4635 Bachelor of Commerce and Bachelor of Engineering (Honours) 2015

Civil engineering

Stage One:

- Course advice is required for enrolment in stage one – enrolment plan depends on the need for foundation units
- Level 2 electives may be undertaken following successful completion of 24 credit points. If a level 2 elective is undertaken at stage one, course advice is required to ensure that all engineering course requirements are met in later stages
- Students undertake a common first year and nominate their chosen specialisation through the 'branch selection' process

Core Units (30 credit points) – all students complete:	Foundation units (0 or 6 credit points)
ENG1060 Computing for engineers ENG1091 Mathematics for engineering ENG1001 Engineering design: lighter, faster, stronger ENG1002 Engineering design: cleaner, safer, smarter ENG1003 Engineering mobile apps	*Students who have not completed VCE units 3&4 of Chemistry, Physics and/or Specialist Mathematics must complete one appropriate unit from:* ENG1070 Foundation chemistry ENG1090 Foundation mathematics ENG1080 Foundation physics *Students who have not completed Year 12 VCE Specialist Mathematics (or equivalent)* ***must*** *undertake ENG1090 Foundation mathematics.*
Elective units (0 or 6 credit points)	
CHM1011 Chemistry I (Clayton) or CHM1051 Chemistry 1 advanced (Malaysia) ENE1621 Environmental engineering ENG1021 Spatial communication in engineering ENG1051 Materials for energy and sustainability ENG1071 Chemistry for engineering ENG1081 Physics for engineering MNE1010 Introduction to mining	CHE2161 Mechanics of fluids *or* MEC2404 Mechanics of fluids ECE2041 Telecommunications ECE2072 Digital systems MAE2405 Aircraft performance TRC2001 Introduction to systems engineering Free elective – can be taken from any faculty where prerequisites can be met

Stage one **48 credit points (36cp Engineering and 12cp Commerce)**

Sem 1	Engineering stage one foundation unit or Engineering stage one elective unit	Engineering stage one core unit	Engineering stage one core unit	Commerce unit	
Sem 2	Engineering stage one core unit	Engineering stage one core unit	Engineering stage one core unit	Commerce unit	

Stage two **(54 credit points)**

Sem 1	CIV2206 Mechanics of solids	ENG2091 Advanced engineering mathematics A	Commerce unit	Commerce unit	
Sem 2	CIV2207 computing and water systems modeling	CIV2226 Design of concrete and masonry structures	CIV2242 Introductory geoengineering	Commerce unit	Commerce unit

Stage three **(54 credit points)**

Sem 1	CIV2225 Design of steel and timber structures	CIV2263 Water systems	Commerce unit	Commerce unit	
Sem 2	CIV2282 Transport and traffic engineering	CIV3247 Geomechanics II	Commerce unit	Commerce unit	Commerce unit

Stage four **(48 credit points)**

Sem 1	CIV3205 Project management for civil engineers	CIV3221 Building structures and technology	CIV3248 Groundwater and environmental geomechanics	Commerce unit
Sem 2	CIV3204 Engineering investigation	CIV3222 Bridge design and assessment	CIV3283 Road engineering	Commerce unit

Stage five **(48 credit points)**

Sem 1	CIV4210 Project A	Civil engineering elective from list below	CIV3264 Urban water and wastewater systems	Commerce unit
Sem 2	CIV4212 Civil engineering practice 4	Civil engineering elective from list below	Commerce unit	Commerce unit

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Civil Engineering elective units:	
CIV3203 Civil engineering construction	CIV4261 Integrated urban water management
CIV4211 Project B*	CIV4268 Water resources management
CIV4234 Advanced structural analysis	CIV4283 transport planning
CIV4235 Advanced structural design	CIV4284 transport systems
CIV4248 Ground hazards engineering	ENG4700 Engineering technology for biomedical imaging and sensing
CIV4249 Foundation engineering	
*Subject to departmental approval	

Notes:

Overloading	Students will normally expect to complete the course in five years. This is achieved by undertaking one additional unit per semester twice in the later stages of the degree. Overloading is not compulsory, students may choose to complete in 5 ½ years.
Credit points	Unless specified, all units are worth 6 credit points **Bachelor of Engineering** 26 units x 6cp = **Total of 156 credit points** **Bachelor of Commerce** 16 units x 6cp = **Total of 96 credit points** (42 units = 252cp)
Unit requisites	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
Duration of degree	5 years full-time, 10 years part-time
Time limit	Time limit = 10 years. Students have ten years in which to complete this award from the time they commence first year. Periods of intermission are counted as part of the ten years.
Course advice	www.eng.monash.edu.au/current-students/course-advice.html www.buseco.monash.edu.au/student/
Monash University handbook	Students should follow the course requirements for the year the degree was commenced www.monash.edu.au/pubs/2015handbooks/courses/index-byfaculty-eng.html
Branch Selection	www.eng.monash.edu.au/current-students/firstyear.html

All information correct at publication but may be subject to change – 14 January 2015
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