

COMP90020 Distributed Algorithms

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - 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:	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/
Coordinator:	Dr Egemen Tanin
Contact:	Melbourne School of Engineering Office Building 173, Grattan Street The University of Melbourne VIC 3010 Australia General telephone enquiries + 61 3 8344 6703 + 61 3 8344 6507 Facsimiles + 61 3 9349 2182 + 61 3 8344 7707 Email eng-info@unimelb.edu.au (mailto:eng-info@unimelb.edu.au)
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 : # 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
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"># 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
Related Course(s):	Bachelor of Computer Science (Honours) Master of Engineering in Distributed Computing Master of Software Systems Engineering