

## B-ENG Civil Engineering stream

<b>Year and Campus:</b>	2013															
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<b>Overview:</b>	<p>The Civil Engineering stream of the Bachelor of Engineering (<b>THIS COURSE IS FOR THOSE STUDENTS COMMENCING PRIOR TO 2010</b>).</p> <p>See Bachelor of Engineering (B-ENG)</p>															
<b>Objectives:</b>	See Bachelor of Engineering (B-ENG)															
<b>Structure &amp; Available Subjects:</b>	<p>Completion of 400 points of study.</p> <p>The structure of the Bachelor of Engineering degree requires completion of specific subjects as part of this stream. The majority of subjects have one or more prerequisites and therefore the sequence in which subjects are taken is very important. It is unlikely that prerequisite waivers will be granted for these engineering subjects and therefore students should take care to select subjects in one study period that satisfy prerequisites for subjects in later study periods.</p>															
<b>Subject Options:</b>	<p>The following subjects are required for this stream of the Bachelor of Engineering.</p> <p><b>First Year (100 points normally taken in Year 1)</b></p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ENGR10003 Engineering Systems Design 2</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>ENGR10004 Engineering Systems Design 1</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>MAST10005 Calculus 1</td> <td>Not offered 2013</td> <td>12.50</td> </tr> <tr> <td>MAST10006 Calculus 2</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus</p> <ul style="list-style-type: none"> <li># Two breadth subjects (i.e. 25.00 credit points total)</li> <li># Two science subjects (i.e. 25.00 credit points total)</li> </ul> <p>N.B.</p> <ul style="list-style-type: none"> <li># Students who have completed VCE Specialist Mathematics (or equivalent) are exempt from MAST10005 Calculus 1 and should therefore enrol in MAST10006 Calculus 2 and MAST10007 Linear Algebra.</li> <li># Students with a high level of achievement in mathematics may enrol in both MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2 instead of both MAST10006 Calculus 2 and MAST10007 Linear Algebra.</li> <li># Science subjects could be chosen to keep options open for other streams of engineering (e.g. chemistry, informatics and physics subjects) or be chosen for disciplines not directly related to engineering.</li> </ul> <p><b>Second Year (100 points normally taken in Year 2)</b></p> <p><b>Core</b> (total 62.5 points)</p>	Subject	Study Period Commencement:	Credit Points:	ENGR10003 Engineering Systems Design 2	Not offered 2013	12.50	ENGR10004 Engineering Systems Design 1	Not offered 2013	12.50	MAST10005 Calculus 1	Not offered 2013	12.50	MAST10006 Calculus 2	Not offered 2013	12.50
Subject	Study Period Commencement:	Credit Points:														
ENGR10003 Engineering Systems Design 2	Not offered 2013	12.50														
ENGR10004 Engineering Systems Design 1	Not offered 2013	12.50														
MAST10005 Calculus 1	Not offered 2013	12.50														
MAST10006 Calculus 2	Not offered 2013	12.50														

Subject	Study Period Commencement:	Credit Points:
ENEN20002 Earth Processes for Engineering	Not offered 2013	12.50
ENGR20003 Engineering Materials	Not offered 2013	12.50
ENGR20004 Engineering Mechanics	Not offered 2013	12.50
MAST10007 Linear Algebra	Not offered 2013	12.50
MAST20029 Engineering Mathematics	Not offered 2013	12.50

**Plus**

- # Two breadth subjects (25.00 credit points)
- # One science or engineering elective (12.50 credit points)

**N.B.**

- # Students who have completed VCE Specialist Mathematics (or equivalent) and completed either both MAST10006 Calculus 2 and MAST10007 Linear Algebra or both MAST10008 Accelerated Mathematics 1 and MAST10009 Accelerated Mathematics 2 in Year 1 can replace MAST10007 Linear Algebra in the table above with a science elective.
- # A science elective is any subject available as science credit in the Bachelor of Science course (B-SCI). Refer to **Science-credited subjects - new generation B-SCI and B-ENG (.J../view/current/%21B-SCI-SPC%2B1021)** for a full list of subjects. Science electives may have prerequisites.
- # An engineering elective is any subject offered by the Melbourne School of Engineering and requires the approval of the stream coordinator.

**Third Year (100 points normally taken in Year 3)**

**Please note:** In 2013 *ENGR30001 Fluid Mechanics & Thermodynamics* was replaced with *ENGR30002 Fluid Mechanics*. Students who have completed ENGR30001 are not required to complete ENGR30002

**Core (total 100 points)**

Subject	Study Period Commencement:	Credit Points:
CVEN30008 Risk Analysis	Not offered 2013	12.50
CVEN90043 Sustainable Infrastructure Engineering	Not offered 2013	12.50
CVEN90044 Engineering Site Characterisation	Not offered 2013	12.50
ENGR30002 Fluid Mechanics	Not offered 2013	12.50
CVEN30009 Structural Theory and Design	Not offered 2013	12.50
CVEN30010 Systems Modelling and Design	Not offered 2013	12.50
CVEN90045 Engineering Project Implementation	Not offered 2013	12.50
CVEN90048 Transport Systems	Not offered 2013	12.50

**Fourth Year (100 points normally taken in Year 4)****Core (total 62.5 points)**

Subject	Study Period Commencement:	Credit Points:
CVEN90049 Structural Theory and Design 2	Not offered 2013	12.50
CVEN90050 Geotechnical Engineering	Not offered 2013	12.50
CVEN90051 Civil Hydraulics	Not offered 2013	12.50

	CVEN90052 Integrated Design	Not offered 2013	25
<b>Civil Engineering Electives (total 37.5 points)</b>			
	<b>Subject</b>	<b>Study Period Commencement:</b>	<b>Credit Points:</b>
	CVEN90024 High Rise Structures	Not offered 2013	12.50
	ENEN90006 Solid Wastes to Sustainable Resources	Not offered 2013	12.50
	ENEN90029 Water and Waste Water Management	Semester 1	12.50
	ENGM90007 Project Management Practices	Not offered 2013	12.50
	CVEN90016 Concrete Design and Technology	Not offered 2013	12.50
	CVEN90027 Geotechnical Applications	Not offered 2013	12.50
	CVEN90035 Structural Theory and Design 3	Not offered 2013	12.50
	ENEN90005 Environmental Management ISO 14000	Not offered 2013	12.50
	ENEN90011 Energy Efficiency Technology	Not offered 2013	12.50
	ENGM90006 Engineering Contracts and Procurement	Not offered 2013	12.50
	CVEN90056 IE Research Project 3	Semester 2	12.50
<b>Notes:</b>	Credit may not be obtained for both ENGR30001 Fluid Mechanics & Thermodynamics and ENGR30002 Fluid Mechanics		
<b>Related Course(s):</b>	Bachelor of Engineering		