COMP30017 Operating Systems and Network Services

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 24 one-hour lectures (two per week) and 12 one hours workshops (one per week) Total Time Commitment: 120 hours
Prerequisites:	**One of the following:** Subject: COMP20003 Algorithms and Data Structures — Study Period Commencement: Semester 1, Semester 2 — Credit Points: 12.50 Subject: COMP90038 Algorithms and Complexity — Study Period Commencement: Semester 1, Semester 2 — Credit Points: 12.50
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 Michael Kirley
Contact:	Associate Professor Tim Baldwin email: **tbaldwin@unimelb.edu.au (mailto:tbaldwin@unimelb.edu.au)**
Subject Overview:	Many services reside on servers accessed over the Internet, with the user's own computer being used only to provide an interface. Examples include search engines and social networking sites. This subject introduces students to writing such applications. Topics covered include: introduction to networks, and to some simple protocols; operating systems principles, including interrupts, the user/kernel distinction, virtual memory and security; how to use an operating system, including how to create, manage and communicate between processes; how to write simple server programs, including server programming models, web services, concurrency, and distributed systems.
Objectives:	On completion of this subject, students should be able to: # Demonstrate their knowledge of operating system and networking technologies from the programmer's perspective # Apply this knowledge to select appropriate tools and technologies for a problem at hand; and # Build simple server applications
Assessment:	Project work during semester, expected to take about 36 hours (30%) A mid-semester test (10%) And a 2-hour end-of-semester written examination (60%) To pass the subject, students

	must obtain at least: 50% overall 15/30 in project work And 35/70 in the mid-semester test and end-of-semester written examination combined
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2012/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2012/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject students should have developed the following generic skills: # Ability to apply knowledge of basic science and engineering fundamenta # Capacity for independent critical thought, rational inquiry and self-directed learning # Ability to undertake problem identification, formulation and solution # Ability to function effectively as an individual and in multi-disciplinary and multi-cultural teams, with the capacity to be a leader or manager as well as an effective team member.
Related Course(s):	Bachelor of Engineering (Computer Engineering) Bachelor of Engineering (Software Engineering) Bachelor of Engineering (Software Engineering)/Bachelor of Science Master of Engineering in Distributed Computing
Related Majors/Minors/ Specialisations:	B-ENG Software Engineering stream Computer Science Computer Science Master of Engineering (Mechatronics) Master of Engineering (Software) Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED. Software Systems