

Geomatics

Year and Campus:	2014																	
Coordinator:	Cliff Ogleby Department of Geomatics																	
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Overview:	<p>This major aims to provide science students with the background knowledge necessary for a career in spatial science. Geomatics is concerned with measurement, representation, analysis, management, retrieval and display of spatial data concerning both the Earth's physical features and the built environment. The principal disciplines embraced by Geomatics include the mapping sciences, land administration and management, geographic information systems, environmental visualisation, geodesy, photogrammetry, remote sensing and surveying. The major will develop a knowledge base in spatial measurement and analysis for both the human and natural environment. After completion of a science degree with a major in geomatics students can enter the workforce with their current skills or apply to commence a professional masters degree.</p>																	
Learning Outcomes:	<p>On completion of this course graduates should:</p> <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; # 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 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. 																	
Structure & Available Subjects:	Completion of 50 points of study at Level 3.																	
Subject Options:	<p>All four of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CVEN30008 Risk Analysis</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>GEOM30009 Imaging the Environment</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>GEOM30012 Integrated Spatial Systems</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>GEOM30013 Land Administration Systems</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	CVEN30008 Risk Analysis	Semester 1	12.50	GEOM30009 Imaging the Environment	Semester 1	12.50	GEOM30012 Integrated Spatial Systems	Semester 2	12.50	GEOM30013 Land Administration Systems	Semester 2	12.50
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Related Course(s):	Bachelor of Science																	