

# COMP90018 Mobile Computing Systems Programming

<b>Credit Points:</b>	12.50						
<b>Level:</b>	9 (Graduate/Postgraduate)						
<b>Dates &amp; Locations:</b>	This subject is not offered in 2013.						
<b>Time Commitment:</b>	Contact Hours: 24 hours of lectures, 12 hours of student presentations, 12 hours of tutorial/laboratory classes Total Time Commitment: 120 hours						
<b>Prerequisites:</b>	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>COMP90015 Distributed Systems</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	COMP90015 Distributed Systems	Not offered 2013	12.50
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COMP90015 Distributed Systems	Not offered 2013	12.50					
<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>Contact:</b>	<p>Dr Adrian Pearce</p> <p>email: <a href="mailto:adrianrp@unimelb.edu.au">adrianrp@unimelb.edu.au</a> (mailto:adrianp@unimelb.edu.au)</p>						
<b>Subject Overview:</b>	<p>Mobile devices are ubiquitous nowadays. Mobile computing encompasses technologies, devices and software that enable (wireless) access to services anyplace, anytime, and anywhere. This subject will cover fundamental mobile computing techniques and technologies, and explain challenges that are unique to mobile computing. In particular, the development of software for mobile devices requires hands-on experience that cannot be captured using simulation environments or emulators. Mobile devices have not limited computing power and restrictions on the communication bandwidth, latency and network availability. Equally important, mobile device are also confined by their input mechanisms and their output capabilities such as screen size and resolution. This subject will enable students to develop mobile phone applications and provide them with hands-on experience.</p>						
<b>Objectives:</b>	<p>On completion of this subject students should:</p> <ul style="list-style-type: none"> <li># Develop a deeper understanding of mobile systems, their challenges, and their programming.</li> <li># Get hands-on experience on programming applications for mobile devices that includes the integration of sensed information.</li> <li># Learn to work in small effective teams.</li> <li># Discuss and present new mobile research topics and technologies in oral and written form.</li> </ul>						
<b>Assessment:</b>	<p>Project work: implementation of a mobile phone application of a group of 3 students, of approximately 70 hours of time commitment for the entire group (20%) due in week 11. A 20-minute presentation given by a 3-person group due in week 6 to week 10 in combination with a 3000-word report about a current research topic or technology in mobile computing (20%) due in week 10. A 2-hour written examination at the end of the semester (60%). To pass the</p>						

	subject, students must obtain at least:50% overall.20/40 in the group-based work.25/60 in the end-of-semester written examination.ILO 1 is addressed in all assessment components. ILO 2 is addressed in the project work, ILO 3 in project work, the group presentation and the group report. ILO 4 is addressed in the group presentation and the group report.
<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>	On completion of this subject students should: <ul style="list-style-type: none"> <li># Ability to undertake problem identification, formulation and solution</li> <li># Capacity for independent critical thought, rational inquiry and self-directed learning</li> <li># 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 Master of Information Technology Master of Information Technology Master of Information Technology Master of Philosophy - Engineering Master of Science (Computer Science) Master of Software Systems Engineering Ph.D.- Engineering
<b>Related Majors/Minors/ Specialisations:</b>	Computer Science Master of Engineering (Software)