B-ENG Civil Engineering stream

Year and Campus:	2011
Coordinator:	Dr Sam Yuen
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Overview:	The Civil Engineering stream of the Bachelor of Engineering (for students commencing in 2008 and later years). See Bachelor of Engineering (B-ENG)
Objectives:	See Bachelor of Engineering (B-ENG)
Structure & Available Subjects:	Completion of 400 points of study. 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.
Subject Options:	The following subjects are required for this stream of the Bachelor of Engineering.

First Year (normally 100 points taken in Year 1)

Subject	Study Period Commencement:	Credit Points:
ENGR10004 Engineering Systems Design 1	Semester 1, Semester 2	12.50
MAST10005 Calculus 1	Semester 1, Semester 2	12.50
ENGR10003 Engineering Systems Design 2	Not offered 2011	12.50
MAST10006 Calculus 2	Semester 1, Semester 2	12.50

Plus

- Two breadth subjects (i.e. 25.00 credit points total)
- Two science subjects (i.e. 25.00 credit points total)

N.B.

- 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.
- 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.
- 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.

Second Year (normally 100 points taken in Year 2)

Subject	Study Period Commencement:	Credit Points:
MAST10007 Linear Algebra	Summer Term, Semester 1, Semester 2	12.50
ENGR20004 Engineering Mechanics	January, Semester 1, Semester 2	12.50
MAST20029 Engineering Mathematics	Summer Term, Semester 1, Semester 2	12.50
ENGR20003 Engineering Materials	Not offered 2011	12.50

ENEN20002 Earth Processes for Engineering	Not offered 2011	12.50

Plus

- Two breadth subjects (i.e. 25.00 credit points total)
- One science or engineering elective (i.e. 12.50 credit points total)

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 that course entry 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 (normally 100 points taken in Year 3)

Subject	Study Period Commencement:	Credit Points:
ENGR30001 Fluid Mechanics & Thermodynamics	Semester 1, Semester 2	12.50
CVEN30008 Risk Analysis	Not offered 2011	12.50
CVEN90043 Sustainable Infrastructure Systems	Not offered 2011	12.50
CVEN90044 Engineering Site Characterisation	Not offered 2011	12.50
CVEN30010 Systems Modelling and Design	Not offered 2011	12.50
CVEN30009 Structural Theory and Design	Not offered 2011	12.50
CVEN90045 Engineering Project Implementation	Not offered 2011	12.50
CVEN40011 Transport Systems	Semester 2	12.50

Fourth Year (normally 100 points taken in Year 4)

Subject	Study Period Commencement:	Credit Points:
CVEN90049 Structural Theory and Design 2	Not offered 2011	12.50
CVEN90051 Civil Hydraulics	Not offered 2011	12.50
CVEN90050 Geotechnical Engineering	Not offered 2011	12.50
CVEN90052 Integrated Design	Not offered 2011	25

Plus Civil Engineering electives selected from:

Subject	Study Period Commencement:	Credit Points:
CVEN90035 Design in Steel & Other Materials	Not offered 2011	12.50
CVEN90024 High Rise Structures	Not offered 2011	12.50
ENGM90006 Engineering Contracts and Procurement	Not offered 2011	12.50
ENGM90007 Project Management Practices	Not offered 2011	12.50
ENEN90011 Energy Efficiency Technology	Not offered 2011	12.50
ENEN90006 Solid Wastes to Sustainable Resources	Not offered 2011	12.50

	ENEN90005 Environmental Management ISO 14000	Not offered 2011	12.50
	ENEN90029 Water and Waste Water Management	Not offered 2011	12.50
	CVEN90027 Geotechnical Applications	Not offered 2011	12.50
	CVEN90016 Concrete Design and Technology	Not offered 2011	12.50
	CVEN90020 Research Topic	Semester 1, Semester 2	12.50
Related Course(s):	Bachelor of Engineering		