857EE Bachelor of Engineering (Electrical) and Bachelor of Science

Year and Campus:	2010
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	
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Course Overview:	**THE COURSE STRUCTURE BELOW ONLY APPLIES TO RE-ENROLLING STUDENTS WHO COMMENCED THEIR STUDIES PRIOR TO 2008** Students enrolled in the BE/BSc and the BE(IT)/BSc, planning to undertake a science major in computer science, may take this accelerated sequence of subjects in order to maximise their choice of computer or electrical engineering electives in their final two years of study.
Objectives:	Completing the Electrical Engineering degree 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.
Course Structure & Available Subjects:	-
Subject Options:	ThERE WILL BE NO FIRST TO THIRD YEAR ENTRY INTO THIS COURSE FROM 2010 Note: Students who commenced 3rd year in 2009 and have not completed (or who have failed) the third year subjects required in the Bachelor of Engineering degree please see a course adviser. --- **Accelerated program for a major in computer science in the BSc component of the Bachelor of Engineering** **Fourth year** CSSE 300-level subjects 87.5 Electrical engineering elective 12.5 **Fifth year** Subjects as for the final year of the single computer or electrical BE or BE (IT) program, including 25 points of non-technical electives. 100 points Students taking the combined course in computer science with computer engineering should note that they are required to enrol in 431-400 Project Work, to ensure breadth in the combined degree. --- **Accelerated program for a major in mathematics in the BSc component of the Bachelor of Engineering**

Fourth year
Science subjects 100

Fifth year

Year-long
431-400 Project Work 25

Semester 1
431-4xx Fourth year electrical engineering electives 25
Non-technical elective 12.5

Semester 2
431-4xx Fourth year electrical engineering electives 25
Non technical elective 12.5

Accelerated program for a major in physics in the BSc component of the Bachelor of Engineering

Fourth year

Science subjects 100

Fifth year

Year-long
431-400 Project Work 25

Semester 1
431-4xx Fourth year electrical engineering electives 25
Non-technical elective 12.5

Semester 2
431-4xx Fourth year electrical engineering electives 25
Non-technical elective 12.5

The Following third year subjects are available in 2010

Subject	Study Period Commencement:	Credit Points:
ELEN30001 Control 1 (Classical Control)	Semester 1	12.50
ELEN30002 Stochastic Signals and Systems	Semester 1	12.50
ELEN30005 Fields and Transmission Lines	Semester 1	12.50
ELEN30007 Electronic Circuit Design 2	Semester 1	12.50
ELEN30003 Communication Systems	Semester 2	12.50
ELEN30008 Signal Processing 1 (Fundamentals)	Semester 2	12.50
ELEN30011 Electrical Device Modelling	Semester 2	12.50
ELEN30013 Electronic System Implementation	Semester 2	12.50

400 Level Electrical engineering electives

Subject	Study Period Commencement:	Credit Points:
ELEN40003 Digital Communications	Semester 1	12.50
ELEN40004 Signal Processing 2	Semester 1	12.50
ELEN40005 Communication Networks	Semester 1	12.50
ELEN40006 Directed Study 4.1	Semester 1	12.50
ELEN40007 Control 2 (Advanced Control)	Semester 2	12.50
ELEN40008 Wireless Communication	Semester 2	12.50

	ELEN40009 RF, Microwave and Optoelectronic Systems	Semester 2	12.50
	ELEN40010 Digital Systems 4: High Speed Systems	Semester 2	12.50
	ELEN40013 Electronic Circuit Design 3	Semester 1	12.50
	ELEN40011 Directed Study 4.2	Semester 2	12.50

Entry Requirements:	There is no further entry into this combined course.
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/
Further Study:	On completion of a Bachelor of Engineering, students may choose to apply for candidature in a masters by research or PhD degree. They may also apply to undertake an a one year Advanced Masters coursework degree.
Graduate Attributes:	The Bachelor of Engineering is a professional degree. Graduates can obtain professional recognition by joining Engineers Australia who has accredited these programs.The Bachelor of Engineering also delivers on the University graduate attribute
Generic Skills:	An Engineering graduate has a unique skill set comprising a blend of technical, business and interpersonal skills. Upon completion of the Bachelor of Engineering at the University of Melbourne, students will have strong analytical skills, the ability to lead teams and projects and the creativity to look at problems in a way that provides innovative solutions. Our graduates are known for their high standards and professionalism, their understanding of global issues and their outstanding communication skills. For details, see “Objectives”.