ENVS10006 Mapping Environments

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	This subject is not offered in 2014. On campus
Time Commitment:	Contact Hours: 60 hours, comprising of two 1-hour lectures and one 3-hour practical/laboratory per week Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University 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 University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Contact:	Mr Cliff Ogleby **clogleby@unimelb.edu.au (mailto:clogleby@unimelb.edu.au)**
Subject Overview:	In this subject students will learn how information is used to support decision making in urban and rural environments. This includes methods of data collection, mapping, information communication through visualisation, and decision-support systems. This will be presented by studying the historical development of the supporting technologies, the social context of their use, and their current importance in the age of information. Specific topics covered include: methods of determining position; map projections and the shape of the Earth; the development of cartography from paper maps to GIS and 3D visualization; the development and use of GPS technology; data structures for managing information; methods of measuring built environments and monuments; the development of mapping from aerial photographs to hi-resolution satellite imagery The practical sessions will give hands-on experience with a range of measurement, geographic information, image analysis and virtual reality technologies in a problem-solving context
Learning Outcomes:	At the completion of this subject students should have the following skills: # Be able to apply knowledge of basic science fundamentals # Be able to undertake problem identification, formulation and solution # Be able to understand the key role of information technology in sustainable development # Developed their capacity for independent critical thought, creative inquiry and self-directed learning # Developed a profound respect for truth and intellectual integrity, and for the ethics of scholarship
Assessment:	Fortnightly practical exercises, due throughout semester (60%) A 1-hour test in the end-of-semester examination period (40%)
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses:

	# **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2014/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2014/B-COM)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2014/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Links to further information:	http://www.benvs.unimelb.edu.au/
Notes:	Students enrolled in the BSc (new degree only) will receive science credit for the completion of this subject
Related Course(s):	Bachelor of Environments
Related Majors/Minors/ Specialisations:	Architecture major Civil (Engineering) Systems major Construction major Environmental Engineering Systems major Environmental Geographies, Politics and Cultures major Environmental Science major Environments Discipline subjects Geomatics (Geomatic Engineering) major Landscape Architecture major Landscape Management major Property major Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED Urban Design and Planning major
Related Breadth Track(s):	Natural systems and our designed world Understanding Location