

957EE Bachelor of Engineering (Electrical) and Bachelor of Arts

Year and Campus:	2011 - Parkville
CRICOS Code:	012878B
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	500 credit points taken over 60 months full time. This course is available as full or part time.
Coordinator:	Prof. Ampalavanapillai Nirmalathas
Contact:	Faculty of Arts Arts and Music Student Centre http://www.arts.unimelb.edu.au/amsc/ (http://www.arts.unimelb.edu.au/amsc/) Melbourne School of Engineering courseinfo@eng.unimelb.edu.au (mailto:courseinfo@eng.unimelb.edu.au) http://www.eng.unimelb.edu.au (http://www.eng.unimelb.edu.au)
Course Overview:	<p>THE COURSE STRUCTURE BELOW ONLY APPLIES TO RE-ENROLLING STUDENTS WHO COMMENCED THEIR STUDIES PRIOR TO 2008</p> <p>The combined BA/BE(IT) and BA/BE course in engineering (computer, electrical or software engineering) and arts, must satisfy the following requirements:</p> <ul style="list-style-type: none"> # 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 arts subjects undertaken. # A total of 200 arts points must be completed, comprised of 50 points of 100-level arts subjects, 75 points of 200-level arts subjects, and 75 points of 300-level arts subjects. <p>Students are required to complete a total of 500 points in Bachelor of Engineering (Electrical)/ Bachelor of Arts degree.</p> <p>Typical course plans for the three engineering streams of this combined degree appear below.</p> <p>The Bachelor of Arts (BA) offers unique flexibility with the opportunity to focus on a major chosen from a broad range of Arts study options in the humanities, social sciences and languages.</p> <p>Students can:</p> <ul style="list-style-type: none"> # Undertake specialised fieldwork, research options and integrated internship programs which provide opportunities for professional work experience and community engagement. # Broaden your horizons and undertake international study exchange at any one of 120 universities worldwide, receiving credit towards your Melbourne Arts degree. # Study a new language with most areas available from beginners to advanced level. # Benefit from studying with high achieving local and international students with Melbourne Arts having the highest entry requirements for arts disciplines in Australia. # Learn from internationally recognised scholars and industry professionals. # Create pathways into further postgraduate study in professional Arts Masters courses, Melbourne Model Graduate Professional Degrees, and with the completion of an Honours year, entry into research higher degrees in Arts. # Enjoy a rewarding professional career, with Melbourne Arts graduates enjoying employment rates well above the national Arts average.
Objectives:	<p>The Bachelor of Arts has as its objectives that graduates:</p> <ul style="list-style-type: none"> # Can demonstrate a sound knowledge and understanding of selected fields of studies in the humanities, languages and social and behavioural sciences; # Can access and appreciate national and international debates in their areas of study;

	<ul style="list-style-type: none"> # Can demonstrate an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values; # Can apply critical and analytical skills and methods to the identification and resolution of problems within a changing social context; # Can act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force; # Can communicate effectively an,in the case of those students undertaking a language major, are able to read, write and speak another language with fluency and appreciate its cultural context; # Qualify for employment in a wide range of occupations; # Have a continuing committment to learning; # Are proficient in the use of appropriate modern technologies, such as the computer and other IT systems, for the acquisition, processing and interpretation of data. 																								
Course Structure & Available Subjects:	-																								
Majors/Minors/ Specialisations	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Major/Minor/Specialisation</th> </tr> </thead> <tbody> <tr><td>American Studies Major</td></tr> <tr><td>Ancient, Medieval & Early Modern Studies Major</td></tr> <tr><td>Anthropology</td></tr> <tr><td>Arabic Studies Major</td></tr> <tr><td>Art History Major</td></tr> <tr><td>Asian Studies Major</td></tr> <tr><td>Australian Indigenous Studies Major</td></tr> <tr><td>Australian Studies Major</td></tr> <tr><td>Chinese Language Major</td></tr> <tr><td>Chinese Studies Major</td></tr> <tr><td>Cinema Studies Major</td></tr> <tr><td>Classical Studies & Archaeology Major</td></tr> <tr><td>Creative Writing Major</td></tr> <tr><td>Criminology Major</td></tr> <tr><td>Cultural Studies Major</td></tr> <tr><td>Development Studies Major</td></tr> <tr><td>English Literary Studies Major</td></tr> <tr><td>English Language Studies Major</td></tr> <tr><td>Environmental Studies Major</td></tr> <tr><td>European Studies Major</td></tr> <tr><td>French Major</td></tr> <tr><td>Gender Studies Major</td></tr> <tr><td>Geography Major</td></tr> </tbody> </table>	Major/Minor/Specialisation	American Studies Major	Ancient, Medieval & Early Modern Studies Major	Anthropology	Arabic Studies Major	Art History Major	Asian Studies Major	Australian Indigenous Studies Major	Australian Studies Major	Chinese Language Major	Chinese Studies Major	Cinema Studies Major	Classical Studies & Archaeology Major	Creative Writing Major	Criminology Major	Cultural Studies Major	Development Studies Major	English Literary Studies Major	English Language Studies Major	Environmental Studies Major	European Studies Major	French Major	Gender Studies Major	Geography Major
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	German Major						
	Hebrew Major						
	History Major						
	History and Philosophy of Science Major						
	Indonesian Major						
	International Studies Major						
	Islamic Studies Major						
	Italian Major						
	Japanese Major						
	Jewish Studies Major						
	Linguistics & Applied Linguistics Major						
	Modern Greek Major						
	Philosophy Major						
	Planning and Design Major						
	Political Science Major						
	Psychology Major						
	Russian Major						
	Social Theory Major						
	Socio-legal Studies Major						
	Sociology Major						
	Spanish Major						
	Swedish Major						
	Theatre Studies Major						
Subject Options:	<p>Arts Requirements:</p> <p>All students in the Bachelor of Arts and Bachelor of Engineering (Electrical) are required to complete 200 points of Arts subjects of which;</p> <ul style="list-style-type: none"> * 50 points must be taken at first year level; * 75 points must be taken at second year level and; * 75 points must be taken at third year level. <p>In addition it is expected students should complete a major in the Arts component of their degree, for the individual area of study please contact The Faculty of Arts .</p> <p>Engineering Requirements</p> <p>Students who commenced fourth year in 2010 and have not completed (or who have failed) the fourth year subjects required in the Bachelor of Engineering degree please see a course adviser.</p> <p>Final Year Subjects</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:			
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ELEN90067 Electrical Engineering Capstone Project	Year Long, Semester 1	25
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Four Subjects from Final year Electrical Engineering Electives (50 points in total)

Subjects from other degree as required 25 points

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

Final Year Electrical Engineering Electives

ELEN90007 Wireless Communication Systems((.)/view/2011/ELEN90007) 12.5 points)

Semester 2

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

Honours

Depending on your major area of study, you have the option of applying for an Honours year after you complete the BA, which will include a research project. For more information on entry to Honours, see the **Arts webpage** (<http://www.arts.unimelb.edu.au/futurestudents/programs/Honours.html>) .

Coursework Masters

If you wish to continue your professional studies at postgraduate level, the studies you undertake in your major can provide a direct pathway to Coursework Masters Degrees in areas such as editing, media and communications, public policy and management, international studies, arts management, development studies and many more. Entry is based on academic merit and in most cases requires a Bachelors degree or equivalent in the relevant study area. You will also be well-prepared to undertake a Melbourne Model Graduate Professional Degree in areas such as law, teaching and commerce.

For more information on entry into a coursework masters degree, see the **Arts coursework programs webpage** (<http://www.arts.unimelb.edu.au/futurestudents/programs/pg-programs.html>) , or the **University graduate programs webpage** (<http://www.futurestudents.unimelb.edu.au/grad/>) .

Research Higher Degrees

If you wish to undertake advanced research and explore particular study areas in more depth, there will be opportunities to proceed to a range of Research Higher Degrees at masters and doctoral level. For more information about research higher degree study in Arts, see the **Arts webpage** (<http://www.arts.unimelb.edu.au/futurestudents/research/>) .

Graduate Attributes:	See course objectives
Generic Skills:	<p>Arts students are encouraged to pursue their academic interests and professional aspirations by taking a variety of subjects in a range of different areas of study. All arts subjects provide students with transferable generic skills that prepare them for further study and the workplace.</p> <p>As a result of attendance at scheduled classes, participation in planned activities and discussion groups, and timely completion of essays and assignments, arts graduates should acquire transferable generic skills in the following areas:</p> <ul style="list-style-type: none"> # research through competent use of the library, electronic databases, and other information sources, and the definition of areas of inquiry and methods of research; # critical thinking and analysis through recommended reading, essay writing and tutorial discussion, and by determining the strength of an argument; # thinking in theoretical terms through lectures, tutorial discussion, essay writing and engagement in the methodologies of the humanities and social sciences; # thinking creatively through essay writing, creative writing, tutorial discussions and presentations, conceptualising theoretical problems, forming judgements and arguments from conflicting evidence and by critical analysis; # understanding of social, ethical and cultural context through the contextualisation of judgements, developing a critical self-awareness, being open to new ideas and possibilities and by constructing an argument; # communicating knowledge intelligibly and economically through essay writing and tutorial and seminar discussion; # written communication through essay preparation and assignment writing; # public speaking through tutorial and seminar discussion and class presentations; # attention to detail through essay preparation and writing, and examination revision; # time management and planning through managing and organising workloads for recommended reading, essay and assignment completion and examination revision; # teamwork through joint projects and group discussions.