445EG Bachelor of Geomatic Engineering

Year and Campus:	2011 - Parkville
CRICOS Code:	003625J
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	400 credit points taken over 48 months full time. This course is available as full or part time.
Coordinator:	Allison Kealy
Contact:	Melbourne School of Engineering **courseinfo@eng.unimelb.edu.au (mailto:courseinfo@eng.unimelb.edu.au)** **http://www.eng.unimelb.edu.au (http://www.eng.unimelb.edu.au)**
Course Overview:	THERE IS NO FURTHER ENTRY INTO THIS COURSE Students wishing to study Geomatic Engineering need to enrol in a **Bachelor of Environments (../../view/2010/B-ENVS)** or **Bachelor of Science (../../view/2010/B-SCI)** Students who commenced 4th year of this course in 2010 and have not completed, or have failed the fourth year subjects required, should speak to a course advisor. Geomatics is three-dimensional measurement, mapping and visualisation and is one of the fastest growing industry sectors in the world. Land surveying and spatial information science are disciplines covered in Geomatics and it is therefore ideally suited to students who have an interest in the management of the environment, information technology, computing and computer graphics, mathematics or working outdoors. Pathways to a professional degree in Geomatics (Land Surveying/Spatial Information Science) are through the Bachelor of Environments (BEnv) or the Bachelor of Science (BSc). Students who have completed a three year BEnv or BSc with a major in Geomatics can continue on to the professional Masters of Engineering (Geomatics). Students then undertake studies in advanced measurement sciences, remote sensing, spatial analysis, photogrammetry, land administration, cadastral surveying, land law, professional development and and a comprehensive research project,. The whole five year program for Geomatics is accredited by Engineers Australia and accreditation is pending for the Royal Institute of Chartered Surveyors (RICS) and the Surveyors Registration Board, Victoria.
Objectives:	On completion of this course graduates should: # Have a sound fundamental understanding of the scientific principles underlying technology; # Possess a broad knowledge base of their chosen discipline and of other disciplines to facilitate effective communication with those other professionals with whom engineers routinely communicate; # Be able to apply the basic principles underlying the management of physical, human and financial resources; # Have acquired the mathematical and computational skills necessary for the solution of theoretical and practical problems; # Possess analytical, problem-solving and design skills, including those appropriate for sustainable development; # Have verbal and written communication skills that enable them to contribute substantially to society; # Have acquired lifelong learning skills for further development professionally and for meeting future changes in technology; # Have acquired a sense of professional ethics and responsibility towards the profession and the community; # Have developed the interpersonal and management skills required by engineers in undertaking professional activities; and # Be able to enact the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development.
Course Structure & Available Subjects:	THE COURSE STRUCTURE BELOW ONLY APPLIES TO RE-ENROLLING STUDENTS WHO COMMENCED THEIR STUDIES PRIOR TO 2008

The recommended or standard course structures are listed below. When setting the timetable every effort will be made to avoid clashes between the times of classes associated with these sets of subjects. Students should be aware however, that if it proves to be impossible to achieve a timetable without clashes in these sets of subjects, the School reserves the right to modify course structures in order to eliminate the conflicts. Students will be advised during the enrolment period of the semester if the recommended courses need to be varied. Where the courses include elective subjects these should be chosen so that timetable clashes are avoided. In particular, students in combined degrees should plan their courses so that the subjects chosen in the other faculty do not clash with those recommended for the engineering component.

Subject Options:

Fourth Year

The following fourth year subjects are available in 2011

Year Long

Subject	Study Period Commencement:	Credit Points:
GEOM40006 Research Project	Year Long	25

Semester 1

Subject	Study Period Commencement:	Credit Points:
ENGM90010 Management of Technological Enterprises	Not offered 2011	12.50
GEOG30019 Sustainable Development	Semester 1	12.50

Semester 2

Subject	Study Period Commencement:	Credit Points:
GEOM40002 Residential Land Development	Semester 2	12.50

Entry Requirements:

There is no further entry into this course. Students wishing to study Geomatic Engineering need to enrol in a **Bachelor of Environments (../../view/2010/B-ENVS)** or **Bachelor of Science (../../view/2010/B-SCI)**

Core Participation Requirements:

For the purposes of considering request 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 Unitwebsite: http://www.services.unimelb.edu.au/disability/

Further Study:

None

Graduate Attributes:

An Engineering graduate has a unique skill set comprising a blend of technical, business and interpersonal skills. Upon completion of the Bachelor of Engineering at the University of Melbourne, students will have strong analytical skills, the ability to lead teams and projects and the creativity to look at problems in a way that provides innovative solutions. Our graduates are known for their high standards and professionalism, their understanding of global issues and their outstanding communication skills. For details, see “Objectives”.

Professional Accreditation:

Royal Institute of Chartered Surveyors

Generic Skills:

For details, see “Objectives”.

Links to further information:

None

Notes:

None