

COMP30020 Declarative Programming

Credit Points:	12.50											
Level:	3 (Undergraduate)											
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.											
Time Commitment:	Contact Hours: 24 one-hour lectures (two per week) and 12 one-hour workshops (one per week) Total Time Commitment: 120 hours											
Prerequisites:	<p>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>COMP20003 Algorithms and Data Structures</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>COMP90038 Algorithms and Complexity</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	COMP20003 Algorithms and Data Structures	Semester 1, Semester 2	12.50	COMP90038 Algorithms and Complexity	Semester 1, Semester 2	12.50
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COMP20003 Algorithms and Data Structures	Semester 1, Semester 2	12.50										
COMP90038 Algorithms and Complexity	Semester 1, Semester 2	12.50										
Corequisites:	None											
Recommended Background Knowledge:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>SWEN20003 Object Oriented Software Development</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	SWEN20003 Object Oriented Software Development	Semester 2	12.50			
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Non Allowed Subjects:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>COMP90048 Declarative Programming</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	COMP90048 Declarative Programming	Semester 2	12.50			
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Core Participation Requirements:	<p>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/</p>											
Coordinator:	Dr Lee Naish											
Contact:	Associate Professor Tim Baldwin email: tbaldwin@unimelb.edu.au (mailto:tbaldwin@unimelb.edu.au)											
Subject Overview:	<p>Declarative programming languages provide elegant and powerful programming paradigms that every programmer should know. Topics covered include functional programming, logic programming, constraint programming; declarative programming techniques, including higher order programming and the exploitation of advanced type systems; declarative languages as a competitive advantage, and how they fit into an environment dominated by imperative languages.</p>											
Objectives:	<p>On completion of this subject, students should be able to:</p> <ul style="list-style-type: none"> # Apply declarative programming techniques # Write medium size programs in a declarative language # Write programs in which different components use different languages; and 											

	# Select appropriate languages for each component task in a project
Assessment:	Project work during semester, expected to take about 36 hours (30%) A mid-semester test (10%) And a 2-hour end-of-semester written examination (60%) To pass the subject, students must obtain at least: 50% overall 15/30 in project work And35/70 in the mid-semester test and end-of-semester written examination combined.
Prescribed Texts:	TBA
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2012/B-ARTS) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2012/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/B-MUS) <p>You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<p>On completion of this subject students should have developed the following generic skills:</p> <ul style="list-style-type: none"> # Ability to undertake problem identification, formulation and solution # Ability to utilise a systems approach to design and operational performance # Intellectual curiosity and creativity, including understanding of the philosophical and methodological bases of research activity # Openness to new ideas and unconventional critiques of received wisdom # Capacity for independent critical thought, rational inquiry and self-directed learning
Related Course(s):	Bachelor of Engineering (Software Engineering) Bachelor of Engineering (Software Engineering)/Bachelor of Science
Related Majors/Minors/ Specialisations:	<p>B-ENG Software Engineering stream Computer Science Computer Science Computing and Software Systems Master of Engineering (Software) Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED. Software Systems</p>