

## 955-AV Bachelor of Engineering (Civil) and Bachelor of Commerce

<b>Year and Campus:</b>	2008
<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>Nghiem Tran  Course Advisor  Melbourne School of Engineering  T: + 61 3 8344 4628  F: + 61 3 9349 2182  E <a href="mailto:n.tran@unimelb.edu.au">n.tran@unimelb.edu.au</a></p>
<b>Course Overview:</b>	<p>Students studying the BE/BCom degree should consult the BE single degree course structure for a current list of core engineering subjects. For further information and up-to-date course advice students should regularly check the Department of Civil and Environmental Engineering's course advice page on the Engineering Faculty website.</p> <p>The combined degree of Bachelor of Engineering (Civil)/Bachelor of Commerce requires a total of 500 points over five years. Students are required to complete 300 points of Engineering subjects and 200 points of Commerce subjects.</p> <p>Note: 421-355 Management for Engineers 2 - exempt for students who complete 732-103 Principles of Business Law and 306-107 Accounting Reports and Analysis as part of the BCom. In order to complete the degree in 500 points, this exemption should be used.</p> <p>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 departmental guidelines on electives are satisfied (see <a href="http://www.civenv.unimelb.edu.au/undergraduate">www.civenv.unimelb.edu.au/undergraduate</a>). Students should also avoid timetable clashes in choosing their electives. 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.</p>
<b>Objectives:</b>	<p>The course objectives are that graduates should have acquired:</p> <ul style="list-style-type: none"> <li># the educational and professional standards of the professional institutions and boards with which the Faculty of Engineering's courses are accredited;</li> <li># a sense of professional ethics and responsibility towards their chosen professions and the community;</li> <li># the ability to think critically, analytically and creatively when seeking to design solutions to professional problems whilst displaying an understanding of the dynamic economic, social, political and physical environments in which they occur;</li> <li># the oral and written communication skills which are necessary to operate effectively in their chosen disciplines and of other disciplines so as to facilitate effective work-related communication;</li> <li># a broad knowledge-base of their chosen disciplines and of other disciplines so as to facilitate effective work-related communication;</li> <li># a sound fundamental understanding of the scientific principles underlying technology;</li> <li># the mathematical and computational skills necessary for the solution of theoretical and practical problems, for further development professionally, and for meeting future changes in technology;</li> <li># the ability to efficiently and effectively apply, the basic principles underlying the management of physical, human and financial resources in an engineering-based enterprise;</li> <li># a basic level of knowledge and skills in several disciplines and a more specialised level of knowledge and skills in one or more of the following disciplines: accounting, actuarial studies, business information systems, econometrics, economics, finance, management and marketing;</li> <li># an understanding of basic concepts and institutional arrangements operating in the Australian economy; and</li> </ul>

	<p># skills in basic quantitative methods used in the study of the economy, commerce and government.</p>																								
<b>Course Structure &amp; Available Subjects:</b>	<p>The combined degree of BE with BCom requires a total of 500 points over five years.</p> <p>The BE/BCom course aims to develop skills in critical analysis and professional competence in the areas of accounting, business information systems, econometrics, economics, finance, international business, management and marketing; and provide a professional education in one of environmental, chemical, civil, electrical, computer, software, mechanical engineering. The first two years of this combined course would normally include compulsory engineering and commerce subjects. In years three, four and five the remaining compulsory engineering subjects (and possibly electives) are taken along with sufficient commerce subjects to obtain the required total of 200 commerce points.</p> <p>In order to establish a balanced study program, it is recommended that by the end of the equivalent of three full-time years, students in most streams of this course are to have:</p> <ul style="list-style-type: none"> <li># completed no less than 100 points of commerce;</li> <li># completed no less than 200 points of engineering.</li> </ul> <p>To satisfy course requirements students must:</p> <ul style="list-style-type: none"> <li># take the set of core engineering subjects prescribed for the branch of engineering being studied. This will include the professional study requirements in one of chemical engineering, civil engineering, environmental engineering, mechanical engineering, or one of electrical, computer or software engineering;</li> </ul> <p>complete 200 points towards the commerce component comprising;</p> <ul style="list-style-type: none"> <li># at least 50 level-one points</li> <li># at least 50 level-three points (these must be completed at the University of Melbourne)</li> <li># the five compulsory subjects</li> </ul>																								
<b>Subject Options:</b>	<p><b>THERE WILL BE NO FIRST YEAR ENTRY INTO THIS COURSE FROM 2008</b></p> <p><b>Second Year</b></p> <p>Subjects listed below <b>MUST</b> be taken in this approved order, regardless of semester availability.</p> <p><b>2nd year: Semester 1</b></p> <table border="1" data-bbox="389 1323 1485 1585"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>316-205 Introductory Econometrics</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>431-201 Engineering Analysis A</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>880-103 Constructing Environments</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus Commerce subject as required (12.5 points).</p> <p><b>2nd year: Semester 2</b></p> <table border="1" data-bbox="389 1682 1485 1944"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>421-122 Materials 2</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>431-202 Engineering Analysis B</td> <td>Summer, 1, 2</td> <td>12.500</td> </tr> <tr> <td>325-201 Organisational Behaviour</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus Commerce subject as required (12.5 points).</p> <p><b>Third Year</b></p>	Subject	Study Period Commencement:	Credit Points:	316-205 Introductory Econometrics	Semester 1, Semester 2	12.50	431-201 Engineering Analysis A	Semester 1	12.50	880-103 Constructing Environments	Semester 1, Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	421-122 Materials 2	Semester 2	12.50	431-202 Engineering Analysis B	Summer, 1, 2	12.500	325-201 Organisational Behaviour	Semester 1, Semester 2	12.50
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### 3rd year: Semester 1

Subject	Study Period Commencement:	Credit Points:
421-208 Mechanics of Solids	Semester 1	12.50
421-255 Management for Engineers 1	Semester 1	12.50

Plus Commerce subjects as required (25 points).

### 3rd year: Semester 2

Subject	Study Period Commencement:	Credit Points:
421-207 Introduction to Design	Semester 1	12.50
421-209 Geomechanics 1	Semester 2	12.50

Plus Commerce subjects as required (25 points).

### Fourth Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

#### 4th year: Semester 1

Subject	Study Period Commencement:	Credit Points:
421-305 Engineering Hydraulics 1	1	12.500
421-306 Geotechnical Engineering	Semester 1	12.50
421-307 Structural Engineering 1	Semester 1	12.50

Plus Commerce subject as required (12.5 points).

#### 4th year: Semester 2

Subject	Study Period Commencement:	Credit Points:
421-316 Engineering Hydraulics & Hydrology	Semester 2	12.50
421-317 Structural Engineering 2	Semester 2	12.50
421-318 Construction Engineering	Semester 2	12.50

Plus Commerce subject as required (12.5 points).

### Fifth Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

#### 5th year: Semester 1

Subject	Study Period Commencement:	Credit Points:
421-441 Infrastructure Design	Semester 1	12.50
421-405 Management for Engineers 3	Semester 1	12.50

Plus Commerce subjects as required (12.5 points)

Plus Engineering elective (12.5 points)

#### 5th year: Semester 2

	<b>Subject</b>	<b>Study Period Commencement:</b>	<b>Credit Points:</b>
	421-440 Steel & Concrete Design	Semester 2	12.50
	421-442 Integrated Design	Semester 2	12.50
	Plus Commerce subjects as required (25 points).		
<b>Core Participation Requirements:</b>	-		
<b>Graduate Attributes:</b>	-		
<b>Generic Skills:</b>	-		