

## 365EE Bachelor of Engineering (Electrical) and Bachelor of Laws

<b>Year and Campus:</b>	2010								
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>								
<b>Level:</b>	Undergraduate								
<b>Duration &amp; Credit Points:</b>									
<b>Coordinator:</b>	A/Prof Jamie Evans								
<b>Contact:</b>	<p>Melbourne School of Engineering          Building 173, Grattan Street          The University of Melbourne          VIC 3010 Australia          General telephone enquiries          + 61 3 8344 6703          + 61 3 8344 6507          Facsimiles          + 61 3 9349 2182          + 61 3 8344 7707          Email  <a href="mailto:eng-info@unimelb.edu.au">eng-info@unimelb.edu.au</a> (<a href="mailto:eng-info@unimelb.edu.au">mailto:eng-info@unimelb.edu.au</a>)</p>								
<b>Course Overview:</b>	<p><b>THE COURSE STRUCTURE BELOW ONLY APPLIES TO RE-ENROLLING STUDENTS WHO COMMENCED THEIR STUDIES PRIOR TO 2008</b></p> <p>The combined LLB/BE(IT) and LLB/BE course in computer, electrical or software engineering and law, must satisfy the following requirements:</p> <ul style="list-style-type: none"> <li># All requirements of the chosen stream of the BE(IT) or BE course must be satisfied, except that the requirement for physics is waived. For the software engineering stream the requirement for 431-202 Engineering Analysis B is also waived. However, students in the computer and electrical streams are strongly encouraged to complete 640-142 Physics B as an additional elective, as a number of the 300-level and 400-level elective subjects in electrical engineering require physics as a prerequisite. Students must complete a total of 300 engineering points. The remaining elective subjects to make up 400 points for the award of the engineering degree, including the non-technical requirements of the computer and electrical engineering streams, are credited from the law subjects undertaken.</li> <li># A total of 300 law points must be completed, including a number of compulsory subjects. Please refer to the Faculty of Law website for further information.</li> </ul> <p>Typical course plans for the three engineering streams of this combined degree appear below.</p>								
<b>Objectives:</b>	<p>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.</p>								
<b>Course Structure &amp; Available Subjects:</b>	see course overview								
<b>Subject Options:</b>	<p>Note: Students who commenced third 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.</p> <p><b>Fourth year</b>  <b>Semester 1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Subject</th> <th style="width: 20%;">Study Period Commencement:</th> <th style="width: 20%;">Credit Points:</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:			
Subject	Study Period Commencement:	Credit Points:							

ELEN30002 Stochastic Signals and Systems	Semester 1	12.50
--	------------	-------

Electrical engineering 300-level electives 25 points

Subject from other degree as required 12.5 points

### Semester 2

Subject	Study Period Commencement:	Credit Points:
ELEN30003 Communication Systems	Semester 2	12.50
ELEN30013 Electronic System Implementation	Semester 2	12.50

Electrical engineering 300-level elective 12.5 points

Subject from other degree as required 12.5 points

Note:Credit may not be obtained for both 431-330 Design laboratory and 431-305 Electronic System Implementation

### Electrical Engineering 300 level Electives

Electrical Engineering 300-level Electives can be chosen from the following list

Subject	Study Period Commencement:	Credit Points:
ELEN30005 Fields and Transmission Lines	Semester 1	12.50
ELEN30007 Electronic Circuit Design 2	Semester 1	12.50
ELEN30001 Control 1 (Classical Control)	Semester 1	12.50
ELEN30008 Signal Processing 1 (Fundamentals)	Semester 2	12.50
PHYC30013 Principles and Applications of Sensors	Semester 2	12.50
ELEN30011 Electrical Device Modelling	Semester 2	12.50

### Fifth Year

Subject	Study Period Commencement:	Credit Points:
ELEN40001 Project Work	Year Long	25

### Semester 1

Electrical engineering 400-level electives 25 points,

Subjects from other degree as required 12.5 points

### Semester 2

Electrical engineering 400-level electives 25 points;

Subjects from other degree as required 12.5 points

**Sixth year** (LLB/BE(IT) or LLB/BE with computer, electrical and software engineering)

Law subjects to complete the requirements of the LLB degree. (100 points)

### Electrical Engineering 400 Level Electives

Electrical Engineering 400-level Electives can be chosen from the following list

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
ELEN40013 Electronic Circuit Design 3	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
<b>Entry Requirements:</b>	There will be no further entry into this combined course.		
<b>Core Participation Requirements:</b>	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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>		
<b>Further Study:</b>	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.		
<b>Graduate Attributes:</b>	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		