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

Chemical 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 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 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	CHE2164 Thermodynamics	ENG2091 Advanced engineering mathematics A	Commerce unit	Commerce unit	
Sem 2	CHE2162 Material and energy balances	CHE2163 Heat and mass transfer	Commerce unit	Commerce unit	Commerce unit

Stage three **(54 credit points)**

Sem 1	CHM2735 Chemistry – principles and practice	CHE3161 Chemistry and chemical thermodynamics	Commerce unit	Commerce unit	Commerce unit
Sem 2	CHE2161 Fluid mechanics	Commerce unit	Commerce unit	Commerce unit	

Stage four **(48 credit points)**

Sem 1	CHE3163 Sustainable processing I	CHE3165 Separation processes	CHE3167 Transport phenomena and numerical methods	Commerce unit
Sem 2	CHE3162 Process control	CHE3164 Reaction engineering	CHE3166 Process design	Commerce unit

Stage five **(48 credit points)**

Sem 1	CHE4161 Engineering society	CHE4180 Chemical engineering project (12cp)	Commerce unit
Sem 2	CHE4162 Particle technology	CHE4170 Design project (12cp)	CHE4173 Sustainable processing 2

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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** 22 units x 6cp + 2 x 12cp = **Total of 156 credit points** **Bachelor of Commerce** 16 units x 6cp = **Total of 96 credit points** (252cp**)**
Unit requisites	All pre-requisite and co-requisite requirements must be undertaken in order to be able to enrol into a specific unit
Level 2 units	If MEC2404 Mechanics of fluids is completed at stage one this can replace CHE2161 Mechanics of fluids at stage two in Chemical engineering
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.buseco.monash.edu.au/student/
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 – 15 November 2014
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