355EE Bachelor of Engineering (Electrical Engineering)

Year and Campus:	2012
CRICOS Code:	003626G
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	400 credit points taken over 48 months
Coordinator:	Prof. Ampalavanapillai Nirmalathas
Contact:	Melbourne School of Engineering Ground Floor, Old Engineering (Building 173) Current Students: Email:**13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)** Phone: 13 MELB (13 6352) +61 3 9035 5511 Prospective Students: Email: **eng-info@unimelb.edu.au (mailto:eng-info@unimelb.edu.au)** Phone: + 61 3 8344 6944
Course Overview:	**THE COURSE STRUCTURE BELOW ONLY APPLIES TO RE-ENROLLING STUDENTS WHO COMMENCED THEIR STUDIES PRIOR TO 2008** The BE and BE(IT) courses in the School of Electrical Engineering and Computer Science offer three distinct streams of the BE degree: electrical engineering, computer engineering and software engineering. The three streams have most first-year subjects in common, and with the appropriate selection of subjects it is possible to defer the choice of stream until the commencement of second year, and in some cases, until the middle of second year. For students who commenced prior to 2008, each of the three streams may be taken in the combined degrees: BE/BA, BE(IT)/BA (with an arts major in any department in the Faculty of Arts); BE/BCom, BE(IT)/BCom (with a commerce major in any department in the Faculty of Business and Economics); BE/LLB, BE(IT)/LLB; and BE/BSc, BE(IT)/BSc (with a major in any department in the Faculty of Science, with the majority of students undertaking a major in computer science, physics or mathematics, however students in the software engineering stream of the BE or BE(IT) are not permitted to take a computer science major in the BSc). Computer science as a Science Faculty major may be combined with a BE in chemical, civil, environmental and mechanical engineering through the BE/BSc degree program. The single degree, Bachelor of Engineering (Electrical), requires the completion of 400 points usually over four years.
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:	There is no further entry into this course . Note:The single degree, Bachelor of Engineering (Electrical), requires the completion of 400 points usually over four years. Student who have not yet completed the requirements of the Bachelor of Engineering degree should see a course adviser.
Subject Options:	**Final Year Subjects**

Subject	Study Period Commencement:	Credit Points:
ELEN90067 Electrical Engineering Capstone Project	Year Long, Semester 1	25

At least four units from Final Year Electrical Engineering Electives (50 points in total)

At most two (25 points) free electives - these can be subjects offered from any department

In selecting electives, students are reminded that the Electrical Engineering degree completion requirements include a minimum of 25 points management or non-technical electives."

The selection of elective subjects may be restricted by timetable and pre-requisite requirements.

Final Year Electrical Engineering Electives

Subject	Study Period Commencement:	Credit Points:
ELEN90051 Advanced Communication Systems	Semester 1	12.50
ELEN90052 Advanced Signal Processing	Semester 1	12.50
ELEN90053 Electronic System Design	Semester 2	12.50
ELEN90059 Lightwave Systems	Semester 1	12.50
ELEN90060 Power System Analysis	Semester 1	12.50
ELEN90061 Communication Networks	Semester 2	12.50
ELEN90062 High Speed Electronics	Semester 2	12.50
ELEN90064 Advanced Control Systems	Semester 2	12.50
ELEN90007 Wireless Communication Systems	Semester 2	12.50

Entry Requirements:	There will be no further entry into this 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”.
Notes:	

	Pre-requisite requirements and not allowed subject/s should be checked before selecting any subject. When setting the timetable every effort will be made to avoid clashes between the times of classes associated with these sets of subjects. Students should be aware however, that if it proves to be impossible to achieve a timetable without clashes in these sets of subjects, the Faculty reserves the right to modify course structures in order to eliminate the conflicts. Students will be advised during the enrolment period of the semester if the recommended courses need to be varied. Where the courses include elective subjects these should be chosen so that timetable clashes are avoided. In particular, students in combined degrees should plan their courses so that the subjects chosen in the other faculty do not clash with those recommended for the engineering component.