

ELEN90044 Electromagnetic Compatibility

Credit Points:	12.50		
Level:	9 (Graduate/Postgraduate)		
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.		
Time Commitment:	Contact Hours: 1 two hour lecture per week Total Time Commitment: 120 hours		
Prerequisites:	prerequisites for this subject are		
	Subject	Study Period Commencement:	Credit Points:
	ELEN90043 Device Models	Semester 1	12.50
	ELEN90048 Passive Component Design & Simulation	Semester 1	12.50
Corequisites:	None		
Recommended Background Knowledge:	None		
Non Allowed Subjects:	None		
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/		
Coordinator:	Prof Stan Skafidas		
Contact:	Prof Stan Skafidas Email: skaf@unimelb.edu.au (mailto:skaf@unimelb.edu.au)		
Subject Overview:	A critical component of system design is the air interface to radiating the desired signal and suppressing undesirable signals from being radiated - electromagnetic compatibility. This subject will enable the students to calculate the radiation patterns of antennas, design efficient radiators and determine means of suppressing unwanted signals from being radiated.		
Objectives:	Upon successful completion of this subject students should be able to: <ul style="list-style-type: none"> # Explain the issues in electromagnetic compatibility, interference, antennas and radiation and regulatory standards governing these systems and devices; # Describe system and regulatory issues associated with the design and implementation of nano-electronic systems. 		
Assessment:	One, written examination (not exceeding three hours) at the end of semester, worth 70%; Continuous assessment of submitted project work (not exceeding 30 pages in total over the semester), worth 30%.		
Prescribed Texts:	TBA		
Breadth Options:	This subject is not available as a breadth subject.		
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees		
Generic Skills:	# Ability to apply knowledge of science and engineering fundamentals		

	<ul style="list-style-type: none"># Ability to undertake problem identification, formulation, and solution# Ability to utilise a systems approach to complex problems and to design and operational performance# Ability to build and test real world systems that meet industry specialisation and manufacturing standards# Capacity for lifelong learning and professional development
Related Course(s):	Master of Nanoelectronic Engineering