

364AA Master of Telecommunications Engineering

Year and Campus:	2016 - 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 Email: shiehw@unimelb.edu.au
Contact:	<p>Melbourne School of Engineering</p> <p>Currently enrolled students:</p> <ul style="list-style-type: none"> # General information: https://ask.unimelb.edu.au (https://ask.unimelb.edu.au/) # Contact Stop 1 (http://students.unimelb.edu.au/stop1) <p>Future Students:</p> <ul style="list-style-type: none"> # Further information: Master of Telecommunications Engineering (http://www.eng.unimelb.edu.au/study/degrees/master-telecommunications-engineering/overview) # Enquiry: Email (http://www.eng.unimelb.edu.au/study/degrees/master-telecommunications-engineering/overview)
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.
Learning Outcomes:	<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"> # Acquire a body of knowledge including recent developments in the area of telecommunications networks; # 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; # Obtain the mathematical and computational skills necessary for the solution of theoretical and practical problems; # Demonstrate creativity and initiative in application of analytical, problem-solving and design skills to telecommunications engineering; # Develop an ability to successfully work independently with personal accountability in solving problems in 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> <ul style="list-style-type: none"> # Up to 8 subjects can be selected from the Master of Telecommunications Engineering (MTE) Electives AND <ul style="list-style-type: none"> # At least 2 subjects from the following MTE subjects must be selected: <p>ELEN90011, ELEN90003, ELEN90013, ELEN90016, ELEN90034, ELEN90014, and ELEN90008</p> <ul style="list-style-type: none"> # Up to 2 subjects can be selected from other master's level programs in the Melbourne School of Engineering on approval by the subject coordinator and the MTE course coordinator; and

Subject Options:	<p>Master of Telecommunications Engineering Electives :</p> <table border="1" data-bbox="387 327 1485 1104"> <thead> <tr> <th data-bbox="387 327 1074 416">Subject</th> <th data-bbox="1074 327 1348 416">Study Period Commencement:</th> <th data-bbox="1348 327 1485 416">Credit Points:</th> </tr> </thead> <tbody> <tr> <td data-bbox="387 416 1074 472">ELEN90003 Network Design and Optimisation</td> <td data-bbox="1074 416 1348 472">Semester 2</td> <td data-bbox="1348 416 1485 472">12.50</td> </tr> <tr> <td data-bbox="387 472 1074 528">ELEN90006 Internet Engineering</td> <td data-bbox="1074 472 1348 528">Semester 1</td> <td data-bbox="1348 472 1485 528">12.50</td> </tr> <tr> <td data-bbox="387 528 1074 584">ELEN90007 Wireless Communication Systems</td> <td data-bbox="1074 528 1348 584">Semester 2</td> <td data-bbox="1348 528 1485 584">12.50</td> </tr> <tr> <td data-bbox="387 584 1074 640">ELEN90008 Signalling and Network Management</td> <td data-bbox="1074 584 1348 640">Semester 2</td> <td data-bbox="1348 584 1485 640">12.50</td> </tr> <tr> <td data-bbox="387 640 1074 696">ELEN90011 Directed Studies</td> <td data-bbox="1074 640 1348 696">Semester 1, Semester 2</td> <td data-bbox="1348 640 1485 696">12.50</td> </tr> <tr> <td data-bbox="387 696 1074 752">ELEN90013 Mobile and Wireless Networks and Design</td> <td data-bbox="1074 696 1348 752">Semester 1</td> <td data-bbox="1348 696 1485 752">12.50</td> </tr> <tr> <td data-bbox="387 752 1074 808">ELEN90014 Multimedia Content Delivery</td> <td data-bbox="1074 752 1348 808">Semester 1</td> <td data-bbox="1348 752 1485 808">12.50</td> </tr> <tr> <td data-bbox="387 808 1074 864">ELEN90016 Broadband Access Networking and Design</td> <td data-bbox="1074 808 1348 864">Semester 2</td> <td data-bbox="1348 808 1485 864">12.50</td> </tr> <tr> <td data-bbox="387 864 1074 920">ELEN90034 Optical Networking and Design</td> <td data-bbox="1074 864 1348 920">Semester 2</td> <td data-bbox="1348 864 1485 920">12.50</td> </tr> <tr> <td data-bbox="387 920 1074 976">ELEN90059 Lightwave Systems</td> <td data-bbox="1074 920 1348 976">Semester 1</td> <td data-bbox="1348 920 1485 976">12.50</td> </tr> <tr> <td data-bbox="387 976 1074 1032">ELEN90051 Advanced Communication Systems</td> <td data-bbox="1074 976 1348 1032">Semester 1</td> <td data-bbox="1348 976 1485 1032">12.50</td> </tr> <tr> <td data-bbox="387 1032 1074 1104">ELEN90068 Business of Telecommunications</td> <td data-bbox="1074 1032 1348 1104">Semester 1</td> <td data-bbox="1348 1032 1485 1104">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	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
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Entry Requirements:	<p>1. In order to be considered for entry, applicants must have completed:</p> <ul style="list-style-type: none"> • either <ul style="list-style-type: none"> – a four year electrical, communications, computer or information engineering degree with a weighted average mark of at least H3 (65%), or equivalent, or – an undergraduate degree in an appropriate discipline with a weighted average mark of at least H3 (65%), or equivalent, and a graduate diploma in telecommunications with a weighted average mark of at least H3 (65%), or equivalent, or – an undergraduate degree in an appropriate discipline with a weighted average mark of at least H3 (65%), or equivalent, and a graduate certificate in telecommunications with a weighted average mark of at least H3 (65%), or equivalent, and one year of documented, relevant work experience. <p>Meeting these requirements does not guarantee selection.</p> <p>2. In ranking applications, the Selection Committee will consider:</p> <ul style="list-style-type: none"> • prior academic performance; and where relevant • the professional experience. <p>3. The Selection Committee may seek further information to clarify any aspect of an application in accordance with the Academic Board rules (http://about.unimelb.edu.au/academicboard/resolutions) on the use of selection instruments.</p> <p>4. Applicants are required to satisfy the university's English language requirements for postgraduate courses. For those applicants seeking to meet these requirements by one of the standard tests approved by the Academic Board, performance band 6.5 (http://about.unimelb.edu.au/academicboard/resolutions) is required.</p> <p>For more information on meeting the University's English language requirements, see: http://futurestudents.unimelb.edu.au/info/international/english_and_foundation_programs (http://futurestudents.unimelb.edu.au/info/international/english_and_foundation_programs)</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</p>																																							

	support scheme can be found at the Student Equity and Disability Support website: http://www.services.unimelb.edu.au/disability/
Graduate Attributes:	The Melbourne School of Engineering closely maps subject level attributes and knowledge to align with the Australian Qualifications Framework (AQF), whilst also aligning with Attributes of the University of Melbourne Graduate, Engineers Australia competencies and its own School 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>