

# Computer Science

<b>Year and Campus:</b>	2016																														
<b>Coordinator:</b>	Dr Aaron Harwood																														
<b>Contact:</b>	<a href="mailto:aharwood@unimelb.edu.au">aharwood@unimelb.edu.au</a> (mailto:aharwood@unimelb.edu.au)																														
<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> 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.</p> <p><b>Level 3</b></p> <p>All three 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>COMP30026 Models of Computation</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>SWEN30006 Software Modelling and Design</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus one 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>COMP30019 Graphics and Interaction</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>COMP30022 IT Project</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>COMP30024 Artificial Intelligence</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>INFO30004 Usability Engineering</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>INFO30005 Web Information Technologies</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	COMP30023 Computer Systems	Semester 1	12.50	COMP30026 Models of Computation	Semester 2	12.50	SWEN30006 Software Modelling and Design	Semester 1, Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	COMP30019 Graphics and Interaction	Semester 2	12.50	COMP30022 IT Project	Semester 2	12.50	COMP30024 Artificial Intelligence	Semester 1	12.50	INFO30004 Usability Engineering	Semester 1	12.50	INFO30005 Web Information Technologies	Semester 1	12.50
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<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