ELEN90006 Internet Engineering

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: one 3- hours lecture per week Total Time Commitment: Estimated 120 hours.
Prerequisites:	4-year Electrical Engineering degree or equivalent.
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 Robert Warfield
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:	This subject explores current and emerging Internet technology, and the delivery of solutions to customers.Beginning with the basics of packet transmission and switching, the Internet Protocol Suite is studied in depth – both current practice and emerging technologies. The operation of applications over the Internet is explored, including Domain Name System, World Wide Web, file transfer, email, video, voice, and ecommerce. The ability of current (and likely future) Internet technologies to deliver satisfactory customer solutions with respect to Management, performance, and Security is investigated. Design of services to meet Performance and Security requirements is included, as well as management to address operational problems
Objectives:	On Completion of this subject students should be able to: # Prepare themselves for a responsible position in industry. # Develop comprehensive understanding of Internet technologies and how they can be applied to meet customer requirements.
Assessment:	Assessment will be based on a Project (team work) and a Final Examination. Team Seminar on Project: 5% (group mark);Written Report on Project. Maximum 1500 words per student: 25% (group mark);Formally supervised, 3-hour written examination at end of semester: 70% (end of semester). This final exam is a hurdle. A student must pass the exam to pass the subject.

Prescribed Texts:	Due to the breadth of the subject and rapid developments, no single text is prescribed. Internet resources will be recommended for each topic.
Recommended Texts:	Douglas E. Comer and Ralph Droms,"Computer Networksand Internets", Prentice Hall Behrouz A. Forouzan, "TCP/IP Protocol Suite"
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, the students should have developed: # Knowledge of the application of mathematical and computing techniques to the solution of engineering problems; # Problem-solving abilities; # Understanding of the value of their knowledge to prospective employers; # The ability to pursue lifelong learning goals; # Skills to manage competing demands on time.
Related Course(s):	Master of Software Systems Engineering Master of Telecommunications Engineering Master of Telecommunications Engineering Postgraduate Certificate in Engineering