

433-655 Distributed Algorithms

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 24 hours of lectures, 12 hours of tutorial/laboratory classes; Non-contact time commitment: 84 hours Total Time Commitment: Not available
Prerequisites:	433-652: Distributed Systems
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<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>
Coordinator:	Dr Egemen Tanin
Subject Overview:	Topics covered include: synchronous and asynchronous network algorithms that address resource allocation, communication, consensus among distributed processes, distributed data structures, data consistency, deadlock detection, leader election, and global snapshots issues in distributed systems.
Objectives:	On successful completion, students should : <ul style="list-style-type: none"> # have developed an understanding of distributed algorithm design; # be able to implement and analyse distributed algorithms; # 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.
Assessment:	Assignments on devising, analysing, and applying algorithms to solve real world problems during semester (40%) and a 3-hour written examination (60%). All components must be completed satisfactorily to pass the subject.
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: <ul style="list-style-type: none"> # be able to undertake problem identification, formulation and solution.
Related Course(s):	Master of Engineering in Distributed Computing

Master of Information Technology