433-313 Computer Design

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: Twenty-four hours of lectures and approximately 11 hours of tutorials Total Time Commitment: Not available
Prerequisites:	433-252 Software Engineering Principles and Tools and 431-102 Digital Systems 1.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Dr Aaron Harwood
Subject Overview:	Topics covered include memory hierarchy, processor implementation, pipelining, instruction sets, multiprocessors, input/output, performance measurement, and the design process.
Objectives:	On completion of this subject students should be able to describe the components of current computer systems as well as their interactions; to be able to evaluate the suitability of a given computer for a given task; to be able to analyse the effects of architectural features on the efficiency of a given program and of programs in general; and to understand the process of computer design.
Assessment:	Project work during semester, expected to take about 36 hours (25%); and a 3-hour end-of-semester written examination (75%). To pass the subject, students must obtain at least 50% overall, 12.5/25 in project work, and 37.5/75 in the written examination.
Prescribed Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject students should: # be able to apply knowledge of basic science and engineering fundamentals # have an in-depth technical competence in at least one engineering discipline # be able to undertake problem identification, formulation and solution # be able to utilise a systems approach to design and operational performance

Notes:	Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.
Related Course(s):	Bachelor of Engineering (Computer Engineering) Bachelor of Engineering (Computer) and Bachelor of Arts Bachelor of Engineering (Computer) and Bachelor of Commerce Bachelor of Engineering (Computer) and Bachelor of Laws Bachelor of Engineering (Electrical Engineering) Bachelor of Engineering (EngineeringManagement) Computer Bachelor of Engineering (Mechatronics) and Bachelor of Computer Science Bachelor of Engineering (Software Engineering)
Related Majors/Minors/ Specialisations:	Computer Science Computer Science Major