

## 433-653 Mobile Computing Systems Programming

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| <b>Credit Points:</b>                    | 12.50   |
| <b>Level:</b>                            | 9 (Graduate/Postgraduate)   |
| <b>Dates &amp; Locations:</b>            | This subject is not offered in 2009.  |
| <b>Time Commitment:</b>                  | Contact Hours: 12 hours of lectures, 12 hours of student presentations, 12 hours of tutorial/laboratory classes; Non-contact time commitment: 84 hours Total Time Commitment: Not available   |
| <b>Prerequisites:</b>                    | 433-652 : Distributed Systems   |
| <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;         &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> |
| <b>Subject Overview:</b>                 | A major focus is the programming of mobile devices using the standard toolkits "Java Micro Edition" or ".NET Compact Framework". Topics covered include: programming applications for Smartphones and PDAs; user interfaces for mobile devices; accessing location sensing technologies; interfaces for grid computing; geometric routing; data and information management, in particular for location-based services; privacy and security issues; and SnycML, WAP and XML technologies.   |
| <b>Objectives:</b>                       | <p>On successful completion, students should:</p> <ul style="list-style-type: none"> <li># be familiar with key concepts and technologies in mobile and location-aware computing</li> <li># have practical skills in implementing fundamental algorithms used in mobile computing.</li> </ul>   |
| <b>Assessment:</b>                       | Project work during semester of approx. 24 hours (25%), one presentation including a short paper of a current research approach in mobile computing expected to take about 12 hours (15%) and a 3-hour written examination at the end of the semester (60%). All components must be completed satisfactorily to pass the subject.   |
| <b>Prescribed Texts:</b>                 | None  |
| <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>                   | <p>On completion of this subject students should:</p> <ul style="list-style-type: none"> <li># be able to undertake problem identification, formulation and solution;</li> <li># have a capacity for independent critical thought, rational inquiry and self-directed learning; and</li> <li># have a profound respect for truth and intellectual integrity, and for the ethics of scholarship.</li> </ul>  |
| <b>Related Course(s):</b>                | Master of Engineering in Distributed Computing<br>Master of Information Technology<br>Master of Software Systems Engineering  |