

433-495 Advanced Topic in Computer Science

Credit Points:	12.50
Level:	4 (Undergraduate)
Dates & Locations:	This subject is not offered in 2009.
Time Commitment:	Total Time Commitment: Not available
Prerequisites:	Study at the third-year level in at least four of the following areas: artificial intelligence, computer design, database systems, graphics, interactive system design, networks and communications, operating systems, programming languages, software engineering, and theory of computation.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>
Subject Overview:	In this subject students study a particular area of computer science at an advanced level. This subject will be offered from time to time depending upon the availability of visiting researchers and academic staff and their particular areas of expertise.
Objectives:	On completion of this subject will have studied a particular area of computer science at an advanced level.
Assessment:	Project work during semester, expected to take about 36 hours (30%); and a 3-hour end-of-semester written examination (70%). To pass the subject, students must obtain at least 50% overall, 15/30 in project work, and 35/70 in the written examination.
Prescribed Texts:	None
Recommended Texts:	Information Not Available
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:	<p>On successful completion of this subject, students should:</p> <ul style="list-style-type: none"> # be aware of parallel architectures and computations; # have detailed knowledge of communication patterns and interconnection networks; # be able to analyze the complexity of parallel algorithms and the efficiency of a particular implementation; # be able to implement a parallel algorithm using a number of techniques; # be able to construct proofs using formal models of communication complexity and parallel computing; # gain experience with a real application; # be able to undertake problem identification, formulation and solution; # have a capacity for independent critical thought, rational inquiry and self-directed learning; and

	# have a profound respect for truth and intellectual integrity, and for the ethics of scholarship.
Notes:	Students may only enrol in this subject with the approval of the honours coordinator, and should note that it will only be offered when suitable teaching staff are available.
Related Course(s):	Bachelor of Computer Science (Honours) Bachelor of Engineering (Software Engineering)