834EG Bachelor of Geomatic Engineering and Bachelor of Information Systems

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 who intend to overlap third- and later-year subjects, should consult with a course adviser to ensure all core engineering requirements are met. 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 Faculty 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.
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:	Students must complete a minimum (and maximum) of 500 points. Within the 500 points students must ensure that they satisfy the requirements of both the geomatic engineering component and the information systems component as specified below.

The final first year intake into the Bachelor of Geomatic Engineering/Bachelor of Information Systems course was at the start of 2007. In addition to the information below, current BIS students should refer to other resources regarding course requirements and appropriate subject selection:

Previous years' handbooks (for each of the years that a student has been enrolled in the course).
The course planning website of the Science Student Centre: **http://www.science.unimelb.edu.au/current/planning/index.php (http://www.science.unimelb.edu.au/current/planning/index.php)**

The description of the Bachelor of Geomatic Engineering/Bachelor of Information Systems course has changed over recent years. Students may complete this course as defined by the current structure or a structure detailed in a previous year's handbook, applicable to any year the student was enrolled in the course.

In the course structure listed below reference is made to 'Information systems subject/s as required'. For detailed information about which subjects to consider, refer to the course planning website of the Science Student Centre: **http://www.science.unimelb.edu.au/current/planning/index.php (http://www.science.unimelb.edu.au/current/planning/index.php)**

Subject Options:

THERE WILL BE NO NEW STUDENT ENTRY INTO THIS COURSE.

Third Year

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

Semester 1

Subject	Study Period Commencement:	Credit Points:
GEOM30004 Cadastral Surveying & Land Development	Semester 1	12.50

AND **one** of the following subjects

Subject	Study Period Commencement:	Credit Points:
451-331 Spatial Analysis	Not offered 2010	
451-332 Imaging in the Geosciences	Not offered 2010	

Information systems subjects as required (25 points)

Semester 2

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

Information systems subjects as required (25 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
GEOM40005 Professional and Business Studies	Semester 1	12.50

Information systems subjects as required (25 points)

Semester 2

And **one** of the following subjects

Subject	Study Period Commencement:	Credit Points:
451-340 Integrated Spatial Systems 1	Not offered 2010	
GEOM40004 Photogrammetry	Semester 2	12.50

Information systems 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:
GEOM40006 Research Project	Year Long	25

Information systems subjects as required (37.5 points)

Semester 2

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

Information systems 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 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