

## BH-SCI Bachelor of Science (Degree with Honours)

<b>Year and Campus:</b>	2012 - Parkville
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Level:</b>	Undergraduate
<b>Duration &amp; Credit Points:</b>	100 credit points taken over 12 months full time. This course is available as full or part time.
<b>Coordinator:</b>	Associate Professor Michelle Livett
<b>Contact:</b>	<p>For honours programs in the Faculty of Science and the Faculty of Veterinary Science:            Eastern Precinct Student Centre            The Eastern Precinct (building 138)            (between Doug McDonnell building and Eastern Resource Centre)</p> <p><a href="http://www.studentcentre.unimelb.edu.au/eastern">http://www.studentcentre.unimelb.edu.au/eastern</a> (<a href="http://www.studentcentre.unimelb.edu.au/eastern">http://www.studentcentre.unimelb.edu.au/eastern</a>)            Phone: 13 MELB (13 6352)            Email: 13MELB@unimelb.edu.au</p> <p>For honours programs in the Faculty of Medicine, Dentistry and Health Science (excluding Psychology):  <a href="http://sc.mdhs.unimelb.edu.au/contact">http://sc.mdhs.unimelb.edu.au/contact</a> (<a href="http://sc.mdhs.unimelb.edu.au/contact">http://sc.mdhs.unimelb.edu.au/contact</a>)  <a href="http://sc.mdhs.unimelb.edu.au/why-honours">http://sc.mdhs.unimelb.edu.au/why-honours</a> (<a href="http://sc.mdhs.unimelb.edu.au/why-honours">http://sc.mdhs.unimelb.edu.au/why-honours</a>)</p> <p>For the psychology honours program in Psychological Sciences:  <a href="http://www.psych.unimelb.edu.au/">http://www.psych.unimelb.edu.au/</a> (<a href="http://www.psych.unimelb.edu.au/">http://www.psych.unimelb.edu.au/</a>)</p> <p>For honours programs in the Melbourne School of Land and Environment:  <a href="http://www.land-environment.unimelb.edu.au">http://www.land-environment.unimelb.edu.au</a> (<a href="http://www.land-environment.unimelb.edu.au">http://www.land-environment.unimelb.edu.au</a>)</p>
<b>Course Overview:</b>	<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 (Degree with Honours) can be undertaken in a range of <b>programs/ departments</b>.</p>
<b>Objectives:</b>	<p>The Bachelor of Science (Degree with 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 (Degree with Honours) comprises two components:</p> <ul style="list-style-type: none"> <li># 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.</li> <li># 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.</li> </ul> <p>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.</p>

<p><b>Course Structure &amp; Available Subjects:</b></p>	<p>The Bachelor of Science (Degree with Honours) programs are prescribed 100-point programs (equivalent to eight 12.5-point subjects) comprising Advanced Coursework and Research Project components as outlined below.</p> <p>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.</p> <p><b>1. Advanced coursework:</b></p> <ul style="list-style-type: none"> <li># two to four, 12.5-point honours or postgraduate level advanced coursework subjects.</li> </ul> <p>The coordinator of the honours program in which the student is enrolled must approve each student's advanced coursework program.</p> <p>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.</p> <p>The honours coordinator may approve a student including one 12.5-point Level 3 coursework subject. Inclusion of a Level 3 subject will also require approval of the appropriate subject coordinator. This option is only available if it specified in the details of the individual program which can be found using the links below.</p> <p><b>2. Research project:</b></p> <ul style="list-style-type: none"> <li># A research project subject or subjects with total points value of between 50 and 75 points.</li> </ul> <p><b>Duration and commencement of honours programs</b></p> <p>The duration of the Bachelor of Science (Degree with 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. Not all programs are available as mid year entry. Refer to individual program entries for details.</p> <p>The dates of the honours programs may vary between programs.</p> <p>For Semester 2 entrants, up to ten weeks of leave may be taken within this 46-week period, in negotiation with the supervisor.</p> <p><b>Completion Requirements</b></p> <p>To be awarded honours students must gain:</p> <ul style="list-style-type: none"> <li># a pass in at least 100-points of subjects in their chosen program;</li> <li># a result of at least 65% in the research project;</li> <li># a weighted credit-point average of 65% or greater.</li> </ul> <p>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.</p>						
<p><b>Majors/Minors/ Specialisations</b></p>	<p>Honours Programs available within the Bachelor of Science (Degree with Honours)</p> <p>Honours programs are grouped by the responsible Faculty/organisational unit.</p> <p><b>Faculty of Science and Faculty of Veterinary Science</b></p> <table border="1" data-bbox="389 1704 1485 2042"> <thead> <tr> <th>Major/Minor/Specialisation</th> </tr> </thead> <tbody> <tr> <td>Honours Program - Botany</td> </tr> <tr> <td>Honours Program - Chemistry</td> </tr> <tr> <td>Honours Program - Earth Sciences</td> </tr> <tr> <td>Honours Program - Genetics</td> </tr> <tr> <td>Honours Program - Vision Science</td> </tr> </tbody> </table>	Major/Minor/Specialisation	Honours Program - Botany	Honours Program - Chemistry	Honours Program - Earth Sciences	Honours Program - Genetics	Honours Program - Vision Science
Major/Minor/Specialisation							
Honours Program - Botany							
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Honours Program - Zoology
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Honours Program - Veterinary Bioscience
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### Melbourne School of Land and Environment

Major/Minor/Specialisation
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Honours Program - Agricultural Science
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Honours Program - Animal Science and Management
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Honours Program - Food Science
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Honours Program - Forest Science
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Honours Program - Geography
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### Faculty of Medicine, Dentistry and Health Sciences

Each honours project is offered by one of the following departments / institutes. Some projects are offered within multiple departments / institutes. Please refer to the **MDHS Honours website** (<http://www.sc.mdhs.unimelb.edu.au/why-honours>) for full details on selecting a project.

Major/Minor/Specialisation
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Anatomy and Cell Biology
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Biochemistry and Molecular Biology
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Otolaryngology
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Medical Biology
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Medicine (Austin Health / Northern Health)
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Medicine (Royal Melbourne Hospital and Western Health)
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Medicine (St Vincent's Hospital)
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Microbiology and Immunology
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Oral Health Science
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Paediatrics
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Pathology
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Pharmacology
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Physiology
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Primary Care (General Practice)
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Psychopharmacology [Psychiatry (Austin and Northern Health)]
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Surgery (Austin and Northern Health)
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### Psychological Sciences

Major/Minor/Specialisation
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Psychology
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#### 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,

	<p># 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%.</p> <p>2. 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.</p> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>1 Ranking students during selection will be based on students' Standard Grade Point Average (SGPA).</li> <li>2 Some honours programs include specified prerequisites for entry to that particular program in addition to the entry requirements for the Bachelor of Science (Degree with Honours) year.</li> <li>3 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.</li> <li>4 For entry to the BSc(hons) in 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.</li> </ol> <p>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.</p> <p><i>Standard Grade Point Average</i> – the weighted grade point average of the most recent 300 points of a completed tertiary degree, but excluding 25 points of subjects with the lowest results within the earliest 200 points.</p>
<p><b>Core Participation Requirements:</b></p>	<p>The Bachelor of Science (Degree with 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 (Degree with Honours) requires all students to enrol in subjects where they will require: the ability to comprehend complex science and technology related information; the ability to clearly and independently communicate a knowledge and application of science, and technology principles and practices during assessment tasks; 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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a></p>
<p><b>Further Study:</b></p>	<p>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.</p>
<p><b>Graduate Attributes:</b></p>	<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</p>

	<p>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>
<b>Generic Skills:</b>	<p>Graduates of the Bachelor of Science (Degree with Honours) programs will have been provided with the opportunity to develop the skills to:</p> <ul style="list-style-type: none"> <li># Use and evaluate scientific literature;</li> <li># Apply their understanding to the design and implementation of a research plan;</li> <li># Acquire, analyse, evaluate and interpret data using appropriate techniques;</li> <li># Communicate advanced concepts in their discipline in written and oral form;</li> <li># Exercise responsibility for their own learning;</li> <li># Work effectively in teams, both collaboratively and independently;</li> <li># Manage their time effectively.</li> </ul>