MONASH University

Course progression map for 2016 commencing students

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study. It should be used in conjunction with the requirements of the course as specified in the Handbook. The map is subject to updates. Update version: 18 December 2023

E3001 Bachelor of Engineering (Honours)

Specialisation – Aerospace Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	MAE2401 Aircraft structures 1 Replace with MEC2403 from 2023	MEC2401 Dynamics 1 Unit title change from 2021	ENG2005 Advanced engineering mathematics	Elective or aerospace technical elective
	2	MAE2402 Thermodynamics and heat transfer Unit title change from 2021	MAE2404 Aerodynamics 1	MAE2405 Aircraft performance	Elective or aerospace technical elective
3	1	MAE3401 Aerodynamics 2	MAE3404 Flight vehicle dynamics	MAE3456 Aerospace computational mechanics Replace with MEC3456 from 2023	Aerospace technical elective at level 3 or 4
	2	MAE3405 Flight vehicle propulsion Unit title change from 2022	MAE3408 Aerospace control	MAE3426 Computer-aided design	Aerospace technical elective at level 3 or 4
4	1	MEC4401 Final year project Replace with ENG4701 from 2021/22	MAE4411 Aircraft structures 2	MAE4404 Aerospace practices Replace with MEC4404 from 2023	Aerospace technical elective at level 3 or above
	2	MEC4402 Final year project – Thesis Replace with ENG4702 from 2022	MAE4408 Damage tolerance and airworthiness	MAE4410 Flight vehicle design	Aerospace technical elective at level 3 or above

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Note:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

Source: *Monash University 2016 Handbook* –http://www.monash.edu.au/pubs/2016handbooks/maps/map-e3001.pdf
CRICOS Provider Number: 00008C

MONASH University

Course progression map for 2016 commencing students

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E3001 Bachelor of Engineering (Honours)

Specialisation – Chemical Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1002 Engineering design: cleaner, safer, smarter	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1001 Engineering Design: lighter, faster, stronger	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	CHE2161 Mechanics of fluids (if not already completed at level 1)	CHM1011 Chemistry 1 (if not already completed at level 1) or CHM1051 Chemistry 1 Advanced	CHE2164 Thermodynamics 1	Elective or chemical technical elective
	2	CHE2162 Materials and energy balances	ENG2005 Advanced engineering mathematics	CHE2163 Heat and mass transfer	Elective or chemical technical elective
3	1	CHE3161 Chemistry and chemical thermodynamics	CHE3165 Separation processes	CHE3167 Transport phenomena and numerical methods	Chemical technical elective at level 3 or 4
	2	CHE3162 Process control	CHE3164 Reaction engineering	CHE3166 Process design	Chemical technical elective at level 3 or 4
4	1	CHE4164 Integrated industrial project (18 points) For selected students taking a period of integrated industrial training in the first semester of their final year. This will replace the three two core units below [CHE4161 and CHE4180 (or ENG4701 and ENG4702)]			Chemical technical elective at level 3 or above
	OR				
	1	CHE4180 Chemical engineering project Replace with ENG4701 from 2021.*See footnote*	CHE4162 Particle technology	CHE4161 Engineer in society	Chemical technical elective at level 3 or above
	2	ENG4702 Final year project B See footnote	CHE4170 Design project (12 points)		Chemical technical elective at level 3 or above

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Note:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

From 2021, **ENG4701 and ENG4702 will replace the 12 credit points CHE4180**, therefore extending the final year project over two semesters. Please seek course advice if needed.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

Depending on placement location, students who choose CHE4164 may have to overload a semester or extend an additional semester in order to complete their course requirement.

Students should not overload in the semester of undertaking CHE4170.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

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MONASH University

Course progression map for 2016 commencing students

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E3001 Bachelor of Engineering (Honours)

Specialisation – Civil Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering Design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	CIV2206 Mechanics of solids Unit title change from 2019	CIV2225 Design of steel and timber structures Replace with CIV2235 from 2021	CIV2263 Water systems	Elective or civil technical elective
	2	ENG2005 Advanced engineering mathematics	CIV2242 Geomechanics 1	CIV2282 Transport and traffic engineering	Elective or civil technical elective
3	1	CIV3248 Groundwater and environmental geomechanics	CIV3284 Design of concrete and masonry structures Replace with CIV3294 from 2022	CIV3285 Engineering hydrology	Civil technical elective at level 3 or 4
	2	CIV3204 Engineering investigation See footnote	CIV3221 Building structures and technology	CIV3247 Geomechanics 2	Civil technical elective at level 3 or 4
4	1	CIV4210 Project A Replace with ENG4701 from 2022. See footnote	CIV4286 Project management for civil engineers	CIV4280 Bridge design and assessment	Civil technical elective at level 3 or 4
	2	CIV4287 Road engineering Replace with ENG4702 from 2022. See footnote	CIV4212 Civil and environmental engineering practice	CIV4288 Water treatment	Civil technical elective at level 3 or 4

Note:

- MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.
- **FROM 2022:** Following a recent advice by Engineers Australia, you must complete 12 CP of a final year project in order to meet professional accreditation requirements. Please seek course advice from the Student Services at the Faculty of Engineering.
- **CIV4210** – If you are course-completing in 2022/S1, complete CIV4210 (for 6CP FYP) or CIV4211 (if undertaking 12CP FYP). Otherwise, replace CIV4210 with ENG4701 from 2022.
- **CIV3204** – If you have not completed CIV3204 by 2021, replace CIV3204 with CIV3283 Road engineering from 2022.
- **CIV4287** – If you have completed CIV3204 but not CIV4287 by 2021, replace CIV4287 with ENG4702 from 2022. CIV3283 is highly recommended to be taken as a level 3 civil engineering technical elective.
- The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.
- You are required to complete at least 420 hours of Continuous Professional Development (CPD) in order to graduate. For further information refer to the CPD webpage.
- For enrolment advice, please refer to the Course Advisers webpage

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MONASH University

Course progression map for 2016 commencing students

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study. It should be used in conjunction with the requirements of the course as specified in the Handbook. The map is subject to updates. Update version: 18 December 2023

E3001 Bachelor of Engineering (Honours)

Specialisation – Electrical and Computer Systems Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1002 Engineering design: cleaner, safer, smarter	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1001 Engineering Design: lighter, faster, stronger	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	ECE2071 Computer organisation and programming	ECE2131 Electrical circuits	ENG2005 Advanced engineering mathematics	Elective or ECSE technical elective
	2	ECE2072 Digital systems (if not already completed at level 1)	ECE2111 Signals and systems	ECE2191 Probability models in engineering	Elective or ECSE technical elective
3	1	ECE3073 Computer systems	ECE3141 Information and networks	ECE3161 Analogue electronics	ECSE technical elective at level 3 or 4
	2	ECE3051 Electrical energy systems*	ECE3091 Engineering design Replace with ECE4191 from 2022	ECE3121 Engineering electromagnetics **Clayton students**: Replace ECE3121 with ECE3122 in 2024	ECSE technical elective at level 3 or 4
4	1	ECE4094 Project A Replace with ENG4701 from 2021/22	Level 4 or 5 ECE-coded core elective	Level 4 or 5 ECE-coded core elective	ECSE technical elective at level 3 or above
	2	ECE4095 Project B Replace with ENG4702 from 2022	ECE4132 Control system design**	ECE4099 Professional Practice	ECSE technical elective at level 3 or above

* This unit replaces ECE4151 Electrical energy systems

** This unit replaces ECE3132 Control systems design

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Note:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

ECE3091 – Replace with ECE4191 if you have not completed ECE3091 by 2021. ECE4191 should be undertaken in your final year of study by swapping placement on the course map with ECE4132 or the level 4 ECSE technical elective.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

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Course progression map for 2016 commencing students

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E3001 Bachelor of Engineering (Honours)

Specialisation – Environmental Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering Design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	BIO2011 Ecology and biodiversity	CHE2164 Thermodynamics 1	CIV2263 Water systems	Elective or environmental technical elective
	2	CHE2162 Material and energy balances	ENG2005 Advanced engineering mathematics	ENE2503 Material properties and recycling	Elective or environmental technical elective
3	1	CIV3248 Groundwater and environmental geomechanics	CIV3285 Engineering hydrology	ENE3048 Energy and the environment *Replaced by ENE2021 from 2019*	Environmental technical elective at level 3 or 4
	2	ENE3606 The air environment	CIV4286 Project management for civil engineers	Environmental engineering technical elective at level 4 See footnote	Environmental technical elective at level 3 or 4
4	1	***Streams: Geomechanics, Transport, Water management*** CIV4210 Project A Replace with ENG4701 from 2022. See footnote	ECC2800 Prosperity, poverty and sustainability in a globalised world	ENE3608 Environmental impact assessment and management systems Replaced by ENE4042	Environmental technical elective at level 3 or 4
	2	ENE4607 Environmental risk assessment Replace with ENG4702 from 2022. See footnote	***Streams: Geomechanics, Transport, Water management*** CIV4212 Civil and environmental engineering practice	BTX3100 - Sustainability regulation for business See footnote	Environmental technical elective at level 3 or 4
			Stream: Sustainable processing CHE4170 Design project (12 credit points)		

Note:

- MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.
- **FROM 2022:** Following a recent advice by Engineers Australia, you must complete 12 CP of a final year project (FYP) in order to meet professional accreditation requirements. To undertake 12CP FYP units ENG4701 and ENG4702, you must free up 6 credit points by reserving the level 4 technical elective (the 6 CP elective that counts towards the Part C and D of the course requirement) for the FYP or by dropping **ENE4607 or BTX3100** (if you haven't already completed these units by 2021). Please seek course advice from the Student Services at the Faculty of Engineering.
- **CIV4210** – If you are course-completing in 2022/S1, complete CIV4210 (if undertaking 6CP FYP only) or CIV4211 (if undertaking 12CP FYP). Otherwise, replace CIV4210 with ENG4701 from 2022.
- The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.
- You are required to complete at least 420 hours of Continuous Professional Development (CPD) in order to graduate. For further information, refer to the CPD webpage.
- For enrolment advice, please refer to the Course Advisers webpage.

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MONASH University

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E3001 Bachelor of Engineering (Honours)

Specialisation – Materials Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering Design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	MTE2544 Functional materials Replace with MTE2202 from 2021 (Semester 2 offering)	MTE2541 Crystal structures, thermodynamics and phase equilibria See footnote 1	MTE2546 Mechanics of materials Replace with MTE2103 from 2021.	Elective or materials technical elective
	2	ENG2005 Advanced engineering mathematics	MTE2542 Microstructural development Replace with MTE2102 from 2021 (Semester 1 offering)	MTE2545 Polymers and ceramics 1 See footnote 2	Elective or materials technical elective
3	1	MTE3541 Materials durability Replace with MTE3103 from 2022	MTE3543 Microstructure to applications: The mechanics of materials See footnote 3	MTE3542 Microstructural design in structural materials Replace with MTE3102 from 2022.	Materials technical elective at level 3 or 4
	2	MTE3546 Polymers and ceramics 2 See footnote 2	MTE3545 Functional materials and devices Replace with MTE3202 from 2022.	MTE3547 Materials characterisation and modelling See footnote 1	Materials technical elective at level 3 or 4
4	1	MTE4525 Project 1 Replace with ENG4701 from 2021/22	MTE4571 Materials engineering design and practice See footnote 3	MTE4572 Polymer and composite processing and engineering See footnote 3	Materials technical elective at level 3 or above
	2	MTE4526 Project 2 Replace with ENG4702 from 2022	MTE4573 Processing and engineering of metals and ceramics See footnote 3	Level 4 or 5 MTE-coded materials engineering core elective	Materials technical elective at level 3 or above

Note:

- MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

1. **MTE2101 and MTE3101 replaces MTE2541 and MTE3547** in combination. If you have completed MTE2541 prior to 2021, you must complete MTE3547 (last offering 2021). Otherwise, complete MTE2101 and MTE3101 as a combination.
2. **MTE2201 and MTE3203 replaces MTE2545 and MTE3546** in combination. If you have completed MTE2545 prior to 2021, you must complete MTE3546 (last offering 2021). Otherwise, complete MTE2201 and MTE3203 as a combination.
3. You must complete the **(MTE3543+MTE4571+MTE4572+MTE4573)** combination (last offerings 2022). Otherwise, complete **(MTE3201+MTE4101+MTE4102+MTE4201)** combination.

- The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.
- All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage. For enrolment advice, please refer to the Course Advisers webpage

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CRICOS Provider Number: 00008C

MONASH University

Course progression map for 2016 commencing students

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E3001 Bachelor of Engineering (Honours)

Specialisation – Mechanical Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering Design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	MEC2403 Mechanics of materials	MEC2401 Dynamics 1	MEC2402 Engineering design 1 *Unit title change in 2021*	Elective or mechanical technical elective
	2	ENG2005 Advanced engineering mathematics	MEC2404 Mechanics of fluids	MEC2405 Thermodynamics	Elective or mechanical technical elective
3	1	MEC3455 Solid mechanics	MEC3451 Fluid mechanics 2	MEC3456 Engineering computational mechanics	Mechanical technical elective at level 3 or 4
	2	MEC3453 Dynamics 2	MEC3416 Engineering design 2 Unit title change from 2021	MEC3457 Systems and control	Mechanical technical elective at level 3 or 4
4	1	MEC4401 Final year project Replace with ENG4701 from 2021/22	MEC4404 Professional Practice	MEC4408 Thermodynamics and heat transfer	Mechanical technical elective at level 3 or above
	2	MEC4402 Final year project – Thesis Replace with ENG4702 from 2022	MEC4407 Engineering design 3	MEC4426 Computer-aided design	Mechanical technical elective at level 3 or above

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Note:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

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MONASH University

Course progression map for 2016 commencing students

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E3001 Bachelor of Engineering (Honours)

Specialisation – Mechatronics Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering Design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	ECE2131 Electrical circuits	MEC2402 Engineering design 1 Unit title change in 2021	ECE2071 Computer organisation and programming	Elective or mechatronics technical elective
	2	ENG2005 Advanced engineering mathematics	TRC2201 Mechanics	TRC2001 Intro to systems engineering	Elective or mechatronics technical elective
3	1	TRC3802 Thermo-fluids and power systems *Re-coded TRC4802 from 2018*	TRC3200 Dynamical systems	TRC3500 Sensors and artificial perception	Mechatronics technical elective at level 3 or 4
	2	ECE3161 Analogue electronics	TRC3000 Mechatronics project 2	TRC3600 Modelling and control	Mechatronics technical elective at level 3 or 4
4	1	TRC4000 Mechatronics final year project 1 Replace with ENG4701 from 2021/22	TRC4800 Robotics	MEC4418 Control systems *This unit is not offered in 2019 and is replaced by ECE3141 Information and networks*	Mechatronics technical elective at level 3 or above
	2	TRC4001 Mechatronics final year project 2 Replace with ENG4702 from 2022	TRC4902 Mechatronics and manufacturing	TRC4002 Professional practice	Mechatronics technical elective at level 3 or above

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Note:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

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MONASH University

Course progression map for 2016 commencing students

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E3001 Bachelor of Engineering (Honours)

Specialisation – Mining Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering Design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	CIV2206 Mechanics of solids *Unit title change from 2019*	RSE2030 Project, risk and safety management	EAE2511 The deep earth	Elective or mining technical elective
	2	ENG2005 Advanced engineering mathematics	CIV2242 Geomechanics 1	RSE2010 Fixed plant engineering	Elective or mining technical elective
3	1	RSE3040 Surface mining systems	RSE3020 Resource estimation	RSE3050 Underground mining systems	Mining technical elective at level 3 or 4
	2	RSE3010 Mine geotechnical engineering	RSE3030 Mine ventilation *Unit title change from 2021*	RSE3060 Blasting and fragmentation	Mining technical elective at level 3 or 4
4	1	CIV4210 Project A Replace with ENG4701 from 2022	RSE4120 Instrumentation, automation, asset management	RSE4010 Mine planning and scheduling	Mining technical elective at level 3 or 4
	2	CIV4211 Project B Replace with ENG4702 from 2022	RSE4020 Mine design and feasibility project	RSE4040 Mineral processing	Mining technical elective at level 3 or 4

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Note:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

The mining Engineering specialisation is not offered in a double degree course.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

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MONASH University

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E3001 Bachelor of Engineering (Honours)

Specialisation – Software Engineering

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units			
1	1	ENG1001 Engineering design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective
2	1	FIT2085 Introduction to computer science for engineers	MAT1830 Discrete mathematics for computer science	FIT2099 Object-oriented design and implementation	Elective or software engineering technical elective
	2	FIT2101 Software engineering process and management	FIT2004 Algorithms and data structures	FIT2107 Software quality and testing	Elective or software engineering technical elective
3	1	FIT3159 Computer architecture	FIT3077 Software engineering: architecture and design	FIT3170 Software engineering practice (12 points)	Software engineering technical elective at level 3 or 4
	2	FIT2100 Operating systems	FIT3171 Databases		Software engineering technical elective at level 3 or 4
4	1	FIT4002 Software engineering industry experience studio project (12 points)	FIT4003 Software engineering research project Replace with FIT4701 from 2023	FIT4165 Computer networks	Software engineering technical elective at level 3 or 4
	2		Replace with FIT4702 from 2023	Software engineering technical elective at level 4 or 5	Software engineering technical elective at level 3, 4 or 5

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Notes:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

Students in the Industry Based Learning placement program will have a different progression map, with their placement in Semester 2 of third year, and will need to overload in one semester or complete a summer semester unit.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

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MONASH University

Course progression map for 2016 commencing students

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study. It should be used in conjunction with the requirements of the course as specified in the Handbook. The map is subject to updates. Update version: 18 December 2023

E3001 Bachelor of Engineering (Honours)

Specialisation – Software Engineering – Industry Based Learning

The placement of units may be rearranged to support sequencing for double degree courses but care should be taken to ensure sequenced units are maintained in sequence.

Year	Sem	Units				
1	1	ENG1001 Engineering design: lighter, faster, stronger	ENG1005 Engineering mathematics or ENG1003 Engineering mobile apps	ENG1090 (if required) or PHS1080 (if required)* or Level 1 engineering elective *Replaced by PHS1001 from 2018*	Elective (If two foundation units are required then this elective is used to complete the second of ENG1090 and PHS1001)	
	2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps or ENG1005 Engineering mathematics	ENG1060 Computing for engineers	Elective or software engineering technical elective	
2	1	FIT2085 Introduction to computer science for engineers	MAT1830 Discrete mathematics for computer science	FIT2099 Object-oriented design and implementation	Elective or software engineering technical elective	
	2	FIT2101 Software engineering process and management	FIT2004 Algorithms and data structures	FIT2107 Software quality and testing	FIT2100 Operating systems	
3	1	FIT3077 Software engineering: architecture and design	FIT3159 Computer architecture	FIT3171 Databases	Software engineering technical elective at level 3 or 4	Elective or software engineering technical elective
	2	FIT4042 Industry based learning (18 pts)				
4	1	FIT3170 Software engineering practice (12 points)	FIT4003 Software engineering research project Replace with FIT4701 from 2023	FIT4165 Computer networks	Software engineering technical elective at level 3 or 4	
	2		Replace with FIT4702 from 2023	Software engineering technical elective at level 3 or 4	Software engineering technical elective at level 3, 4 or 5	

A	Engineering fundamentals
B	Engineering design
C/D	Specialist engineering knowledge and practice
E	Elective Study

Notes:

MINORS AND ELECTIVES LIST is located on the Faculty's current student course information webpage.

Double degree students requiring two foundation units will need to overload in year 1 or 2 and increase the total credit points needed for the double by 6 points.

All Bachelor of Engineering (Honours) students are required to complete Continuous Professional Development (CPD) in order to graduate. For CPD advice, refer to the CPD webpage.

Source: *Monash University 2016 Handbook* –http://www.monash.edu.au/pubs/2016handbooks/maps/map-e3001.pdf
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