

COMP90018 Mobile Computing Systems Programming

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 24 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
Prerequisites:	433-652 : Distributed Systems
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http:// www.services.unimelb.edu.au/disability/
Coordinator:	Dr Lars Kulik
Contact:	Melbourne School of Engineering Office Building 173, Grattan Street The University of Melbourne VIC 3010 Australia General telephone enquiries + 61 3 8344 6703 + 61 3 8344 6507 Facsimiles + 61 3 9349 2182 + 61 3 8344 7707 Email eng-info@unimelb.edu.au (mailto:eng-info@unimelb.edu.au)
Subject Overview:	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 SncML, WAP and XML technologies.
Objectives:	On completion of this subject students should: # Be familiar with key concepts and technologies in mobile and location-aware computing # Have practical skills in implementing fundamental algorithms used in mobile computing.
Assessment:	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.
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:	On completion of this subject students should: <ul style="list-style-type: none"># Be able to undertake problem identification, formulation and solution# Have a capacity for independent critical thought, rational inquiry and self-directed learning; and# Have a profound respect for truth and intellectual integrity, and for the ethics of scholarship
Related Course(s):	Bachelor of Computer Science (Honours) Master of Engineering in Distributed Computing Master of Software Systems Engineering Postgraduate Certificate in Engineering