

# Geomatics

<b>Year and Campus:</b>	2009															
<b>Coordinator:</b>	Cliff Ogleby															
<b>Contact:</b>	<p><b>Environments and Design Student Centre</b>                  Old Commerce Building                  The University of Melbourne                  VIC 3010                  T: +61 3 8344 6417                  F: +61 3 8344 5532                  E: <a href="mailto:envs-courseadvice@unimelb.edu.au">envs-courseadvice@unimelb.edu.au</a> (<a href="mailto:envs-courseadvice@unimelb.edu.au">mailto:envs-courseadvice@unimelb.edu.au</a>)</p>															
<b>Overview:</b>	<p>Geomatic Engineering is the study of the science and technologies of 3D measurement, mapping and visualisation. This course provides the opportunity to acquire skills in modern, sophisticated technologies such as global positioning system (GPS), three dimensional computer visualisations, geographic information systems (GIS), surveying, and satellite and photographic image processing.</p> <p><b>Careers and Further Study</b></p> <p>Students pursuing a career in Geomatics will complete the Bachelor of Environments with a major in Geomatics, followed by the two-year Master of Engineering (Geomatics). The five-year Bachelor-Master combination leads to professional accreditation by Engineers Australia and the Institution of Surveyors, Australia. For more information on the Masters of Engineering and graduate careers, please visit the Melbourne school of Engineering web site: <a href="http://eng.unimelb.edu.au">http://eng.unimelb.edu.au</a> (<a href="http://eng.unimelb.edu.au">http://eng.unimelb.edu.au/</a>)</p>															
<b>Objectives:</b>	<p>By the end of a three year Bachelor of Environments degree with a Geomatics major, you will have developed a sound understanding of technologies used in one of the fastest growing IT industries in the world today. For more information visit: <a href="http://www.benvs.unimelb.edu.au">www.benvs.unimelb.edu.au</a> (<a href="http://www.benvs.unimelb.edu.au">http://www.benvs.unimelb.edu.au/</a>)</p>															
<b>Subject Options:</b>	<p><b>Core second year subjects for the Geomatics Major</b>                  Students majoring in Geomatics must complete the following second year core subjects:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>451-217 Applications of GIS</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>451-237 Surveying and Mapping</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>451-238 Residential Field Course</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>620-159 Data Analysis 1</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p><b>Core third year subjects for the Geomatics major</b>                  Students completing a major in Geomatics must complete the third year core subjects listed below. Please note that these subjects will be available from 2010.</p> <ul style="list-style-type: none"> <li># Programming Geomatics Applications</li> <li># Imaging the Environment</li> <li># Integrated Spatial Systems</li> <li># People, Land and Sustainability</li> <li># Computational Methods in Geomatics</li> </ul> <p><b>Breadth subjects</b>                  Bachelor of Environments Students must complete <b>75 credit points</b> of subjects selected from those available as <b>breadth for Bachelor of Environments students</b>; including at least one subject at 300-level. For a complete listing of available subjects please see:  <a href="https://app.portal.unimelb.edu.au/CSCApplication/faces/htdocs/user/breadth/BreadthSearch.jsp">https://app.portal.unimelb.edu.au/CSCApplication/faces/htdocs/user/breadth/BreadthSearch.jsp</a> (<a href="https://app.portal.unimelb.edu.au/CSCApplication/faces/htdocs/user/breadth/BreadthSearch.jsp">user/breadth/BreadthSearch.jsp</a>)</p>	Subject	Study Period Commencement:	Credit Points:	451-217 Applications of GIS	Semester 1	12.50	451-237 Surveying and Mapping	Semester 2	12.50	451-238 Residential Field Course	Semester 2	12.50	620-159 Data Analysis 1	Semester 2	12.50
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**Bachelor of Environments electives**

All Bachelor of Environments students must complete **37.5 points of Bachelor of Environments electives**. For a complete listing of available subjects please see:

<http://www.benvs.unimelb.edu.au/electives> (<http://www.benvs.unimelb.edu.au/electives>)

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**For more information on this major and to view a sample course plan please visit:**

<http://www.benvs.unimelb.edu.au/about/fields-of-study/geomatics.html> (<http://www.benvs.unimelb.edu.au/about/fields-of-study/geomatics.html>)

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**Related Course(s):**

Bachelor of Environments