

GEOM90007 Spatial Visualisation

Credit Points:	12.50						
Level:	9 (Graduate/Postgraduate)						
Dates & Locations:	This subject is not offered in 2013.						
Time Commitment:	Contact Hours: 16 hours of lectures, 16 hours practical work. This is a two week intensive subject which will run from 15th July - 26th July 2013. Total Time Commitment: 100 hours						
Prerequisites:	<p>Successful completion of the following subject, or equivalent, is required to enrol:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>GEOM90008 Foundations of Spatial Information</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	GEOM90008 Foundations of Spatial Information	Not offered 2013	12.50
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GEOM90008 Foundations of Spatial Information	Not offered 2013	12.50					
Corequisites:	None						
Recommended Background Knowledge:	None						
Non Allowed Subjects:	None						
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>						
Contact:	<p>Associate Professor Matt Duckham</p> <p>mduckham@unimelb.edu.au (mailto:mduckham@unimelb.edu.au)</p>						
Subject Overview:	<p>Visualization is about using and designing effective mechanisms for presenting and exploring the patterns embedded in large and complex data sets. Visualization is especially important to spatial decision making, since geographic data sets are both voluminous and rich in structure. This subject covers the fundamentals of information visualization and the foundations of user interface and cartographic design, before investigating geovisualization and exploratory spatial data analysis. Students will gain hands-on experience with a range of visualization tools and techniques, and will use the skills gained to complete a visualization project based on an international visualization challenge.</p>						
Objectives:	<p>On successful completion of this subject students will have the ability to:</p> <ul style="list-style-type: none"> # Understand what makes visualization of geographic information different from information visualization in other domains; # Critically evaluate the designs of maps and user interfaces for spatial data; and # Analyze big spatial data sets using geovisualization techniques, and compare alternative techniques. 						
Assessment:	1-hour written exam, end of week 1 (20%) 3 x Practical assignment reports (3 pages), week 1 (30%) Report (6 pages), end of week 2 (30%) An oral presentation (10 mins), end of week 2 (20%)						
Prescribed Texts:	None						

Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<p>On successful completion of this subject students will have the ability to:</p> <ul style="list-style-type: none"> # Ability to apply knowledge of science and engineering fundamentals # Ability to undertake problem identification, formulation, and solution # Ability to communicate effectively, with the engineering team and with the community at large # Capacity for creativity and innovation # Understanding of professional and ethical responsibilities, and commitment to them
Related Course(s):	<p>Master of Geographic Information Technology Master of Information Technology Master of Information Technology Master of Information Technology Master of Philosophy - Engineering Master of Spatial Information Science Ph.D.- Engineering Postgraduate Certificate in Engineering</p>
Related Majors/Minors/ Specialisations:	Master of Engineering (Geomatics)