

364AA Master of Telecommunications Engineering

Year and Campus:	2011 - Parkville											
CRICOS Code:	027900G											
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees											
Level:	Graduate/Postgraduate											
Duration & Credit Points:	100 credit points taken over 12 months full time.											
Coordinator:	Dept of Electrical & Electronic Engineering Program Director Assoc Prof Bill Shieh											
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Course Overview:	The Master of Telecommunications Engineering is designed for graduates with a high standard degree in electrical and electronic engineering or equivalent, who wish to develop their knowledge and skills base in the design and management of telecommunications networks.											
Objectives:	<p>This program aims to provide students with the technological and competitive skills needed in the design and engineering of modern telecommunications systems and networks. It will provide students with opportunities to:</p> <ul style="list-style-type: none"> # Develop a fundamental understanding of the principles of telecommunications engineering # Develop an understanding of the basic principles underlying the planning and management of telecommunications networks; # Acquire a broad knowledge of telecommunications networks # Obtain the mathematical and computational skills necessary for the solution of theoretical and practical problems # Develop high-level analytical, problem-solving and design skills applicable to telecommunications engineering # Develop high-level oral and written communication skills specific to the needs of the telecommunications industry. # Apply their knowledge to design, investigate and solve specific problems in the area of telecommunications and their applications through directed studies or projects in the form of internships with industry or research providers 											
Course Structure & Available Subjects:	<p>The total of 100 credit points are taken through eight elective subjects each worth 12.5 credit points.</p> <p>Up to 8 subjects could be selected from the Master of Telecommunications Engineering Electives, and</p> <p>up to 2 recommended subjects from other master level programs below</p> <p>Master of Nanoelectronic Engineering</p> <ul style="list-style-type: none"> # ELEN90050 RF Systems and Architecture (../view/2011/ELEN90050) <p>Master of Engineering in Distributed Computing</p> <ul style="list-style-type: none"> # COMP90017 Sensor Networks and Applications (../view/2011/COMP90017) # COMP90024 Cluster and Grid Computing (../view/2011/COMP90024) # SWEN90003 IT Project management (../view/2011/SWEN90003) 											
Subject Options:	<p>Master of Telecommunications Engineering Electives :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Subject</th> <th style="width: 20%;">Study Period Commencement:</th> <th style="width: 20%;">Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ELEN90003 Network Design and Optimisation</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ELEN90006 Internet Engineering</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ELEN90003 Network Design and Optimisation	Semester 2	12.50	ELEN90006 Internet Engineering	Semester 1	12.50
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ELEN90003 Network Design and Optimisation	Semester 2	12.50										
ELEN90006 Internet Engineering	Semester 1	12.50										

	ELEN90007 Wireless Communication Systems	Semester 2	12.50
	ELEN90008 Signalling and Network Management	Semester 2	12.50
	ELEN90011 Directed Studies	Semester 1, Semester 2	12.50
	ELEN90013 Mobile and Wireless Networks and Design	Semester 1	12.50
	ELEN90014 Multimedia Content Delivery	Semester 1	12.50
	ELEN90016 Broadband Access Networking and Design	Semester 2	12.50
	ELEN90034 Optical Networking and Design	Semester 2	12.50
	ELEN90059 Lightwave Systems	Semester 1	12.50
	ELEN90051 Advanced Communication Systems	Semester 1	12.50
	ELEN90068 Business of Telecommunications	Semester 1	12.50
Entry Requirements:	<p>Entry Requirements A four-year electrical engineering degree with a minimum of third-class honours, or equivalent .</p> <p>Language Requirements International students and students whose prior qualifications are from a university overseas where English is not the official language of instruction and examination need to supply proof of academic English language competency. Proof acceptable to the University includes: Original evidence of an English Language test score at a sitting within the last 24 months of either - TOEFL - at least 577 and a TWE of at least 4.5 (paper based) or a TOEFL of at least 233 with an Essay Rating of at least 4.5 (computer based) or IELTS - at least 6.5. with no band less than 6 Entry under a slightly lower Engineering alternative* English Language entry requirement is available as follows: TOEFL - at least 550, with a TWE of 4 or the computer based TOEFL of at least 213 with an Essay Rating Score of at least 4 and agreeing in writing to undertake and pass an ESL subject in the first semester of study at the University of Melbourne or IELTS - at least 6 and agreeing in writing to undertake and pass an ESL subject in the first semester of study at the University of Melbourne. The Melbourne School of Engineering's English Language alternative may affect the duration and cost of your course.</p>		
Core Participation Requirements:	<p>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/</p>		
Graduate Attributes:	<p>The Melbourne School of Engineering has mapped the University of Melbourne graduate attributes with Engineers Australia graduate attributes and Melbourne School of Engineering graduate attributes.</p>		
Generic Skills:	<p>On completion of this subject, the students should have developed:</p> <ul style="list-style-type: none"> # Problem solving and analytical skills, # Critical and creative thinking, with an aptitude for continued self-directed learning; # Sense of intellectual curiosity; # Ability to interpret data and research results; # Ability to learn in a range of ways, including through information and communication technologies; # Capacity to confront unfamiliar problems; 		

	<ul style="list-style-type: none"># Ability to evaluate and synthesise the research and professional literature;# Ability to develop models of practical applications and evaluate their performance by rigorous analytical means;
Notes:	Equipment Required by Students Students will be required to supply their own computers (e.g. PCs or Macs) and their own software (e.g. PC standard O/S and software).