

548-GM Graduate Diploma in Geomatics Science

Year and Campus:	2008																																														
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees																																														
Level:	Graduate/Postgraduate																																														
Duration & Credit Points:																																															
Contact:	Department of Geomatics , Postgraduate Coordinator: Professor Ian Bishop E: ibishop@unimelb.edu.au Faculty of Engineering , Manager, Planning & Projects (Academic Programs) Rebecca Randall E: r.randall@unimelb.edu.au																																														
Course Overview:	<p>The Graduate Diploma in Geomatics Science is designed to provide an intensive continuing education program for surveyors of some years standing who desire to be re-skilled in aspects of modern geomatics science and technology. The course aims to meet the demands of graduates in allied disciplines presently working in the surveying and mapping industry, and who require specialist skills in specific areas of geomatics science. The course also provides the opportunity for graduates in surveying or geomatics from developing countries to become skilled in modern geomatic processes and it may serve as a preliminary studies program, leading to qualification in the Graduate Diploma in Geomatics Science, for those students intending to enter the Masters of Geomatic Engineering course.</p>																																														
Objectives:	<p>On successful completion of this course, students should have:</p> <ul style="list-style-type: none"> # acquired knowledge of the underlying theory and processes in measurement science which, in conjunction with their previous training and experience, will allow them to work at an advanced level in either geodesy, photogrammetry or another specialist area in Geomatics 																																														
Subject Options:	<p>Students undertake a total of 100 points. The course material is primarily selected from subjects of advanced standing in the Bachelor of Geomatic Engineering course and graduate subjects from the Master of Geographic Information Technology . The particular combination of subjects is chosen in consultation with the Course Coordinator.</p> <p>Students should select a course of study that meets their needs from the following list:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>451-206 Least Squares & Network Analysis</td> <td>Summer</td> <td>12.50</td> </tr> <tr> <td>451-208 Computational Methods in Geomatics</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-332 Imaging in the Geosciences</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-337 Satellite Positioning and Geodesy</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>451-447 Photogrammetry</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>451-499 Integrated Spatial Systems 2</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-607 Land Administration (Masters)</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-608 Spatial Analysis (Masters)</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-609 Remote Sensing</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>451-610 Fundamentals of GIS</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-611 Spatial Visualisation</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>451-612 Research Project GIS</td> <td>Semester 1, Semester 2, Summer</td> <td>12.50</td> </tr> <tr> <td>451-613 Scripting and Programming in GIS</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>451-617 Fundamentals of Positioning Technologies</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>		Subject	Study Period Commencement:	Credit Points:	451-206 Least Squares & Network Analysis	Summer	12.50	451-208 Computational Methods in Geomatics	Semester 1	12.50	451-332 Imaging in the Geosciences	Semester 1	12.50	451-337 Satellite Positioning and Geodesy	Semester 2	12.50	451-447 Photogrammetry	Semester 2	12.50	451-499 Integrated Spatial Systems 2	Semester 1	12.50	451-607 Land Administration (Masters)	Semester 1	12.50	451-608 Spatial Analysis (Masters)	Semester 1	12.50	451-609 Remote Sensing	Semester 2	12.50	451-610 Fundamentals of GIS	Semester 1	12.50	451-611 Spatial Visualisation	Semester 2	12.50	451-612 Research Project GIS	Semester 1, Semester 2, Summer	12.50	451-613 Scripting and Programming in GIS	Semester 2	12.50	451-617 Fundamentals of Positioning Technologies	Semester 1	12.50
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	451-625 Investigative Project	Semester 1, Semester 2, Summer	25
	451-627 Developing Spatial Data Infrastructure	Semester 2	12.50
	451-629 Advanced Topics in GIScience	Not offered 2008	12.500
	451-666 Spatial Databases	Semester 1	12.50
	<p>Notes:</p> <ul style="list-style-type: none"> # subject 451-625 Investigative Project (25 points) is optional, however, students wishing to progress to the Master of Geomatic Engineering are advised to take this subject # students are not permitted to take any more than 25 points at a 200-level # 451-612 Research Project GIS is normally taken in semester 1 or semester 2 but may be taken over the summer semester with the written approval of the Course Coordinator. 		
Entry Requirements:	<p>3 year pass level degree in Surveying or Geomatics or other qualification in an allied technical discipline and at least 2 years industry experience</p> <p>Language Requirements</p> <p>International students and students whose prior qualifications are from a university overseas where English is not the official language of instruction and examination need to supply proof of academic English language competency. Proof acceptable to the University includes:</p> <p>Original evidence of an English Language test score at a sitting within the last 24 months of either -</p> <p>TOEFL - at least 577 and a TWE of at least 4.5 (paper based) or a TOEFL of at least 233 with an Essay Rating of at least 4.5 (computer based)</p> <p>or</p> <p>IELTS - at least 6.5. (A minimum band score of 6 is required in the Academic Writing module).</p> <p>Entry under a slightly lower Engineering alternative* English Language entry requirement is available as follows:</p> <p>TOEFL - at least 550, with a TWE of 4 or the computer based TOEFL of at least 213 with an Essay Rating Score of at least 4 and agreeing in writing to undertake and pass an ESL subject in the first semester of study at the University of Melbourne</p> <p>or</p> <p>IELTS - at least 6 and agreeing in writing to undertake and pass an ESL subject in the first semester of study at the University of Melbourne.</p> <p>* The Faculty of Engineering's English Language alternative may affect the duration and cost of your course.</p>		
Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>		