

# Computer Science

<b>Year and Campus:</b>	2014																					
<b>Coordinator:</b>	Dr Aaron Harwood																					
<b>Contact:</b>	<p><b>Melbourne Graduate School of Science</b>  Faculty of Science  The University of Melbourne  Victoria 3010</p> <p>Tel: + 61 3 8344 6128  Fax: +61 3 8344 3351</p> <p>Web: <a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a> (<a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a>)</p>																					
<b>Overview:</b>	The Graduate Certificate allows students who have completed an undergraduate degree to refocus or expand their body of knowledge by completing the requirement of one of the undergraduate majors (or equivalent) in the Bachelor of Science not already completed. The Graduate Certificate provides a pathway to the Master of Science Streams.																					
<b>Learning Outcomes:</b>	<p>Students who complete the Graduate Certificate should:</p> <ul style="list-style-type: none"> <li># Demonstrate an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values</li> <li># Apply critical and analytical skills and methods to the identification and resolution of problems</li> <li># Act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force</li> <li># Communicate effectively</li> <li># Commit to continuous learning</li> <li># Be proficient in the use of appropriate modern technologies, such as the computer and other information technology systems, for the acquisition, processing and interpretation of data</li> </ul>																					
<b>Structure &amp; Available Subjects:</b>	Completion of 50 points of study at Level 3.																					
<b>Subject Options:</b>	<p><b>Subject prerequisites:</b> <i>COMP20003 Algorithms and Data Structures and two of COMP20004 Discrete Structures, COMP20005 Engineering Computation, COMP20006 Programming the Machine, COMP20007 Design of Algorithms or SWEN20003 Object Oriented Software Development, or equivalents plus 25 points of level 1 or above mathematics or statistics subjects, or equivalent.</i></p> <p>Both of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>COMP30023 Computer Systems</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>COMP30022 IT Project</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus two of the following:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>COMP30021 Theoretical Computer Science</td> <td>Not offered 2014</td> <td>12.50</td> </tr> <tr> <td>COMP30019 Graphics and Interaction</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>COMP30018 Knowledge Technologies</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	COMP30023 Computer Systems	Semester 1	12.50	COMP30022 IT Project	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	COMP30021 Theoretical Computer Science	Not offered 2014	12.50	COMP30019 Graphics and Interaction	Semester 2	12.50	COMP30018 Knowledge Technologies	Semester 1, Semester 2	12.50
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	COMP30020 Declarative Programming	Semester 2	12.50
	SWEN90006 Software Engineering Methods	Semester 2	12.50
	SWEN30006 Software Modelling and Design	Semester 1, Semester 2	12.50
	ISYS90050 IT Project and Change Management	Semester 1, Semester 2	12.50
<b>Links to further information:</b>	<a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a>		
<b>Related Course(s):</b>	Graduate Certificate in Science		