Master of Engineering (Electrical)

Year and Campus:	2010
Coordinator:	Associate Professor Michael Cantoni and Professor Jamie Evans
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Overview:	Electrical engineers play a key role in the design, implementation and management of systems that exploit electrical phenomena to meet practical needs. These include systems for the distribution of power, telecommunications and information processing, on both very large and very small scales. Graduates are sought after for their strong analytical skills and they find employment in a variety of industries in roles ranging from research-and-development to project management and finance.
Objectives:	To produce graduates who are both skilled in electrical engineering principles and have the ability to apply them to complex, open-ended engineering tasks and problems.
Structure & Available Subjects:	The Master of Engineering (Electrical) consists of 300 points of study, typically across six semesters. This includes: # 100 points of foundation study tailored to individual students who enter from non-Engineering backgrounds; and # 200 points of mainly engineering discipline specific study at the level of depth required to practice as a professional engineer upon graduation, including a 25-point capstone project completed in the final year of study. From 2011, students entering with appropriate engineering background may be granted up to 150 point of credit. For example, students entering from the University of Melbourne new generation Bachelor of Science with an 'Engineering Systems' major will be granted 100 points of credit for the foundation year. Credit will also be granted to students who have completed a specified breadth sequence in the new generation Bachelor of Commerce or appropriate electives as part of any major in the new generation Bachelor of Science. Students entering from another institution may also be awarded credit in this way. As the Master of Engineering commences in 2010 only the first year of the structure and available subjects are shown. For further information about structures and subjects see: **http://www.eng.unimelb.edu.au/Postgrad/MEng/me_electrical.html (http://www.eng.unimelb.edu.au/Postgrad/MEng/me_electrical.html)**
Subject Options:	Core and elective requirements in the Master of Engineering (Electrical) Students must complete 100 credit points (eight subjects) of core subjects in the first year of the Master of Engineering (Electrical). **First year core subjects in the Master of Engineering (Electrical) for students commencing March (Semester 1) 2010** Students who commence the Master of Engineering (Electrical) in January (Summer/Semester 1) 2010, must select the following core subjects in the first year of the Master of Engineering (Electrical). Students commencing the Master of Engineering in Summer/Semester 1, 2010 will need to select 431-227 as a Summer subject

Subject	Study Period Commencement:	Credit Points:
ELEN20005 Foundations of Electrical Networks	January, Semester 2	12.50
ELEN30009 Electrical Network Analysis and Design	Semester 1	12.50

ELEN30010 Digital System Design	Semester 1	12.50
ENGR90021 Engineering Communication	Semester 1, Semester 2	12.50
MAST20029 Engineering Mathematics	Summer Term, Semester 1, Semester 2	12.50
ELEN30011 Electrical Device Modelling	Semester 2	12.50
ELEN30012 Signals and Systems	Semester 2	12.50
ELEN30013 Electronic System Implementation	Semester 2	12.50
COMP20005 Engineering Computation	Semester 1, Semester 2	12.50

First year core subjects in the Master of Engineering (Electrical) for students commencing July (Semester 2) 2010

Students who commence the Master of Engineering (Electrical) in July (Semester 2) 2010, must select the following core subjects in the first year of the Master of Engineering (Electrical)

Subject	Study Period Commencement:	Credit Points:
ELEN20005 Foundations of Electrical Networks	January, Semester 2	12.50
COMP20005 Engineering Computation	Semester 1, Semester 2	12.50
ENGR90021 Engineering Communication	Semester 1, Semester 2	12.50
MAST20029 Engineering Mathematics	Summer Term, Semester 1, Semester 2	12.50

Links to further information:	http://www.eng.unimelb.edu.au/Postgrad/MEng/me_electrical.html
Notes:	None
Related Course(s):	Master of Engineering