

Electrical Systems

Year and Campus:	2011																	
Coordinator:	Dr David Grayden Department of Electrical and Electronic Engineering																	
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Overview:	<p>Completing the Electrical Systems major will enable students to rigorously integrate the mathematics of signals, systems and information with the science of electrical phenomena in the formulation and solution of problems in areas such as telecommunications, monitoring and automation, energy distribution, and digital computing. We aim to develop: scientific understanding of electrical phenomena as a basis for mathematical modelling and abstraction in analysis and design; problem-solving and design skills; the ability to construct simulations and laboratory experiments; and good communication skills. The major opens pathways that lead to accredited professional careers in electrical engineering (through the Masters of Engineering), as well as careers in applied mathematics, applied science, teaching, management and finance.</p>																	
Objectives:	The objective of the electrical systems major is to contribute to the academic preparation of graduates who embody the University of Melbourne graduate attributes, as well as additional attributes more specific to the Bachelor of Science.																	
Structure & Available Subjects:	Completion of 50 points of study at Level 3.																	
Subject Options:	All four of:																	
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ELEN30011 Electrical Device Modelling</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ELEN30009 Electrical Network Analysis and Design</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>ELEN30012 Signals and Systems</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ELEN30010 Digital System Design</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ELEN30011 Electrical Device Modelling	Semester 2	12.50	ELEN30009 Electrical Network Analysis and Design	Semester 1	12.50	ELEN30012 Signals and Systems	Semester 2	12.50	ELEN30010 Digital System Design	Semester 1	12.50		
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Related Course(s):	Bachelor of Science																	