

B-ENVS Bachelor of Environments

Year and Campus:	2012 - Parkville
CRICOS Code:	058839G
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	300 credit points taken over 36 months full time. This course is available as full or part time.
Coordinator:	Associate Professor Clare Newton
Contact:	<p>Environments and Design Student Centre Ground Floor, Baldwin Spencer (building 113)</p> <p>Enquiries Phone: 13 MELB (13 6352) Website: http://www.msd.unimelb.edu.au (http://www.msd.unimelb.edu.au/)</p>
Course Overview:	<p>The Bachelor of Environments is an innovative initiative from the University of Melbourne. It provides students with the skills needed to be creative thinkers and to solve twenty-first century problems. The degree brings together expertise from a range of discipline areas across the University to provide leadership in the study of the built, natural, social and virtual environments, and is unique within Australia. This three year degree will give students a broad understanding across diverse environments, whilst providing them with the opportunity to focus on an area of specialisation of their choosing.</p> <p>The foundation of the degree is the inter-disciplinary nature of real-world projects, where professionals work together to bring projects to fruition. Only through innovative and integrated thinking that is an integral part of the Bachelor of Environments, will current challenges like sustainable urban growth and protection of threatened natural resources become attainable. Graduates of the Bachelor of Environments will be able to think about the environment beyond the short term, and play an active role in maintaining, imagining, designing and constructing sustainable areas in which to live, work and visit.</p>
Objectives:	<p>At the completion of the Bachelor of Environments students will be able to:</p> <ul style="list-style-type: none"> # demonstrate a broad knowledge of the sciences, social sciences and design in an environmental context, with a higher level of understanding in one of these areas; # understand the social, historical and professional context of their area of study; # be well-versed in the technical language and concepts relevant to their area of study; # access and appreciate national and international debates in their area of study; # demonstrate an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values; # apply critical and analytical skills and methods to the identification and resolution of problems; # have a capacity to apply practical skills and technology to problem-solving; # demonstrate innovation and creativity; # are able to engage confidently in self-directed study and research; # demonstrate strong teamwork and interpersonal skills; # act as informed participants within the community of scholars, as citizens and in the work force; # communicate effectively in written, oral and graphical form; # qualify for employment in a wide range of occupations; # have a continuing commitment to learning; # be proficient in the use of appropriate modern technologies for the acquisition, processing and interpretation of data.
Course Structure & Available Subjects:	Course Rules:

The Bachelor of Environments requires the successful completion of 300 points comprising:

- # 225 points of Environments discipline subjects including:
 - # # At least 75 points at Level 1, including compulsory subjects
 - # At least 62.5 points at Level 2
 - # At least 62.5 points at Level 3
- # 50 points of breadth including:
 - # # At least 12.5 points at Level 2 or 3 (and no more than 37.5 points at Level 1)
- # 25 points of free subjects at Levels 1 to 3

Note: No more than 125 points may be taken at Level 1 within the B-ENVS.

Major Requirements

Students must complete 112.5 points to satisfy the requirements of a Bachelor of Environments major sequence.

Additional Requirements

Students must complete a minimum of 37.5 points and a maximum of 62.5 points selected from Bachelor of Environments elective subjects.

Progression

Students must normally complete 50 points of study at one year#level before proceeding to the next year#level.

**Majors/Minors/
Specialisations**

Architecture is the art and science of designing buildings and other physical structures. Architects integrate knowledge from the diverse fields and are skilled in understanding how concepts of place and space contribute to quality environments.

Civil (Engineering) Systems involves the planning, design and construction of the built environment and provision of essential services and infrastructure.

Construction explores the management of people, processes and materials on specific building projects as well as construction methods and techniques used across the building industry.

Environmental Geographies, Politics and Cultures focuses on humanity’s changing relationship with the natural environment.

Environmental Science gives students the skills to identify and understand the causes of environmental problems triggered by human activity.

Geomatics (Geomatic Engineering) is the study of the science and technologies of 3D measurement, mapping and visualisation.

Landscape Architecture is the design profession which explores cultural, ecological and social issues in urban, rural and natural environments.

Landscape Management explores rural and urban ecosystems and the human activities that shape these systems.

Physical Systems (Environmental Engineering) involves the planning, design and management of the natural and built environment, with a focus on land use and management, salinity, water quality and soil rehabilitation.

Property is concerned with the worth and management of assets, and the people, processes and finance related to specific buildings and the property industry.

Urban Design and Planning is founded upon the social, environmental, political, aesthetic and economic importance of design and planning in the public realm, serving the public interest.

Major/Minor/Specialisation
Architecture major
Civil (Engineering) Systems major
Construction major
Environmental Geographies, Politics and Cultures major
Environmental Science major
Geomatics (Geomatic Engineering) major

Landscape Architecture major
Landscape Management major
Physical (Environmental Engineering) Systems major
Property major
Urban Design and Planning major

Environments discipline subjects

Major/Minor/Specialisation
Environments Discipline subjects

Subject Options:

First Year Course Structure:

The first year of the Bachelor of Environments will provide a foundation for these strands of the learning experience. All students will take two core subjects, Natural Environments and Reshaping Environments, which will introduce them to natural environmental processes and systems and the socio-cultural context in which these occur. Students will then select an additional four subjects introducing them to other aspects of environments, including their design, planning, production and management, from a range of disciplinary perspectives. The final two first year subjects will be taken from outside the Bachelor of Environments as part of the 'breadth' component of the degree. The first year subjects, and some second year subjects can be taken by students interested in different discipline areas which can assist them in determining their major. Students will be able to interact and share their ideas to solve real-world problems; learn to work effectively in groups and appreciate the value of collaboration and different perspectives. Thus building a strong foundation for graduates to interact with a wide range of professionals from multiple disciplines.

The structure for the first year of the Bachelor of Environments is the same for all students, and is described below. Please note that most subjects in the Bachelor of Environments are worth 12.5 points.

Note: Please refer to your major of choice to ensure you complete the necessary first year prerequisite subjects.

2 core subjects (25 credit points):

Subject	Study Period Commencement:	Credit Points:
ENVS10001 Natural Environments	Semester 1, Semester 2	12.50
ENVS10002 Reshaping Environments	Semester 1, Semester 2	12.50

4 subjects (50 credit points) chosen from the following:

Subject	Study Period Commencement:	Credit Points:
ENVS10003 Constructing Environments	Semester 1, Semester 2	12.50
ENVS10004 Designing Environments	Semester 1, Semester 2	12.50
ENVS10005 Governing Environments	Semester 2	12.50
ENVS10006 Mapping Environments	Semester 1	12.50
ENVS10007 Urban Environments	Semester 1, Semester 2	12.50
ENVS10008 Virtual Environments	Semester 1, Semester 2	12.50

2 breadth subjects (25 points)

	<p>For information on breadth subjects and for a complete listing, please see: http://breadth.unimelb.edu.au/breadth/info/index.html (http://breadth.unimelb.edu.au/breadth/info/index.html)</p> <p>Note: Please refer to your major of choice to ensure you complete the necessary breadth subjects which may be required for professional accreditation.</p>
Breadth Options:	<p>Breadth subjects offer you the opportunity to choose additional subjects from outside your major study area (learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)).</p> <p>View breadth subjects for this course (/faces/htdocs/user/breadth/BreadthSearchResults.jsp?breadthcourse=B-ENVS&year=2012) .</p>
Breadth Tracks:	Available Breadth Tracks
Entry Requirements:	<p>VCE Units 3 and 4, a study score of at least 25 in English (any) or equivalent IB - English Grade 5 Standard Level or Grade 4 Higher Level</p> <p>Please note: no maths background is required for entry to the Bachelor of Environments. However, for applicants intending to major in construction, environmental science, property or an engineering discipline, knowledge of Mathematical Methods or Specialist Mathematics will be assumed. Students without this background may need to take a bridging subject in maths as first year breadth. The bridging subject is equivalent to Units 3 and 4 Mathematical Methods and entry into the subject requires a mathematical background equivalent to Units 1 and 2 Mathematical Methods.</p>
Core Participation Requirements:	<p>The Bachelor of Environments welcomes applications from students with disabilities. It is the University and Custodial Faculty (Architecture, Building and Planning) policy to take reasonable steps to make reasonable adjustments so as to enable the student's participation in the Bachelor of Environments (BEnv). The Bachelor of Environments provides students with a broad understanding of the issues and challenges that shape diverse environments, whilst also providing the opportunity to focus on an area of specialisation of your choosing. Graduates will have the ability to consider the environment beyond the short term, and play an active role in understanding the existing environments and maintaining, designing and constructing sustainable areas in which to live, work and visit. A candidate for the Bachelor of Environments degree must have abilities and skills which include the following: observation; communication; motor; conceptual, integrative, and quantitative; and behavioural and social. Adjustments can be provided to minimise the impact of a disability, however students need to be able to participate in the program in an independent manner and with regard to their safety and the safety of others. Observation: A candidate must be able to read text, diagrams, maps, drawings and numerical data. The candidate should be able to observe details at a number of scales and record useful observations of environmental contexts. Communication: A candidate should be able to communicate with fellow students, professional and academic staff, members of relevant professions and the public. A candidate must be able to communicate effectively and sensitively. Communication includes not only speech but also reading and writing. Motor: Candidates should have sufficient motor function to elicit information from environmental contexts. Off campus investigations may include visits to construction sites, urban, rural and/or remote environments. Candidates should have sufficient motor ability to prepare documentation of analytic texts, drawings and models of findings and for the preparation of proposals for environmental interventions via digital or other means. A candidate should have the ability to actively participate in appropriate site and/or design studio#based activities. Intellectual# Conceptual, Integrative and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of graduates, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three#dimensional relationships and to understand the spatial relationships of structures. Behavioural and Social Attributes: A candidate 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. Students who feel their disability will prevent them from meeting the above academic requirements are encouraged to contact the Disability Liaison Unit.</p>

<p>Further Study:</p>	<p>Graduates of the Bachelor of Environments will have the opportunity to continue their study through a number of pathways and dependent on their chosen field may be able to enrol in an honours year, a professional masters or a research higher degree in an area related to your undergraduate study area. In addition to this, the University offers a range of new graduate-entry only programs, available to graduates of any 3-year Bachelor degree.</p> <p>Professional Masters degrees are available in:</p> <ul style="list-style-type: none"> # Architecture (http://www.abp.unimelb.edu.au/graduate-school/) # Civil Engineering (http://www.eng.unimelb.edu.au/Postgrad/MEng/me_civil.html) # Construction Management (http://www.abp.unimelb.edu.au/graduate-school/) # Environment (http://www.environment.unimelb.edu.au/futurestudents) # Environmental Engineering (http://www.eng.unimelb.edu.au/Postgrad/MEng/me_environmental.html) # Geomatics (http://www.eng.unimelb.edu.au/Postgrad/MEng/me_geomatics.html) # Forest Ecosystem Science (http://www.forests.unimelb.edu.au/) # Landscape Architecture (http://www.abp.unimelb.edu.au/graduate-school/) # Property (http://www.abp.unimelb.edu.au/graduate-school/) # Spatial Information Science (http://www.eng.unimelb.edu.au/Postgrad/MEng/grad_msis.html) # Urban Horticulture (http://www.horticulture.unimelb.edu.au/) # Urban Planning (http://www.abp.unimelb.edu.au/graduate-school/) # Urban Design (http://www.msd.unimelb.edu.au/) <p>Graduate study will provide students with the opportunity to investigate a research project of your interest, further develop your project management and problem solving skills, and in some cases gain national and international professional recognition in your field. For admission requirements to these Professional Masters programs please refer to the handbook entry for each or contact the relevant faculty or school for further information.</p>
<p>Graduate Attributes:</p>	<p>The Bachelor of Environments' balance between cross-disciplinary learning and disciplinary specialisation provides an ideal setting in which to develop the University of Melbourne's graduate attributes. Graduates will develop in-depth knowledge of their specialist discipline through the 112.5-point major sequence. Students will be exposed to a contrasting 'way of knowing' through the breadth component. Finally, they will have the opportunity to take 37.5 points of electives from within the Bachelor of Environments to broaden their knowledge of complementary disciplines. Exposure to a range of disciplines within and outside the Bachelor of Environments will ensure students are able to critically examine different types of knowledge. Students will have diverse learning experiences in settings ranging from the lecture theatre and tutorial rooms to the design studio, scientific and computer laboratories in order to expand and adapt their cognitive and analytical skills. Bachelor of Environments graduates will be characterised by their creative, flexible and multi-disciplinary approach to the sustainable design and management of the environment. Students will be required to learn a range of written, oral and graphical communication techniques in their Bachelor of Environments studies. They will develop practical laboratory and computer skills and apply these to problem-solving. Bachelor of Environments subjects encourage students to work independently and in groups; to become adept at finding information for themselves through research and experimental activities; and to use a wide range of technological applications. Throughout the Bachelor of Environments, a strong sense of professional ethics, intellectual integrity and social responsibility will be instilled in students. Students will develop an awareness of environmental impacts and management at local and global scales, and an understanding of their professional responsibilities to shape and manage environments in a sustainable way. They will be well-positioned to become active global citizens and ambassadors for sustainable environmental values in all their endeavours.</p>
<p>Generic Skills:</p>	<p>Students in the Bachelor of Environments should develop the following skills:</p> <ul style="list-style-type: none"> # independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values; # critical and analytical skills and methods to the identification and resolution of problems; # practical skills and technology to identify new opportunities and to solve problems; # demonstrate innovation and creativity;

- # engage confidently in self-directed study and research;
- # demonstrate strong teamwork and interpersonal skills;
- # communicate effectively in written, oral and graphical form;
- # use appropriate modern technologies for the acquisition, processing and interpretation of data.