 entrants up to ten weeks of leave may be taken within this 46-week period, in negotiation with the supervisor.

Completion Requirements

To be awarded honours students must gain:

- # a pass in at least 100-points of subjects in their chosen program;
- # a result of at least 65% in the research project;

a weighted credit-point average of 65% or greater.

Students may be given permission to repeat an advanced coursework honours subject/component, or enrol in additional subject(s), in order to meet the requirement to pass 100 points. However the honours result will be determined over all subjects for which a result is entered. When the weighted credit-point average is less than 65% the honours degree will not be awarded.

Subject Options:

Programs

Agricultural Science

Research Project

Students must complete 75 points of research:

Subject	Study Period Commencement:	Credit Points:
AGRI40001 Land and Environment Research Project	Semester 1, Semester 2	25
AGRI40002 Land and Environment Research Project	Semester 1, Semester 2	37.50
AGRI40003 Land and Environment Research Project	Semester 1, Semester 2	50

Coursework

Students must complete 25 points of coursework:

Subject	Study Period Commencement:	Credit Points:
NRMT40005 Social Research Methods	Semester 1	12.50
MAST40001 Research Philosophies and Statistics	Semester 1	12.50

Plus one of (the coordinator must approve students' choice from the following electives):

Subject	Study Period Commencement:	Credit Points:
NRMT40001 Emerging Issues in Land Resources	Semester 2	12.50
HORT40001 Advanced Plant Breeding and Improvement	Not offered 2011	12.50
DASC90012 Animal Welfare	October	12.50
DASC90006 Animal Feed Science	Not offered 2011	12.50
DASC90008 Monogastric Science	March	12.50
DASC90010 Dairy Systems	October	12.50
AGRI90066 Soil Science and Management	Not offered 2011	12.50
DASC90011 Genetics and Animal Breeding	Semester 2	12.50

Anatomy and Cell Biology

Research Project

Students must complete:

Subject	Study Period Commencement:	Credit Points:
ANAT40001 Anatomy & Cell Biology Research Project	Semester 1	25
ANAT40005 Anatomy & Cell Biology Research Project	Semester 2	50

Coursework

Students must complete:

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
ANAT40002 Seminars in Anatomy and Cell Biology	Semester 1	12.50

Animal Science and Management

Research

Students must complete 75 points of research project:

Subject	Study Period Commencement:	Credit Points:
AGRI40001 Land and Environment Research Project	Semester 1, Semester 2	25
AGRI40002 Land and Environment Research Project	Semester 1, Semester 2	37.50
AGRI40003 Land and Environment Research Project	Semester 1, Semester 2	50

Coursework

Students complete 25 points of coursework.

Students must complete one of:

Subject	Study Period Commencement:	Credit Points:
NRMT40005 Social Research Methods	Semester 1	12.50
MAST40001 Research Philosophies and Statistics	Semester 1	12.50

Plus one of;

Subject	Study Period Commencement:	Credit Points:
DASC90006 Animal Feed Science	Not offered 2011	12.50
DASC90007 Stress Physiology	March	12.50
DASC90008 Monogastric Science	March	12.50
DASC90010 Dairy Systems	October	12.50
DASC90011 Genetics and Animal Breeding	Semester 2	12.50
DASC90012 Animal Welfare	October	12.50
DASC90005 Animal Metabolism & Nutrition	Not offered 2011	12.50

Biochemistry and Molecular Biology

Admission requirements

In addition to satisfying the BSc(hons) entry requirements, students interested in entering the Biochemistry and Molecular Biology program will need to have a major study in Biochemistry or a discipline providing equivalent appropriate background.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
BCMB40001 Biochemistry Research Project	Semester 1	25
BCMB40006 Biochemistry Research Project	Semester 1, Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BCMB40002 Advanced Studies in Biochemistry A	Semester 1, Semester 2	12.50
BCMB40007 Advanced Studies in Biochemistry B	Semester 1	12.50

Botany

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Botany program will need to have a major study in biological science or a discipline relevant to the project.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
BOTA40001 Botany Research Project	Semester 1, Semester 2	37.50
BOTA40006 Botany Research Project	Not offered 2011	25
BOTA40007 Botany Research Project	Not offered 2011	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOL90001 Microscopy for Biological Sciences	Semester 1	12.50
EVSC90017 Global Environmental Change	Not offered 2011	12.50
BOTA90005 Flora of Victoria	February	12.50
BIOL90002 Biometry	July	12.50
BTCH90005 Advanced Molecular Biology Techniques	Not offered 2011	12.50
SCIE90002 Metabolomics and Proteomics	Semester 2	12.50

Chemistry

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Chemistry program will need to have a major study in Chemistry.

Research

Students must complete 62.5 points of research.

Subject	Study Period Commencement:	Credit Points:
CHEM40008 Chemistry Research Project	Semester 1, Semester 2	25
CHEM40009 Chemistry Research Project	Semester 1, Semester 2	37.50

Coursework

Students must complete 37.5 points of coursework.

Subject	Study Period Commencement:	Credit Points:
CHEM90008 Advanced Spectroscopy	Semester 1	12.50
CHEM90009 Chemical Synthesis & Characterisation 1	Semester 1	12.50
CHEM90010 Advanced Chemical Applications 1	July	12.50

Earth Sciences

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Earth Sciences program will need to have a major study in Earth Sciences or a discipline relevant to the project.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
ERTH40001 Earth Sciences Research Project	Semester 1, Semester 2	25
ERTH40003 Earth Sciences Research Project	March, Semester 2	37.50
ERTH40006 Earth Sciences Research Project	Semester 1, Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
ATOC90002 Climate Affairs	Semester 2	12.50
ATOC90004 Current Topics in Atmospheric Science	Semester 1	12.50
GEOL90012 Current Topics in Geology A	Semester 1	12.50
GEOL90013 Current Topics in Geology B	Semester 2	12.50
GEOL90014 Deposit Models & Mineral Exploration	Semester 1	12.50
GEOL90008 Digital Geoscience	Semester 1	12.50
GEOL90007 Geochemistry and Geochronology	Semester 1	12.50
GEOL90009 Geophysics	Semester 1	12.50
GEOL90010 Geoscience in the Field	Semester 1	12.50
GEOL90005 Hydrogeology	Semester 1	12.50
EVSC90018 Hydrogeology and the Environment	Semester 1	12.50
ATOC90007 Mesoscale Atmospheric Dynamics	Not offered 2011	12.50
GEOL90017 Structural Geology and Geodynamics	Semester 1	12.50
GEOL90016 Surface Processes and Geodynamics	Semester 1	12.50
GEOL90015 The Geology of Ore Deposits	Semester 1	12.50

Food Science

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
AGRI40001 Land and Environment Research Project	Semester 1, Semester 2	25
AGRI40002 Land and Environment Research Project	Semester 1, Semester 2	37.50
AGRI40003 Land and Environment Research Project	Semester 1, Semester 2	50

Coursework

Students complete 25 points of coursework.

Students must complete one of:

Subject	Study Period Commencement:	Credit Points:
NRMT40005 Social Research Methods	Semester 1	12.50
MAST40001 Research Philosophies and Statistics	Semester 1	12.50

Plus one of:

Subject	Study Period Commencement:	Credit Points:
FOOD90024 Disease Management and Food Security	Not offered 2011	12.50
FOOD90007 Food Processing	Semester 1	12.50
FOOD90008 Food Safety and Quality	Semester 2	12.50
FOOD90020 Food Biotechnology	Not offered 2011	12.50

Forest Science Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
AGRI40001 Land and Environment Research Project	Semester 1, Semester 2	25
AGRI40002 Land and Environment Research Project	Semester 1, Semester 2	37.50
AGRI40003 Land and Environment Research Project	Semester 1, Semester 2	50

Coursework

Students complete 25 points of coursework.

Students must complete one of:

Subject	Study Period Commencement:	Credit Points:
NRMT40005 Social Research Methods	Semester 1	12.50
MAST40001 Research Philosophies and Statistics	Semester 1	12.50

Plus one of:

Subject	Study Period Commencement:	Credit Points:
NRMT90002 Management of Plant and Animal Invasions	Semester 2	12.50
FRST90015 Forest Ecosystems	February	12.50
FRST90017 Bushfire Planning & Management	April	12.50
FRST90018 Wood Science & Technology	Not offered 2011	12.50
FRST90022 Forests and Water	August	12.50
FRST90023 Forest Health	Not offered 2011	12.50
FRST90027 Trees Growth & Development	Not offered 2011	12.50
FRST90016 Trees in a Changing Climate	May	12.50

Genetics

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students need to complete a major in Genetics, consisting of GENE30001 (652-301) Evolutionary Genetics and Genomics, GENE30002 (652-302) Genes: Organisation and Function, GENE30004 (652-304) Genetic Analysis and one elective subject (GENE30005 (652-305) Human and Medical Genetics and particular subjects from other biological disciplines). However in special circumstances, particularly where relevant 300-level practical subjects in other biological disciplines have been completed, these requirements may be waived by the Head of Department

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
GENE40001 Genetics Research Project	Semester 1	25
GENE40005 Genetics Research Project	Semester 1, Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
GENE90012 Advanced Topics in Genetics A	Semester 1	12.50
GENE40006 Critical Review in Genetic Research	Semester 1	12.50

Geography

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Geography program will need to have a major in Geography with an average of at least H2B (70%) in second and third-year subjects within the Geography area of study, or equivalent.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
GEOG40002 Geography - Environmental Studies Thesis	Semester 1, Semester 2	25
GEOG40007 Geography - Environmental Studies Thesis	Semester 1, Semester 2	37.50
GEOG40008 Geography - Environmental Studies Thesis	Semester 1, Semester 2	50

Coursework

Students complete 25 points of coursework.

Students must complete one of:

Subject	Study Period Commencement:	Credit Points:
NRMT40005 Social Research Methods	Semester 1	12.50
BIOL90002 Biometry	July	12.50
MAST40001 Research Philosophies and Statistics	Semester 1	12.50

Plus:

Subject	Study Period Commencement:	Credit Points:
GEOG40003 Advancing Geography & Environmental Stud	Semester 1, Semester 2	12.50

Hearing Sciences (Otolaryngology)

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Hearing Sciences program will need to have a major in an discipline relevant to hearing sciences.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
OTOL40001 Otolaryngology Research Project	Semester 1	25
OTOL40003 Otolaryngology Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
OTOL40002 Otolaryngology Advanced Coursework	Semester 1	12.50

Medical Biology (Walter and Eliza Hall Institute)

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Medical Biology program will need to have a major in an discipline relevant to the project being undertaken.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
BMSC40004 Approaches To Medical Research	Semester 1	12.50
BMSC40008 Medical Biology Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BMSC40003 Medical Biology Research Project	Semester 1	25
BMSC40007 Postgraduate Lectures in Medical Biology	Semester 1	12.50

Medicine (Austin and Northern Health)

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
MEDI40013 Biomedicine Research Project - St Vincents	Semester 2	50
MEDI40014 Biomedicine Research Project	Semester 1	25

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
MEDI40002 Advanced Studies in Biomedicine	Semester 1	12.50
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50

Medicine (Royal Melbourne Hospital and Western Health)

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
MEDI40003 Research Project	Semester 1	25
MEDI40011 Research Project	Not offered 2011	25
MEDI40012 Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
MEDI40004 Seminars in Translational Medicine	Semester 1	12.50
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50

Medicine (St Vincent's Hospital)

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
MEDI40014 Biomedicine Research Project	Semester 1	25
MEDI40012 Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
MEDI40006 Biomedical Advanced Coursework	Semester 1, Semester 2	12.50
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50

Microbiology and Immunology

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Microbiology and Immunology program will need to have a major in Microbiology, Immunology, Biochemistry, Genetics, Pathology as relevant to the project being undertaken.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
MIIM40005 Microbiology and Immunology Research Project	Semester 1	25
MIIM40006 Microbiology and Immunology Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
MIIM40002 Advanced Microbiology and Immunology I	Semester 1	12.50
MIIM40007 Advanced Microbiology and Immunology II	Semester 1	12.50

Molecular Biology of Human Health and Diseases (Paediatrics)

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
PAED40001 Paediatrics Research Project	Semester 1	25
PAED40005 Paediatrics Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
PAED40002 The Biology of Human Health and Disease	Semester 1	12.50
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50

Oral Health Science

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
DENT40002 Oral Health Sciences Research Project	Semester 1, Semester 2	37.50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
DENT40003 Advances in Oral Health Research	Semester 2	12.50

Pathology

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Pathology program will need to have completed 12.5 points of Pathology at second or third year level, and a background relevant to project being undertaken.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
PATH40001 Pathology Research Project	Semester 1	25
PATH40005 Pathology Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
PATH40002 Critical Analysis of Pathology Research	Semester 1	12.50

Pharmacology

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Pharmacology program will need to have completed 37.5 points of Pharmacology at third year level or equivalent.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
PHRM40001 Pharmacology Research Project	Semester 1	25
PHRM40006 Pharmacology Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
PHRM40002 Advanced Topics in Pharmacology	Semester 1	12.50

Physiology**Admission requirements**

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Physiology program will need to have a major in a biomedical science discipline relevant to the project being undertaken.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
PHYS40005 Physiology Research Project	Semester 1	25
PHYS40006 Physiology Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
PHYS90008 Advanced Seminars in Physiology	Semester 1	12.50

Primary Care (General Practice)**Admission requirements**

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Primary Care program will need to have a major in a discipline relevant to the project being undertaken.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
GENP40002 Introduction to Primary Care Research	Semester 1	12.50
GENP40000 Primary Health Care Research Project	Semester 1	25
GENP40001 Primary Health Care Research Project	Semester 2	50

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
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BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
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Psychology

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Psychology program will need to have a major in Psychology with a weighted average of at least H2A (75%) in second and third-year subjects within the Psychology area of study, or equivalent. In computing the weighted average, second year subjects are normally assigned one-third of the weight of third-year subjects.

Research

Students must complete 50 points of research.

Subject	Study Period Commencement:	Credit Points:
PSYC40010 Research Project	Semester 1, Semester 2	25

Coursework

Students must complete 50 points of coursework.

Subject	Study Period Commencement:	Credit Points:
PSYC40005 Advanced Design and Data Analysis	Semester 1	12.50
PSYC40006 Theories and Ethics in Psychology	Semester 1	12.50
PSYC40001 Current Topics in Developmental Psych.	Semester 2	12.50
PSYC40002 Current Topics in Social Psychology	July	12.50
PSYC40003 Current Topics in Cognitive Psychology	July	12.50
PSYC40004 Current Topics in Behavioural Neuro.	Semester 2	12.50
PSYC40012 Current Topics in Quantitative Methods	Not offered 2011	12.50

Psychopharmacology

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Psychopharmacology program will need to have a major in pharmacology, psychology or chemistry.

Research

Students must complete 75 points of research.

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50

Surgery (Austin Health and Northern Health)

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
SURG40001 Surgery and Biomedicine Research Project	Semester 2	50
SURG40005 Surgery and Biomedicine Research Project	Semester 1	25

Coursework

Students must complete 25 points of coursework.

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
SURG40002 Advanced Studies in Biomedicine: Surgery	Semester 1	12.50

Veterinary Bioscience (Faculty of Veterinary Science)

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Veterinary Bioscience program will need to have a major in a biological science discipline.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
VETS40015 Veterinary Bioscience Research Project	Semester 1, Semester 2	25
VETS40016 Veterinary Bioscience Research Project	Semester 1, Semester 2	50

Coursework

Students complete 25 points of coursework.

Students must complete one of:

Subject	Study Period Commencement:	Credit Points:
BIOM40001 Introduction To Biomedical Research	Not offered 2011	12.50
MAST40001 Research Philosophies and Statistics	Semester 1	12.50

Plus:

Subject	Study Period Commencement:	Credit Points:
VETS40014 Advanced Seminars in Veterinary Science	Semester 1, Semester 2	12.50

Vision Sciences (Optometry and Vision Science)

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
OPTO40008 Vision Science Research Project	Semester 1, Semester 2	37.50

Coursework

Students must complete 25 points of coursework.

Zoology

Admission requirements

In addition to satisfying the BSc (hons) entry requirements, students interested in entering the Zoology program will need to have completed 50 points of third year level Zoology or other relevant biological disciplines.

Research

Students must complete 75 points of research.

Subject	Study Period Commencement:	Credit Points:
ZOOL40005 Zoology Honours Research Project	Semester 1, Semester 2	37.50

Coursework

Students complete 25 points of coursework.

Students must complete BIOL90002 or equivalent subject approved by the coordinator.

Subject	Study Period Commencement:	Credit Points:
BIOL90002 Biometry	July	12.50

Plus one of:

Subject	Study Period Commencement:	Credit Points:
ZOOL90007 Graduate Seminar in Population Biology	Semester 1	12.50
ZOOL90005 Reproduction & Regeneration: Techniques	Not offered 2011	12.50

Entry Requirements:

- The Selection Committee will evaluate the applicant's ability to pursue successfully the course using the following criteria:
 - # a three-year undergraduate degree, of which at least the equivalent of two full years comprises science or technology areas of study,
 - # at least 50 points of study (one half of a full year) completed at third year level in science or technology areas of study,
 - # a Standard Grade Point Average (SGPA) of at least 65%.
 - The Selection Committee may conduct interviews and tests and may call for referee reports or employer references to elucidate any of the matters referred to above.
 - # Ranking students during selection will be based on students' Standard Grade Point Average (SGPA).
 - # Some honours programs include specified prerequisites for entry to that particular program in addition to the entry requirements for the BBiomed(hons) or BSc (hons) year.
 - # Entry into an Honours program is subject to the capacity of the department(s) or schools(s) offering the program to provide adequate supervision in a project appropriate to the interests and preparation of the individual student.
 - # For entry to the BSc(hons) in 2011 and 2012 only, the Selection Committee is permitted, at its discretion, to evaluate an applicant's ability to pursue the course successfully using, as an alternative to the normal criteria,
 - # an undergraduate degree as detailed above, with a major relevant to the honours discipline into which entry is sought, with an average of at least H3 (65%) across 87.5 points of third-year study.
- Selection is not automatic and in particular is subject to competition, to any relevant quotas, and to the availability of supervision and resources in suitable project areas.

Core Participation Requirements:

The Bachelor of Science (honours) welcomes applications from students with disabilities. It is University and degree policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the degree. The Bachelor of Science (honours) requires all students to enrol in subjects where they will require: (1) the ability to comprehend complex science and technology related information; (2) the ability to clearly and independently communicate a knowledge and application of science, and technology principles and practices during assessment tasks; (3) the ability to actively and safely contribute in clinical, laboratory, and fieldwork/excursion activities. Students must possess behavioural and social attributes that enable them to participate in a complex learning environment. Students are required to take responsibility for their own participation and learning. They also contribute to the learning of other students in collaborative learning environments, demonstrating interpersonal skills and an understanding of the needs of other students. Assessment may include the outcomes of tasks completed in collaboration with other students. There may be additional inherent academic requirements for some subjects, and these requirements are listed within the description of the requirements for each of these subjects. Students who feel their disability will impact on meeting this requirement are encouraged to discuss this matter with the relevant Subject Coordinator and the Disability Liaison Unit: <http://www.services.unimelb.edu.au/disability/>

Further Study:

The opportunity to specialise during the honours year provides a strong foundation for the future direction of graduates. Graduates may progress to higher degree research in the sciences at the Masters or Doctorate level. They are also eligible to progress to a range of graduate coursework programs.

Graduate Attributes:	<p>The Melbourne Experience enables our Bachelor of Science (Degree with Honours) graduates to become: Academically excellent Our graduates will be expected to: have a strong sense of intellectual integrity and the ethics of scholarship have a broad knowledge of science across a range of fields, with an in-depth understanding in one or more scientific disciplines understand the methods of science, and the history and evolution of scientific concepts be intellectually curious and apply a rigorous, critical and logical approach to enquiry understand the principles of sound project and experimental design, including data analysis, and apply this understanding to an independent research project reach a high level of achievement in writing, generic research activities, problem-solving and communication apply outstanding analytical, quantitative and technical skills to problem solving and, where relevant, design be critical and creative thinkers, with an aptitude for continued self-directed learning be adept at learning in a range of ways, including through information and communication technologies Knowledgeable across disciplines Our graduates will be expected to: examine critically, synthesise and evaluate knowledge across a broad range of disciplines expand their analytical and cognitive skills through learning experiences in diverse subjects have the capacity to participate fully in collaborative learning and to confront unfamiliar problems have a set of flexible and transferable skills for different types of employment, including: excellent organisational, planning and time management skills ability to access, evaluate and utilise information from diverse sources ability to communicate their ideas effectively in both written and verbal formats to both specialists and non-specialists knowledge, skills and attitude that enable adaptation to scientific, technological and social change. Leaders in communities Our graduates will be expected to: initiate and implement constructive change in their communities, including professions and workplaces have excellent interpersonal and decision-making skills, including an awareness of personal strengths and limitations mentor future generations of learners engage in meaningful public discourse, with a profound awareness of community needs Attuned to cultural diversity Our graduates will be expected to: value different cultures be well-informed citizens able to contribute to their communities wherever they choose to live and work have an understanding of the social and cultural diversity in our community respect indigenous knowledge, cultures and values Active global citizens Our graduates will be expected to: accept social and civic responsibilities be advocates for improving the sustainability of the environment have a broad global understanding, with a high regard for human rights, equity and ethics</p>
Generic Skills:	<p>Graduates of the Bachelor of Science (honours) programs will have been provided with the opportunity to develop the skills to:</p> <ul style="list-style-type: none"> # Use and evaluate scientific literature; # Apply their understanding to the design and implementation of a research plan; # Acquire, analyse, evaluate and interpret data using appropriate techniques; # Communicate advanced concepts in their discipline in written and oral form; # Exercise responsibility for their own learning; # Work effectively in teams, both collaboratively and independently; # Manage their time effectively.