

364AA Master of Telecommunications Engineering

Year and Campus:	2013 - 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. This course is available as full or part time.
Coordinator:	Prof Bill Shieh
Contact:	<p>Melbourne School of Engineering Ground Floor, Old Engineering (Building 173)</p> <p>Current Students: Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au) Phone: 13 MELB (13 6352) +61 3 9035 5511</p> <p>Prospective Students: Email: eng-info@unimelb.edu.au (mailto:eng-info@unimelb.edu.au) Phone: + 61 3 8344 6944</p>
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/current/ELEN90050) <p>Master of Engineering in Distributed Computing</p> <ul style="list-style-type: none"> # COMP90017 Sensor Networks and Applications (../view/current/COMP90017) # COMP90024 Cluster and Grid Computing (../view/current/COMP90024) # SWEN90003 IT Project management (../view/current/SWEN90013)

Subject Options:	<p>Master of Telecommunications Engineering Electives :</p> <table border="1" data-bbox="389 264 1485 1039"> <thead> <tr> <th data-bbox="389 264 1075 353">Subject</th> <th data-bbox="1075 264 1350 353">Study Period Commencement:</th> <th data-bbox="1350 264 1485 353">Credit Points:</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 353 1075 409">ELEN90003 Network Design and Optimisation</td> <td data-bbox="1075 353 1350 409">Not offered 2013</td> <td data-bbox="1350 353 1485 409">12.50</td> </tr> <tr> <td data-bbox="389 409 1075 465">ELEN90006 Internet Engineering</td> <td data-bbox="1075 409 1350 465">Not offered 2013</td> <td data-bbox="1350 409 1485 465">12.50</td> </tr> <tr> <td data-bbox="389 465 1075 521">ELEN90007 Wireless Communication Systems</td> <td data-bbox="1075 465 1350 521">Not offered 2013</td> <td data-bbox="1350 465 1485 521">12.50</td> </tr> <tr> <td data-bbox="389 521 1075 577">ELEN90008 Signalling and Network Management</td> <td data-bbox="1075 521 1350 577">Not offered 2013</td> <td data-bbox="1350 521 1485 577">12.50</td> </tr> <tr> <td data-bbox="389 577 1075 633">ELEN90011 Directed Studies</td> <td data-bbox="1075 577 1350 633">Not offered 2013</td> <td data-bbox="1350 577 1485 633">12.50</td> </tr> <tr> <td data-bbox="389 633 1075 689">ELEN90013 Mobile and Wireless Networks and Design</td> <td data-bbox="1075 633 1350 689">Not offered 2013</td> <td data-bbox="1350 633 1485 689">12.50</td> </tr> <tr> <td data-bbox="389 689 1075 745">ELEN90014 Multimedia Content Delivery</td> <td data-bbox="1075 689 1350 745">Semester 1</td> <td data-bbox="1350 689 1485 745">12.50</td> </tr> <tr> <td data-bbox="389 745 1075 801">ELEN90016 Broadband Access Networking and Design</td> <td data-bbox="1075 745 1350 801">Not offered 2013</td> <td data-bbox="1350 745 1485 801">12.50</td> </tr> <tr> <td data-bbox="389 801 1075 857">ELEN90034 Optical Networking and Design</td> <td data-bbox="1075 801 1350 857">Not offered 2013</td> <td data-bbox="1350 801 1485 857">12.50</td> </tr> <tr> <td data-bbox="389 857 1075 913">ELEN90059 Lightwave Systems</td> <td data-bbox="1075 857 1350 913">Not offered 2013</td> <td data-bbox="1350 857 1485 913">12.50</td> </tr> <tr> <td data-bbox="389 913 1075 969">ELEN90051 Advanced Communication Systems</td> <td data-bbox="1075 913 1350 969">Not offered 2013</td> <td data-bbox="1350 913 1485 969">12.50</td> </tr> <tr> <td data-bbox="389 969 1075 1039">ELEN90068 Business of Telecommunications</td> <td data-bbox="1075 969 1350 1039">Not offered 2013</td> <td data-bbox="1350 969 1485 1039">12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ELEN90003 Network Design and Optimisation	Not offered 2013	12.50	ELEN90006 Internet Engineering	Not offered 2013	12.50	ELEN90007 Wireless Communication Systems	Not offered 2013	12.50	ELEN90008 Signalling and Network Management	Not offered 2013	12.50	ELEN90011 Directed Studies	Not offered 2013	12.50	ELEN90013 Mobile and Wireless Networks and Design	Not offered 2013	12.50	ELEN90014 Multimedia Content Delivery	Semester 1	12.50	ELEN90016 Broadband Access Networking and Design	Not offered 2013	12.50	ELEN90034 Optical Networking and Design	Not offered 2013	12.50	ELEN90059 Lightwave Systems	Not offered 2013	12.50	ELEN90051 Advanced Communication Systems	Not offered 2013	12.50	ELEN90068 Business of Telecommunications	Not offered 2013	12.50
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Entry Requirements:	<p>Entry Requirements A four-year electrical engineering degree with a minimum of third-class honours, or equivalent . Language Requirements All students studying at the University of Melbourne must satisfy the University's English language entry requirements in accordance with Regulation 11.1.R3 Principles of Selection for Entry to Courses Academic Board Resolutions on Selection: http://www.futurestudents.unimelb.edu.au/admissions/entry-requirements/language-requirements (http://www.futurestudents.unimelb.edu.au/admissions/entry-requirements/language-requirements) For graduate students the University's English language entry requirements are set out at: http://www.futurestudents.unimelb.edu.au/admissions/entry-requirements/language-requirements/graduate-toefl-ielts (http://www.futurestudents.unimelb.edu.au/admissions/entry-requirements/language-requirements/graduate-toefl-ielts) 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>																																							

	http://www.eng.unimelb.edu.au/study/english-requirements.html (http://www.eng.unimelb.edu.au/study/english-requirements.html)
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/
Graduate Attributes:	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.
Generic Skills:	<p>On completion of this course, 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; # 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:	<p>Equipment Required by Students</p> <p>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).</p>