

## 957-CE Bachelor of Engineering (Computer) and Bachelor of Arts

<b>Year and Campus:</b>	2009
<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>Contact:</b>	<p>Enquiries: Arts &amp; Music Student Centre Rm 104 (Ground Floor) Old Arts Building</p> <p><b>Location (PDF, 1027kb) (<a href="http://www.pb.unimelb.edu.au/CampusMaps/Parkville_P.pdf">http://www.pb.unimelb.edu.au/CampusMaps/Parkville_P.pdf</a>)</b></p> <p>Tel: +61 3 8344 5235 Fax: +61 3 9347 0424</p> <p>Search for an answer or send an email via our queries database: <b><a href="http://arts-unimelb.custhelp.com/">http://arts-unimelb.custhelp.com/</a></b> (<a href="http://arts-unimelb.custhelp.com/">http://arts-unimelb.custhelp.com/</a>) Engineering Student Centre Ground Floor, Old Engineering Building The University of Melbourne Victoria 3010 AUSTRALIA Tel: +61 3 8344 6703 Fax: +61 3 9349 2182 Email <b><a href="http://eng-unimelb.custhelp.com">http://eng-unimelb.custhelp.com</a></b> (Engineering%20Student%20Centre%20%20Ground%20Floor,%20Old%20Engineering%20Building%20The%20University%20of%20Melbourne%20Victoria%203010%20AUSTRALIA%20%20Tel:%20+61%203%208344%206703%20Fax:%20+61%203%209349%202182%20%20Email%20http://eng-unimelb.custhelp.com)</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 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"> <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 arts subjects undertaken.</li> <li># 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.</li> </ul> <p>Students are required to complete a total of 500 points in the Bachelor of Engineering (Computer)/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"> <li># Undertake specialised fieldwork, research options and integrated internship programs which provide opportunities for professional work experience and community engagement.</li> <li># Broaden your horizons and undertake international study exchange at any one of 120 universities worldwide, receiving credit towards your Melbourne Arts degree.</li> <li># Study a new language with most areas available from beginners to advanced level.</li> <li># Benefit from studying with high achieving local and international students with Melbourne Arts having the highest entry requirements for arts disciplines in Australia.</li> <li># Learn from internationally recognised scholars and industry professionals.</li> <li># 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.</li> </ul>

	<p># Enjoy a rewarding professional career, with Melbourne Arts graduates enjoying employment rates well above the national Arts average.</p>																							
<p><b>Objectives:</b></p>	<p>The Bachelor of Arts has as its objectives that graduates:</p> <ul style="list-style-type: none"> <li>* can demonstrate a sound knowledge and understanding of selected fields of studies in the humanities, languages and social and behavioural sciences;</li> <li>* can access and appreciate national and international debates in their areas of study;</li> <li>* 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;</li> <li>* can apply critical and analytical skills and methods to the identification and resolution of problems within a changing social context;</li> <li>* can act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force;</li> <li>* 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;</li> <li>* qualify for employment in a wide range of occupations;</li> <li>* have a continuing commitment to learning;</li> <li>* 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.</li> </ul>																							
<p><b>Majors/Minors/ Specialisations</b></p>	<table border="1"> <thead> <tr> <th data-bbox="389 770 1487 831">Major/Minor/Specialisation</th> </tr> </thead> <tbody> <tr><td data-bbox="389 831 1487 887">American Studies Major</td></tr> <tr><td data-bbox="389 887 1487 943">Ancient, Medieval &amp; Early Modern Studies Major</td></tr> <tr><td data-bbox="389 943 1487 999">Anthropology</td></tr> <tr><td data-bbox="389 999 1487 1055">Arabic Studies Major</td></tr> <tr><td data-bbox="389 1055 1487 1111">Art History Major</td></tr> <tr><td data-bbox="389 1111 1487 1167">Asian Studies Major</td></tr> <tr><td data-bbox="389 1167 1487 1223">Australian Indigenous Studies Major</td></tr> <tr><td data-bbox="389 1223 1487 1279">Australian Studies Major</td></tr> <tr><td data-bbox="389 1279 1487 1335">Chinese Language Major</td></tr> <tr><td data-bbox="389 1335 1487 1391">Chinese Studies Major</td></tr> <tr><td data-bbox="389 1391 1487 1447">Cinema Studies Major</td></tr> <tr><td data-bbox="389 1447 1487 1503">Classical Studies &amp; Archaeology Major</td></tr> <tr><td data-bbox="389 1503 1487 1559">Creative Writing Major</td></tr> <tr><td data-bbox="389 1559 1487 1615">Criminology Major</td></tr> <tr><td data-bbox="389 1615 1487 1671">Cultural Studies Major</td></tr> <tr><td data-bbox="389 1671 1487 1727">Development Studies Major</td></tr> <tr><td data-bbox="389 1727 1487 1783">English Literary Studies Major</td></tr> <tr><td data-bbox="389 1783 1487 1839">English Language Studies Major</td></tr> <tr><td data-bbox="389 1839 1487 1895">Environmental Studies Major</td></tr> <tr><td data-bbox="389 1895 1487 1951">European Studies Major</td></tr> <tr><td data-bbox="389 1951 1487 2007">French Major</td></tr> <tr><td data-bbox="389 2007 1487 2063">Gender Studies 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
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	Geography Major
	German Major
	Hebrew Major
	History Major
	History & 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
<b>Subject Options:</b>	<p><b>Arts requirements:</b></p> <p>All students in the Bachelor of Arts and Bachelor of Engineering (Computer) are required to complete 200 points of Arts subjects of which;</p> <ul style="list-style-type: none"> <li>* 50 points must be taken at first year level;</li> <li>* 75 points must be taken at second year level and;</li> <li>* 75 points must be taken at third year level.</li> </ul> <p>In addition it is expected students should complete a major in the Arts component of their degree.</p> <p>All Arts subjects undertaken must be from the following arts-approved study areas (see the individual area of study entry for full details):</p> <ul style="list-style-type: none"> <li>* all language subjects</li> <li>* American studies</li> <li>* Ancient, Medieval and Early Modern Studies (some non-arts approved subjects included)</li> <li>* Anthropology</li> <li>* Art History</li> <li>* Asian Studies (some non-arts approved subjects included)</li> <li>* Australian Indigenous Studies (some non-arts approved subjects included)</li> <li>* Australian Studies</li> </ul>

- \* Cinema Studies
- \* Classical studies and Archaeology
- \* Creative Writing
- \* Criminology
- \* Cultural Studies
- \* Development Studies (some non-art approved subjects included)
- \* English Literary Studies
- \* English as a Second Language
- \* English Language Studies
- \* Environmental Studies (some non-arts approved subjects included)
- \* European Studies
- \* Gender Studies
- \* Geography
- \* Hebrew and Jewish Studies
- \* History
- \* History and Philosophy of Science
- \* International Studies
- \* Islamic Studies
- \* Linguistics and Applied Linguistics
- \* Philosophy
- \* Planning and Design
- \* Political Science
- \* Psychology
- \* Social Theory
- \* Socio-legal Studies
- \* Theatre Studies

#### Engineering Requirements:

Note: Students who commenced 2nd year in 2008 who have not completed, (or who have failed), the second year subjects required in the Bachelor of Engineering degree please see a course adviser.

#### Third year

##### Semester 1

Subject	Study Period Commencement:	Credit Points:
431-201 Engineering Analysis A	Semester 1	12.500
431-204 Digital Systems 2: System Design	Semester 1	12.500
431-210 Electrical Circuits 2	Semester 1	12.500

Subject from other degree as required 12.5 points

##### Semester 2

Subject	Study Period Commencement:	Credit Points:
620-293 Engineering Mathematics	Summer, Semester 1, Semester 2	12.500
431-222 Electronic Circuit Design 1	Semester 2	12.500
431-221 Fundamentals of Signals and Systems	Semester 2	12.500

Subject from other degree as required 12.5 points

#### Fourth year

##### Semester 1

Subject	Study Period Commencement:	Credit Points:
431-325 Stochastic Signals and Systems	Semester 1	12.500
433-252 Software Engineering Principles & Tools	Semester 1	12.500

433-253 Algorithms and Data Structures	Semester 1	12.500
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Subject from other degree as required 12.5 points

### Semester 2

Subject	Study Period Commencement:	Credit Points:
431-328 Digital Systems 3: Circuits and Systems	Semester 2	12.500
433-294 Object Oriented Software Development	Semester 2	12.500
431-330 Design Laboratory	Semester 1, Semester 2	12.500

Subject from other degree as required 12.5 points

### Fifth year

#### Year long

Subject	Study Period Commencement:	Credit Points:
431-400 Project Work	Year Long	25.000

#### Semester 1

Subject	Study Period Commencement:	Credit Points:
433-332 Operating Systems	Semester 1	12.500

Subject from other degree as required 25 points

#### Semester 2

Subject	Study Period Commencement:	Credit Points:
431-467 Digital Systems 4: High Speed Systems	Semester 2	12.500
433-353 Networks and Communications	Semester 2	12.500
433-313 Computer Design	Semester 2	12.500

#### Entry Requirements:

There is no further entry into this combined course.

#### Core Participation Requirements:

The Bachelor of Arts requires a standard level of ability across all disciplines. It will be assumed students are able to access and attend classes on a regular basis, are capable of learning in a University environment and will be able to take responsibility for their own learning. Any ability beyond this threshold will be robustly supported through the curriculum. There are no pre-requisites for first year subjects, and any intensive use of IT or technologies will be adequately supported. Certain subjects have more specific requirements and demands, such as fieldwork or travelling, which are clearly outlined in the subject description. The University is dedicated to provide support to those with special requirements. The Faculty Disability Contact Officer works with students, the University Disability Liaison Unit and teaching staff to assist students with their special requirements, with a particular focus on accommodations for in-class and examination assessment tasks. Further details on the disability support scheme can be found at the Disability Liaison Unit website.

#### 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 \(http://www.arts.unimelb.edu.au/futurestudents/programs/Honours.html\)](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.

	<p>You will also be well-prepared to undertake a Melbourne Model Graduate Professional Degree in areas such as law, teaching and commerce.</p> <p>For more information on entry into a coursework masters degree, see the <b>Arts coursework programs webpage</b> (<a href="http://www.arts.unimelb.edu.au/futurestudents/programs/pg-programs.html">http://www.arts.unimelb.edu.au/futurestudents/programs/pg-programs.html</a>) , or the <b>University graduate programs webpage</b> (<a href="http://www.futurestudents.unimelb.edu.au/grad/">http://www.futurestudents.unimelb.edu.au/grad/</a>) .</p> <p><b>Research Higher Degrees</b> 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 <b>Arts webpage</b> (<a href="http://www.arts.unimelb.edu.au/futurestudents/research/">http://www.arts.unimelb.edu.au/futurestudents/research/</a>) .</p>
<b>Graduate Attributes:</b>	See course objectives
<b>Generic Skills:</b>	<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"> <li># <b>research</b> through competent use of the library, electronic databases, and other information sources, and the definition of areas of inquiry and methods of research;</li> <li># <b>critical thinking and analysis</b> through recommended reading, essay writing and tutorial discussion, and by determining the strength of an argument;</li> <li># <b>thinking in theoretical terms</b> through lectures, tutorial discussion, essay writing and engagement in the methodologies of the humanities and social sciences;</li> <li># <b>thinking creatively</b> through essay writing, creative writing, tutorial discussions and presentations, conceptualising theoretical problems, forming judgements and arguments from conflicting evidence and by critical analysis;</li> <li># <b>understanding of social, ethical and cultural context</b> through the contextualisation of judgements, developing a critical self-awareness, being open to new ideas and possibilities and by constructing an argument;</li> <li># <b>communicating knowledge intelligibly and economically</b> through essay writing and tutorial and seminar discussion;</li> <li># <b>written communication</b> through essay preparation and assignment writing;</li> <li># <b>public speaking</b> through tutorial and seminar discussion and class presentations;</li> <li># <b>attention to detail</b> through essay preparation and writing, and examination revision;</li> <li># <b>time management and planning</b> through managing and organising workloads for recommended reading, essay and assignment completion and examination revision;</li> <li># <b>teamwork</b> through joint projects and group discussions.</li> </ul>