431-636 Wireless Multimedia Networks

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	This subject is not offered in 2008. 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:	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
Subject Overview:	This subject covers all of the major wireless systems in use around the world today. The following radio systems will be covered: • GSM , GPRS and EDGE • cdmaOne, • 3G systems: WCDMA, cdma2000 and TD-SCDMA • Bluetooth • IEEE802.11 and IEEE802.16 Also covered will be: • WAP • GSM, WCDMA, cdmaOne and IEEE802.11 security • The GSM, GPRS, WCDMA and cdmaOne core networks • 4G systems On completion of this subject, the students will possess the knowledge required to understand the fundamentals all of the major cellular and wireless multimedia systems in use globally today: • Understand the key characteristics of the major wireless systems in use today and their advantages and disadvantages • Understand how modern wireless networks are implemented in the real world • Be able to understand talk knowledgably about practical wireless systems to other professionals working in that field
Assessment:	• Formally supervised written examination - 3 hours 50% (end of semester). This final exam is a hurdle. A student must pass the exam to pass the subject • Written class test – 1 hour 20% (mid semester) • Assignment – a 4,000 word assignment must be submitted at the end of the course.
Prescribed Texts:	Notes will be given out during class or posted on the course web page.
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: • Be able to compare other wireless technologies and be able to identify the strengths and weaknesses of different systems

	• Possess practical skills in network implementation that would be of immediate benefit to an employer • Be able to understand the practical, rather than theoretical / mathematical, basis on which networks are built • Apply critical and creative thinking, with an aptitude for continued self-directed learning; • Possess a sense of intellectual curiosity • capacity to confront unfamiliar problems • Be able to research unfamiliar topics from a variety of information sources.
Related Course(s):	Master of Telecommunications Engineering