

## B-ENVS Bachelor of Environments

<b>Year and Campus:</b>	2010 - 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>	
<b>Coordinator:</b>	Coordinator Professor Ian Bishop
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<b>Course Overview:</b>	<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>
<b>Objectives:</b>	<p>At the completion of the Bachelor of Environments students will be able to:</p> <ul style="list-style-type: none"> <li># 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;</li> <li># understand the social, historical and professional context of their area of study;</li> <li># be well-versed in the technical language and concepts relevant to their area of study;</li> <li># access and appreciate national and international debates in their area of study;</li> <li># 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;</li> <li># apply critical and analytical skills and methods to the identification and resolution of problems;</li> <li># have a capacity to apply practical skills and technology to problem-solving;</li> <li># demonstrate innovation and creativity;</li> <li># are able to engage confidently in self-directed study and research;</li> <li># demonstrate strong teamwork and interpersonal skills;</li> <li># act as informed participants within the community of scholars, as citizens and in the work force;</li> <li># communicate effectively in written, oral and graphical form;</li> <li># qualify for employment in a wide range of occupations;</li> <li># have a continuing commitment to learning;</li> <li># be proficient in the use of appropriate modern technologies for the acquisition, processing and interpretation of data.</li> </ul>
<b>Course Structure &amp; Available Subjects:</b>	<p>First Year Course Structure:</p> <p>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.</p>

**2 core subjects (25 credit points):**

- # **880-101 Natural Environments** ([../view/2010/880-101](http://handbook.unimelb.edu.au/view/2010/880-101)) (Semester 1, Semester 2)
- # **880-102 Reshaping Environments** ([../view/2010/880-102](http://handbook.unimelb.edu.au/view/2010/880-102)) (Semester 1, Semester 2)

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

- # **880-103 Constructing Environments** ([../view/2010/880-103](http://handbook.unimelb.edu.au/view/2010/880-103)) (Semester 1, Semester 2)
- # **880-104 Designing Environments** ([../view/2010/880-104](http://handbook.unimelb.edu.au/view/2010/880-104)) (Semester 1, Semester 2)
- # **880-105 Governing Environments** ([../view/2010/880-105](http://handbook.unimelb.edu.au/view/2010/880-105)) (Semester 1)
- # **880-106 Mapping Environments** ([../view/2010/880-106](http://handbook.unimelb.edu.au/view/2010/880-106)) (Semester 2)
- # **880-107 Urban Environments** ([../view/2010/880-107](http://handbook.unimelb.edu.au/view/2010/880-107)) (Semester 2)
- # **880-108 Virtual Environments** ([../view/2010/880-108](http://handbook.unimelb.edu.au/view/2010/880-108)) (Semester 1, Semester 2)

2 breadth subjects (25 points)- for information on breadth subjects and for a complete listing, please see:

**<http://handbook.unimelb.edu.au/breadth/info/index.html>** (**<http://handbook.unimelb.edu.au/breadth/info/index.html>**)

**Bachelor of Environments Course Rules**

Students must complete the following:

- # 300 points total, including no more than 10 subjects (125 points) at 1st year level and at least 6 subjects (75 points) at 3rd year level.
- # 9 subjects (112.5 credit points) to satisfy the requirements of a Bachelor of Environments major sequence.
- # 3 subjects (37.5 credit points) selected from Bachelor of Environments elective subjects.
- # 6 subjects (75 credit points) selected from those available as breadth for Bachelor of Environments students, including at least one subject at 3rd year level.

**Majors/Minors/  
Specialisations**

**Architecture** ([../view/2010/21B-ENVS-MAJ%2B1000](http://handbook.unimelb.edu.au/view/2010/21B-ENVS-MAJ%2B1000)) is the design of buildings and internal environments.

**Civil (Engineering) Systems** ([../view/2010/1B-ENVS-MAJ%2B1001](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1001)) involves the planning, design and construction of the built environment and provision of essential services and infrastructure.

**Construction** ([../view/2010/1B-ENVS-MAJ%2B1002](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1002)) explores the management of people, processes and materials on specific building projects as well as more broadly, across the building industry.

**Environmental Geographies, Politics and Cultures** ([../view/2010/1B-ENVS-MAJ%2B1003](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1003)) focuses on humanity's changing relationship with the natural environment.

**Environmental Science** ([../view/2010/1B-ENVS-MAJ%2B1004](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1004)) gives you the skills to identify and understand the causes of environmental problems triggered by human activity.

**Geomatics (Geomatic Engineering)** ([../view/2010/1B-ENVS-MAJ%2B1005](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1005)) is the study of the science and technologies of 3D measurement, mapping and visualisation.

**Landscape Architecture** ([../view/2010/1B-ENVS-MAJ%2B1006](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1006)) is a design profession with a unique link to the Environmental Sciences.

**Landscape Management** ([../view/2010/1B-ENVS-MAJ%2B1007](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1007)) explores rural and urban ecosystem and the human activities that shape these systems.

**Physical Systems (Environmental Engineering)** ([../view/2010/1B-ENVS-MAJ%2B1008](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1008)) 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** ([../view/2010/1B-ENVS-MAJ%2B1009](http://handbook.unimelb.edu.au/view/2010/1B-ENVS-MAJ%2B1009)) is concerned with the management of assets, people, processes and finances related to specific buildings and across the property industry.

**Urban Design and Planning** ([../view/2010/21A04-AA-MAJ%2B1005](http://handbook.unimelb.edu.au/view/2010/21A04-AA-MAJ%2B1005)) is founded upon the social, environmental, political, aesthetic and economic importance of design and planning in the public realm serving the public interest.

**Subject Options:**

Please refer to the major section (in the box above) for information on subject options.

<b>Breadth Options:</b>	<p>Breadth subjects offer you the opportunity to choose additional subjects from outside your major study area (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)</a>).</p> <p><b><a href="/faces/htdocs/user/breadth/BreadthSearchResults.jsp?breadthcourse=B-ENVS&amp;year=2010">View breadth subjects for this course (/faces/htdocs/user/breadth/BreadthSearchResults.jsp?breadthcourse=B-ENVS&amp;year=2010)</a></b>.</p>
<b>Entry Requirements:</b>	<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>
<b>Core Participation Requirements:</b>	<p>For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a></p>
<b>Further Study:</b>	<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"> <li># <b>Architecture</b> (<a href="http://www.abp.unimelb.edu.au/graduate-school/">http://www.abp.unimelb.edu.au/graduate-school/</a>)</li> <li># <b>Civil Engineering</b> (<a href="http://www.eng.unimelb.edu.au/Postgrad/MEng/me_civil.html">http://www.eng.unimelb.edu.au/Postgrad/MEng/me_civil.html</a>)</li> <li># <b>Construction Management</b> (<a href="http://www.abp.unimelb.edu.au/graduate-school/">http://www.abp.unimelb.edu.au/graduate-school/</a>)</li> <li># <b>Environment</b> (<a href="http://www.environment.unimelb.edu.au/futurestudents">http://www.environment.unimelb.edu.au/futurestudents</a>)</li> <li># <b>Environmental Engineering</b> (<a href="http://www.eng.unimelb.edu.au/Postgrad/MEng/me_environmental.html">http://www.eng.unimelb.edu.au/Postgrad/MEng/me_environmental.html</a>)</li> <li># <b>Geomatics</b> (<a href="http://www.eng.unimelb.edu.au/Postgrad/MEng/me_geomatics.html">http://www.eng.unimelb.edu.au/Postgrad/MEng/me_geomatics.html</a>)</li> <li># <b>Forest Ecosystem Science</b> (<a href="http://www.forests.unimelb.edu.au/">http://www.forests.unimelb.edu.au/</a>)</li> <li># <b>Landscape Architecture</b> (<a href="http://www.abp.unimelb.edu.au/graduate-school/">http://www.abp.unimelb.edu.au/graduate-school/</a>)</li> <li># <b>Property</b> (<a href="http://www.abp.unimelb.edu.au/graduate-school/">http://www.abp.unimelb.edu.au/graduate-school/</a>)</li> <li># <b>Spatial Information Science</b> (<a href="http://www.eng.unimelb.edu.au/Postgrad/MEng/grad_msis.html">http://www.eng.unimelb.edu.au/Postgrad/MEng/grad_msis.html</a>)</li> <li># <b>Urban Horticulture</b> (<a href="http://www.horticulture.unimelb.edu.au/">http://www.horticulture.unimelb.edu.au/</a>)</li> <li># <b>Urban Planning</b> (<a href="http://www.abp.unimelb.edu.au/graduate-school/">http://www.abp.unimelb.edu.au/graduate-school/</a>)</li> </ul> <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><b>Graduate Attributes:</b></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. 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. 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><b>Generic Skills:</b></p>	<p>Students in the Bachelor of Environments should develop the following skills:</p> <ul style="list-style-type: none"> <li># 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;</li> <li># critical and analytical skills and methods to the identification and resolution of problems;</li> <li># practical skills and technology to identify new opportunities and to solve problems;</li> <li># demonstrate innovation and creativity;</li> <li># engage confidently in self-directed study and research;</li> <li># demonstrate strong teamwork and interpersonal skills;</li> <li># communicate effectively in written, oral and graphical form;</li> <li># use appropriate modern technologies for the acquisition, processing and interpretation of data.</li> </ul>