

431-627 Signaling and Network Management

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus. Semester 2, - Taught on campus. On Campus.
Time Commitment:	Contact Hours: Thirty-six hours. Total Time Commitment: Estimated total time commitment of 120 hours.
Prerequisites:	4-year Electrical Engineering degree or equivalent.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><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></p>
Subject Overview:	<p>This unit will provide students with a practical understanding of the Telecommunication Management Network (TMN) framework, modern signalling systems (SS7 and SIP), and the network numbering and addressing schemes that underpin management of, and signalling for, telecommunications services.</p> <p>This unit will educate students on the principles of management of modern telecommunications networks and services, and the principles of access and network signalling in traditional and developing telecommunication networks.</p> <p>It will also provide a practical understanding of the Telecommunication Management Network (TMN) framework, the Telemanagement Forum standards on Operations of telecommunication networks, modern signalling systems (SS7, client-server IP (SIP) and peer-to-peer IP (Skype)) and network numbering and addressing schemes that underpin management of, and signalling for, telecommunication services.</p>
Assessment:	<ul style="list-style-type: none"> • Formally supervised written examination - 3 hours 70% (end of semester). A student must pass the exam to pass the subject. • Written class test – 1 hour 30% (mid semester);
Prescribed Texts:	<p>Textbook: • None Additional Reading: • John G. Van Bosse, "Signalling in Telecommunication Networks", (Wiley Series in Telecommunications and Signal Processing), John Wiley & Sons, ISBN 047 1573779. • Uyless D. Black, "Isdn & Ss7: Architectures for Digital Signalling Networks", (Prentice Hall Series in Advanced Communications Technologies), Prentice Hall, ISBN 0132591936. • Travis Russell, "Signalling System 7" (Telecommunications), 2nd edition, McGraw Hill, ISBN 0070580324. • Igor Faynberg (Editor), "Intelligent Network Standards: Their Application to Services, (McGraw Hill Series on Telecommunications), McGraw Hill, ISBN 0070214220. • Haojin Wang "Telecommunications Network Management" McGraw Hill Telecommunications • William Stallings, "SNMP, SNMPv2, SNMPv3 and RMON 1 and 2" 3rd Edition 1999 Addison Wesley • Gonzalo Camarillo "SIP Demystified" 2002, ISBN: 0071373403 McGraw-Hill • Henry Sinnreich and Alan B. Johnston, "Internet Communications using SIP", Wiley</p>

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:	<p>On completion of this subject, the students should have developed the following basic skills:</p> <ul style="list-style-type: none">• an advanced understanding of the changing knowledge base in the specialist area;• well-developed problem-solving abilities in the discipline area, characterised by flexibility of approach;• an appreciation of the importance of customer requirements in delivering a valuable solution;• an advanced understanding of the international context and sensitivities of the specialist area.
Related Course(s):	Master of Telecommunications Engineering