

## 451-499 Integrated Spatial Systems 2

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| <b>Credit Points:</b>                    | 12.50   |
| <b>Level:</b>                            | 4 (Undergraduate)   |
| <b>Dates &amp; Locations:</b>            | 2009,<br>This subject commences in the following study period/s:<br>Semester 1, - Taught on campus.   |
| <b>Time Commitment:</b>                  | Contact Hours: Forty-eight hours of lectures, tutorials and practical exercise. Total Time Commitment: Not available  |
| <b>Prerequisites:</b>                    | 451-340 Integrated Spatial Systems 1, 451-337 Satellite Positioning and Geodesy, or equivalent subjects.  |
| <b>Corequisites:</b>                     | None  |
| <b>Recommended Background Knowledge:</b> | None  |
| <b>Non Allowed Subjects:</b>             | None  |
| <b>Core Participation Requirements:</b>  | <p>&lt;p&gt;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.&lt;/p&gt; <p>&lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p> </p> |
| <b>Coordinator:</b>                      | Assoc Prof Stephan Winter   |
| <b>Subject Overview:</b>                 | <p>This subject provides advanced concepts, theory, and applications of integrating spatial technologies with enabling technologies, such as wireless communications and the Internet. The subject covers three core areas:</p> <ul style="list-style-type: none"> <li># advanced studies in positioning technologies and measurement<br/>#####integration</li> <li># distributed GIS, web mapping, interoperability</li> <li># location-based services.</li> </ul>   |
| <b>Assessment:</b>                       | Three hours or written examination (50% of subject marks), and the equivalent of 3000 words of coursework assessment across the semester. The coursework assessment will comprise three separate practical exercises each of which is to be completed over a three-week period (16.6% each, 50% of subject marks).  |
| <b>Prescribed Texts:</b>                 | None  |
| <b>Recommended Texts:</b>                | Information Not Available   |
| <b>Breadth Options:</b>                  | This subject is not available as a breadth subject.   |
| <b>Fees Information:</b>                 | Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>   |
| <b>Generic Skills:</b>                   | # ability to apply knowledge of basic science and engineering fundamentals  |

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|                           | <ul style="list-style-type: none"> <li># ability to communicate effectively, not only with engineers but also with the community at large</li> <li># in-depth technical competence in at least one engineering discipline</li> <li># ability to undertake problem identification, formulation and solution</li> <li># ability to utilise a systems approach to design and operational performance</li> <li># ability to function effectively as an individual and in multi-disciplinary and multi-cultural teams, with the capacity to be a leader or manager as well as an effective team member</li> <li># understanding of the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development</li> <li># understanding of the principles of sustainable design and development</li> <li># understanding of professional and ethical responsibilities and commitment to them</li> <li># capacity for independent critical thought, rational inquiry and self-directed learning</li> </ul> |
| <b>Related Course(s):</b> | <p>Bachelor of Geomatic Engineering<br/> Bachelor of Geomatic Engineering and Bachelor of Science<br/> Graduate Diploma in Geomatics Science</p>  |