

# INFO10001 Informatics 1: Practical Computing

<b>Credit Points:</b>	12.50
<b>Level:</b>	1 (Undergraduate)
<b>Dates &amp; Locations:</b>	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 3 x one hour lectures per week; and 1 x three hour workshop per week Total Time Commitment: Estimated total time commitment of 120 hours
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	# 615-145 Concepts of Software Development 1 (prior to 2009) # 433-151 Introduction to Programming (Advanced) (prior to 2008) # 433-171 Introduction to Programming (prior to 2008).
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
<b>Coordinator:</b>	Mr Ivo Widjaja
<b>Contact:</b>	Email: <a href="mailto:ivow@unimelb.edu.au">ivow@unimelb.edu.au</a> (mailto:ivow@unimelb.edu.au)
<b>Subject Overview:</b>	This subject introduces students to computational methods for analysing and visualising structured data. It covers fundamental programming constructs, algorithms and data structures; information visualisation; web-centric computing; and an overview of the field of computing. Workshops and team projects will give students practical experience in solving data-rich problems involving computers, people and the Web. The problems will be drawn from a diverse range of topics, e.g. climate change, finance, social networks, and language analysis.
<b>Objectives:</b>	On completion of this subject students should be able to: <ul style="list-style-type: none"> <li># develop programs using a high-level language (e.g. Python);</li> <li># manipulate static, structured data;</li> <li># implement solutions by writing programs;</li> <li># evaluate proposed solutions;</li> <li># use web technologies to collaborate with fellow team members;</li> <li># communicate results effectively using web technologies.</li> </ul>
<b>Assessment:</b>	A three-stage project (35%) expected to take 36 hours, with stages due at one-third, at two-thirds and at the end of semester. This time commitment includes a peer-assessment component related to the project (5%). About two-thirds of the project is to be done individually and the rest in groups. Additional assessment components are a 1-hour mid-semester test (10%) and a 2-hour written examination in the examination period (50%). Each of the continuous assessment and the final exam components must be passed in order to pass the subject overall.
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject potentially can be taken as a breadth subject component for the following courses:

	<p># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-ARTS">https://handbook.unimelb.edu.au/view/2010/B-ARTS</a>)</p> <p># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-COM">https://handbook.unimelb.edu.au/view/2010/B-COM</a>)</p> <p># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-ENVS">https://handbook.unimelb.edu.au/view/2010/B-ENVS</a>)</p> <p># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2010/B-MUS">https://handbook.unimelb.edu.au/view/2010/B-MUS</a>)</p> <p>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.</p>
<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>	<p>On completion of this subject students should have developed the following generic skills:</p> <ul style="list-style-type: none"> <li># analyse and solve real-world problems with computers;</li> <li># provide clear and constructive critique of other students' work;</li> <li># discern quality with respect to the goals of the subject;</li> <li># synthesise information and communicate results effectively; and</li> <li># work effectively as a member of a project team.</li> </ul>
<b>Notes:</b>	<p>This subject is available for science credit to students enrolled in the BSc (both pre-2008 and new degrees), BAsc or a combined BSc course.</p> <p>VCE mathematics is not a prerequisite for this subject.</p>
<b>Related Course(s):</b>	<p>Bachelor of Information Systems</p> <p>Bachelor of Science</p> <p>Bachelor of Science and Bachelor of Information Systems</p> <p>Diploma in Informatics</p>