

945EG Bachelor of Geomatic Engineering and Bachelor of Science

Year and Campus:	2010 - Parkville
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	500 credit points taken over 60 months full time. This course is available as full or part time.
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Course Overview:	Students taking combined degree courses and who intend to overlap third- and later-year subjects, should consult with a course adviser to ensure all core geomatic engineering requirements are met. Students can elect any science major within the BSc program.
Objectives:	On completion of this course graduates should: <ul style="list-style-type: none"> # 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 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:	THERE WILL BE NO FIRST YEAR ENTRY INTO THIS COURSE FROM 2008.

Third Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
451-331 Spatial Analysis	Not offered 2010	
451-332 Imaging in the Geosciences	Not offered 2010	
GEOM30004 Cadastral Surveying & Land Development	Semester 1	12.50

Breadth subject (<http://handbook.unimelb.edu.au/breadth/index.html>) (12.5 points)

Semester 2

Subject	Study Period Commencement:	Credit Points:
GEOM30005 Satellite Positioning and Geodesy	Semester 2	12.50
451-340 Integrated Spatial Systems 1	Not offered 2010	
451-341 Applications of GIS and Remote Sensing	Not offered 2010	

Science subject as required (12.5 points)

Fourth Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
GEOM40001 Land Administration	Semester 1	12.50

AND **one** of the following subjects

A management elective subject (taken from the Faculty of Business and Economics) at undergraduate level

-OR-

Subject	Study Period Commencement:	Credit Points:
GEOM40007 Integrated Spatial Systems 2	Semester 1	12.50
MGMT10002 Managing and Leading Organisations	Summer Term, Semester 1, Semester 2	12.50

Science subjects as required (25 points)

Semester 2

Subject	Study Period Commencement:	Credit Points:
GEOM40004 Photogrammetry	Semester 2	12.50

Science subjects as required (37.5 points)

Fifth Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
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	GEOM40006 Research Project	Year Long	25
	GEOM40005 Professional and Business Studies	Semester 1	12.50
	Science subjects as required (25 points)		
	Semester 2		
	Subject	Study Period Commencement:	Credit Points:
	GEOM40002 Residential Land Development	Semester 2	12.50
	Science subjects as required (25 points)		
Entry Requirements:	N/A - as there is no entry into the program from 2008.		
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 Unit website: 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		