

4644 Bachelor of Environmental Engineering (Honours) and Bachelor of Arts 2015

Environmental Engineering

Stage one: 48 credit points (36 credit point Engineering and 12 credit points Arts)

- Course advice is required for enrolment in stage one – enrolment plan depends on the need for a foundation unit
- Level 2 electives may be undertaken following successful completion of 24 credit points
- Students undertake a common first year and specialise in Environmental engineering

Core Units (36 credit points) – all students complete:	Foundation units (0 or 6 credit points)
BIO2040 Conservation biology ENE1621 Environmental engineering ENG1001 Engineering design: lighter, faster, stronger ENG1002 Engineering design: cleaner, safer, smarter ENG1060 Computing for engineers ENG1091 Mathematics for engineering	<i>Students who have not completed VCE units 3&4 of Chemistry, Physics and/or Specialist Mathematics must complete one unit from:</i> ENG1070 Foundation chemistry ENG1090 Foundation mathematics ENG1080 Foundation physics <i>Students who have not completed Year 12 VCE Specialist Mathematics (or equivalent) must undertake ENG1090 Foundation mathematics.</i>

Stage one (48 credit points)

Sem 1	ENE1621 Environmental engineering	ENG1001 Engineering design: lighter, faster, stronger <u>or</u> a foundation unit if required	Engineering stage one core unit	Arts unit
Sem 2	BIO2040 Conservation biology	Engineering stage one core unit	Engineering stage one core unit	Arts unit

Stage two (54 credit points)

Sem 1	ATS2548 Environmental policy and management	BIO2011 Ecology and biodiversity	Arts unit	Arts unit	
Sem 2	ENE2503 Materials properties and recycling <u>or</u> ENG1001 if not completed at stage one	ENG2091 Advanced engineering mathematics A	Arts unit	Arts unit	Arts unit

Stage three (54 credit points)

Sem 1	CHE2164 Thermodynamics I	CIV2263 Water systems	Arts unit	Arts unit	
Sem 2	CHE2162 Material and energy balances	CIV2282 transport and traffic engineering	Arts unit	Arts unit	Arts unit

Stage four (48 credit points)

Sem 1	CIV3248 Groundwater and environmental geomechanics	CIV3264 Urban water and wastewater systems	ECC2800 Prosperity, poverty and sustainability in a globalised world	Arts unit
Sem 2	BTC3100 Sustainability and the law	Arts unit	Arts unit	Arts unit

Stage five (48 credit points)

Sem 1	ENE3048 Energy and the environment	ENE3608 Environmental impact assessment and management systems	6 point stream core unit	6 point stream core unit
Sem 2	ENE3606 the air environment	6 point stream elective <u>or</u> ENE2503 if not already completed	ENE4607 Environmental risk assessment	6 point stream core unit

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Stream core and elective units:	
Students complete core units comprising topics, project and design elements, and elective/s (if required) in one of the available streams	
(a) Water and land management or (b) Transport and the built environment	
Stream core units – all students complete the following units undertaking topics from within their chosen stream:	
CIV3205 Project management for civil engineers ENE4603 Environmental project A ENE4212 Environmental design	
Students who were not required to complete a foundation unit at level one complete one stream elective unit from below:	
Water and land management electives: CIV2207 Computer and water systems modelling CIV3204 Engineering investigations CIV3247 Geomechanics II CIV4248 Ground hazards and environmental geomechanics CIV4261 Integrated urban water management CIV4268 Water resources management	Transport and the built environment electives: CIV2206 Mechanics of solids CIV2225 Design of steel and timber structures CIV2226 Design of concrete and masonry structures CIV3221 Building structures and technology CIV3247 Geomechanics II CIV3283 Road engineering CIV4234 Advanced structural analysis CIV4235 Advanced structural design CIV4249 Foundation engineering CIV4283 Transport planning CIV4284 Transport systems MTE4593 Materials and environment MTE4599 Materials for energy technologies

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.
Unit requisites	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
Credit points	Unless specified, all units are worth 6 credit points Bachelor of Environmental Engineering 26 units x 6cp = Total of 156 credit points Bachelor of Arts 16 units x 6cp = Total of 96 credit points
Duration of degree	5 years full-time, 10 years part-time
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.monash.edu/students/courses/arts/course-planning.html
Monash University handbook	Students should follow the course requirements for the year the course was commenced http://monash.edu/pubs/2015handbooks/courses/index-byfaculty-eng.html

All information correct at publication but may be subject to change – 14 January 2015
 Faculty of Engineering, Monash University
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