

# SWEN90006 Software Engineering Methods

<b>Credit Points:</b>	12.50						
<b>Level:</b>	9 (Graduate/Postgraduate)						
<b>Dates &amp; Locations:</b>	This subject is not offered in 2011.						
<b>Time Commitment:</b>	Contact Hours: 24 one-hour lectures (two per week) and 12 one hours workshops (one per week) 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>SWEN30006 Software Modelling and Design</td> <td>Not offered 2011</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	SWEN30006 Software Modelling and Design	Not offered 2011	12.50
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SWEN30006 Software Modelling and Design	Not offered 2011	12.50					
<b>Corequisites:</b>	None						
<b>Recommended Background Knowledge:</b>	None						
<b>Non Allowed Subjects:</b>	433 342 Software Engineering						
<b>Core Participation Requirements:</b>	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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>						
<b>Contact:</b>	Dr Shanika Karunasekera email: <a href="mailto:karus@unimelb.edu.au">karus@unimelb.edu.au</a> ( <a href="mailto:karus@unimelb.edu.au">mailto:karus@unimelb.edu.au</a> )						
<b>Subject Overview:</b>	This subject introduces students to the software engineering principles, processes, tools and techniques for analysing, measuring and developing quality and dependable software. The subject is one of the two SE foundational subjects and looks at methods and tools for analysing, measuring, and building dependable software systems. Topics covered include: methods for static and dynamic software testing; quality and dependability; reliability engineering; performance engineering; fault tolerance; software problem analysis and fault isolation; and software tools.						
<b>Objectives:</b>	On completion of this subject, students should be able to: <ul style="list-style-type: none"> <li># Select appropriate methods to build in quality and dependability into software systems</li> <li># Select and apply a effective testing techniques for verifying medium and large scale software systems; and</li> <li># Select and apply measures and models to evaluate the quality and dependability of a software system</li> </ul>						
<b>Assessment:</b>	Project work during semester, expected to take about 36 hours (50%); and a 2-hour end-of-semester written examination (50%). To pass the subject, students must obtain at least 50% overall, 25/50 in project work, and 25/50 in the written examination.						
<b>Prescribed Texts:</b>	TBA						
<b>Breadth Options:</b>	This subject potentially can be taken as a breadth subject component for the following courses: <ul style="list-style-type: none"> <li># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2011/B-ARTS">https://handbook.unimelb.edu.au/view/2011/B-ARTS</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2011/B-COM">https://handbook.unimelb.edu.au/view/2011/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2011/B-ENVS">https://handbook.unimelb.edu.au/view/2011/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2011/B-MUS">https://handbook.unimelb.edu.au/view/2011/B-MUS</a>)</li> </ul>						

	You should visit <b>learn more about breadth subjects</b> ( <a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a> ) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
<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 have: <ul style="list-style-type: none"> <li># An in-depth technical competence in the selection and application of methods to develop, measure and test quality of software systems</li> <li># The ability undertake problem identification, formulation and solution</li> </ul>
<b>Related Course(s):</b>	Bachelor of Engineering (Computer Engineering) Bachelor of Science
<b>Related Majors/Minors/Specialisations:</b>	B-ENG Software Engineering stream Computer Science Master of Engineering (Software) Science credit subjects* for pre-2008 BSc, BAsC and combined degree science courses Software Systems