COMP90015 Distributed Systems

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2014, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours, comprising of two hours of lectures and one hour of tutorial/laboratory classes per week Total Time Commitment: 200 hours

Prerequisites:

Subject	Study Period Commencement:	Credit Points
COMP90041 Programming and Software Development	Semester 1, Semester 2	12.50
COMP90038 Algorithms and Complexity	Semester 1, Semester 2	12.50
COMP90007 Internet Technologies	Semester 1, Semester 2	12.50

OR

Equivalent subjects

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
Contact:	Email: **aharwood@unimelb.edu.au (mailto:aharwood@unimelb.edu.au)**
Subject Overview:	**AIMS** The subject aims to provide an understanding of the principles on which the Web, Email, DNS and other interesting distributed systems are based. Questions concerning distributed architecture, concepts and design; and how these meet the demands of contemporary distributed applications will be addressed. **INDICATIVE CONTENT** Topics covered include: characterization of distributed systems, system models, interprocess communication, remote invocation, indirect communication, operating system support, distributed objects and components, web services, security, distributed file systems, and name services.
Learning Outcomes:	**INTENDED LEARNING OUTCOMES (ILO)**

	On completion of this subject the student is expected to:
	1 Have an understanding of the principles and paradigms underlying distributed software systems
	2 Obtain experience developing distributed applications
Assessment:	Intended Learning Outcomes (ILOs) 1 and 2 are addressed by extensive Project work of approximately 60 hours during semester (40%), which reinforce lecture content and develop programming and writing skills. Project work is assessed in stages throughout the semester, with half of the work typically due in Week 8 and the remaining work due in Week 12. ILO 1 is further addressed by a 3-hour written examination (60%) Hurdle requirement: To pass the subject, students must obtain at least: 50% overall 20/40 in the Project work 30/60 in the end-of-semester written examination
Prescribed Texts:	None
Recommended Texts:	TBA
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 have the following skills:
	# Ability to undertake problem identification, formulation and solution
	# Capacity for independent critical thought, rational inquiry and self-directed learning
	# Profound respect for truth and intellectual integrity, and for the ethics of scholarship
Notes:	**LEARNING AND TEACHING METHODS**
	The subject will be delivered through a combination of lectures, tutorials and project work. The project work involves developing a distributed application and writing a report.
	INDICATIVE KEY LEARNING RESOURCES
	Students will have access to lecture notes and lecture slides. The subject LMS site also contains links to recommended literature and current survey papers of distributed system principles and paradigms.
	CAREERS / INDUSTRY LINKS
	The subject provides the fundamentals in distributed systems that support a career in areas such as IT System Engineer, Enterprise Architect, Analytics, Software Developer, Systems Administration, and Network Engineer.
Related Course(s):	Master of Engineering in Distributed Computing Master of Information Technology Master of Information Technology Master of Information Technology Master of Philosophy - Engineering Master of Science (Computer Science) Master of Software Systems Engineering Ph.D.- Engineering
Related Majors/Minors/ Specialisations:	Computer Science Master of Engineering (Software with Business) Master of Engineering (Software)