MONASH University

Course progression map for 2019 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

E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Common first year engineering

If no foundation units are required:					
YEAR 1 Semester 1	ENG1060 Computing for engineers	ENG1005 Engineering mathematics	Science unit	Science unit	
YEAR 1 Semester 2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1003 Engineering mobile apps	Science unit	Science unit	
YEAR 2 Semester 1	ENG1001 Engineering design: lighter, faster, stronger	First year engineering elective	Science unit	Science unit	
Tip: You can swap the semester of ENG1003 and your Engineering elective unit.					

If you need to enrol in foundation physics and maths*:					
YEAR 1 Semester 1	PHS1001 Foundation physics	ENG1090 Foundation Mathematics	Science unit	Science unit	
YEAR 1 Semester 2	ENG1002 Engineering design: cleaner, safer, smarter	ENG1005 Engineering mathematics	Science unit	Science unit	
YEAR 2 Semester 1	ENG1001 Engineering design: lighter, faster, stronger	ENG1060 Computing for engineers	Science unit	Science unit	ENG1003 Engineering mobile apps
1. Double degree students requiring two foundation units will need to take the remaining core unit ENG1003 Engineering mobile apps in semester one of year two as an overload, and increase the total credit points needed for the double by 6 points. 2. Students wanting to complete Software Engineering must complete ENG1003 Engineering mobile apps in Year 1 (Semester 1) and PHYS1001 Foundation physics in Year 2 (Semester 1) as an overload. Tip: You can swap the semesters of ENG1003 and ENG1005.					

If you need to enrol in foundation maths:				
YEAR 1 Semester 1	ENG1002 Engineering design: cleaner, safer, smarter	ENG1090 Foundation Mathematics	Science unit	Science unit
YEAR 1 Semester 2	ENG1060 Computing for engineers	ENG1005 Engineering mathematics	Science unit	Science unit
YEAR 2 Semester 1	ENG1001 Engineering design: lighter, faster, stronger	ENG1003 Engineering mobile apps	Science unit	Science unit
Tip: You can swap the semesters of ENG1003 and ENG1005.				

If you need to enrol in foundation physics:				
YEAR 1 Semester 1	ENG1002 Engineering design: cleaner, safer, smarter	PHS1001 Foundation physics	Science unit	Science unit
YEAR 1 Semester 2	ENG1060 Computing for engineers	ENG1005 Engineering mathematics	Science unit	Science unit
YEAR 2 Semester 1	ENG1001 Engineering design: lighter, faster, stronger	ENG1003 Engineering mobile apps	Science unit	Science unit
Tip: You can swap the semesters of ENG1003 and ENG1005.				

Note:

- All students 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.

Source: *Monash University 2019 Handbook*

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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Aerospace Engineering

	Bachelor of Aerospace Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first year engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	MAE2402 Thermodynamics and heat transfer Unit title change from 2021	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	MAE2401 Aircraft structures 1 Replace with MEC2403 from 2023	MAE2412 Aerospace design Replace with MEC2402 from 2023	Science major level 3	Science elective	
YEAR 3 Semester 2	MAE2404 Aerodynamics I	MAE2505 Aerospace dynamics	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	MAE3401 Aerodynamics 2	MAE3404 Flight vehicle dynamics	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	MAE3426 Computer-aided design	MAE3405 Flight vehicle propulsion Unit title change from 2022	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	MEC4401 Final year project Replace with ENG4701 from 2022	MAE4404 Aerospace practices Replace with MEC4404 from 2023	MAE4416 Orbital mechanics and spaceflight dynamics	MAE3456 Aerospace computational mechanics Replace with MEC3456 from 2023	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	MEC4402 Final year – thesis Replace with ENG4702 from 2022	MAE4410 Flight vehicle design	MAE3411 Aerospace structural mechanics	MAE3408 Aerospace control	

Note:

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MONASH University

Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Chemical Engineering

	Bachelor of Chemical Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved Science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	CHE2161 Mechanics of fluids	CHE2163 Heat and mass transfer	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	CHM1011 Chemistry 1 (if not already completed at level 1) or CHM1051 Chemistry 1 Advanced	ENG2005 Advanced engineering mathematics	Science major level 3	Science elective	
YEAR 3 Semester 2	CHE2162 Materials and energy balances	CHE2164 Thermodynamics 1	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	CHE3161 Chemistry and chemical thermodynamics	CHE3165 Separation processes	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	CHE3166 Process design	CHE3164 Reaction engineering	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	CHE4164 Integrated industrial project (18 points) For select students taking a period of integrated industrial training in their final year. CHE4164 (18 cp) will be replaced by CHE4164 (6 cp) and CHE4165 (6 cp) from 2022. You must now also complete CHE4161. See footnote.				ENG0001 Continuous Professional Development (0 credit points)
OR					
YEAR 5 Semester 1	CHE4180 Chemical engineering project Replace with ENG4701. See footnote	CHE4161 Engineer in society	CHE4162 Particle technology	CHE3167 Transport phenomena and numerical methods	
YEAR 5 Semester 2	ENG4702 Final year project B See footnote	CHE4170 Design project		CHE3162 Process control	

Note:

- 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.
- CHE4164 and CHE4165 are integrated industrial project units for select students only. The units are undertaken in place of the final year project units ENG4701 and ENG4702. Depending on placement location, you may have to overload a semester or extend an additional semester in order to complete your course.
- CHE4170 - You should not overload in the semester when undertaking this unit.
- All students 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.

MONASH University

Course progression map for 2019 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

E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Civil Engineering

	Bachelor of Civil Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	Science elective	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (Advanced)	
YEAR 3 Semester 1	CIV2225 Design of steel and timber structures Replace with CIV2235 from 2021	CIV2263 Water systems	CIV2206 Structural mechanics	Science major level 3	
YEAR 3 Semester 2	CIV2242 Geomechanics 1	CIV2282 Transport and traffic engineering Sem 1 offering from 2021	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	CIV3285 Engineering hydrology	CIV3284 Design of concrete and masonry structures Replace with CIV3294 from 2022	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	CIV3247 Geomechanics 2	CIV3221 Building structures and technology	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	CIV4210 Project A Replace with ENG4701 from 2022. See footnote.	CIV3248 Groundwater and environmental geomechanics	CIV4286 Project management for civil engineers	CIV4280 Bridge design and assessment	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	CIV4287 Road engineering Replace with ENG4702 from 2022. See footnote.	CIV3204 Engineering investigation See footnote	CIV4212 Civil and environmental engineering practice	CIV4288 Water treatment	

Note:

- **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

MONASH University

Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Electrical and Computer Systems Engineering

	Bachelor of Electrical and Computer Systems Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	ECE2072 Digital systems	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	ECE2071 Computer organisation and programming	ECE2131 Electrical circuits	Science major level 3	Science elective	
YEAR 3 Semester 2	ECE2111 Signals and systems	ECE2191 Probability models in engineering	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	ECE3073 Computer systems	ECE3141 Information and networks	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	ECE3121 Engineering electromagnetics Replace ECE3121 with ECE3122 in 2024	ECE4132 Control system design	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	ECE4094 Project A Replace with ENG4701 from 2022	ECE3161 Analogue electronics	ECE3051 Electrical energy systems	Level 4 or 5 ECE-coded core elective	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	ECE4095 Project B Replace with ENG4702 from 2022	ECE3091 Engineering design Replace with ECE4191 from 2022	ECE4099 Professional Practice	Level 4 or 5 ECE-coded core elective	

Note:

- All students 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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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Environmental Engineering

	Bachelor of Environmental Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	CHE2162 Material and energy balances	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	ENE2021 Energy and the environment	CIV2263 Water systems	Science major level 3	Science elective	
YEAR 3 Semester 2	ENE3031 Building sustainability	ENE2503 Materials properties and recycling	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	CIV3248 Groundwater and environmental geomechanics	CHE2164 Thermodynamics 1	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	ENE3606 The air environment	ENE3032 Fate and transport of contaminants	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	CIV4210 Project A Replace with ENG4701 from 2022. See footnote.	BTX3100 - Sustainability regulation for business	CIV3285 Engineering hydrology	ENE4042 Environment impact and risk assessment	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	Environmental engineering elective at level 4 Replace with ENG4702 from 2022. See footnote.	CIV4286 Project management for civil engineers	CIV4212 Civil and environmental engineering practice	ENE4041 Soil remediation and solid waste management	

Note:

- **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) or replacing **BTX3100** (if you haven't already completed this unit by 2021) for FYP.
- **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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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Materials Engineering

	Bachelor of Materials Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	Science elective	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (Advanced)	
YEAR 3 Semester 1	MTE2541 Crystal structures, thermodynamics and phase equilibria See footnote 1	MTE2546 Mechanics of materials Replace with MTE2103 from 2021.	MTE2544 Functional materials Replace with MTE2202 from 2021 (Semester 2 offering)	Science major level 3	
YEAR 3 Semester 2	MTE2542 Microstructural development eplace with MTE2102 from 2021 (Semester 1 offering)	MTE2545 Polymers and ceramics 1 See footnote 2	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	MTE3543 Microstructure to applications: The mechanics of materials See footnote 3	MTE3542 Microstructural design in structural materials Replace with MTE3102 from 2022.	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	MTE3545 Functional materials and devices Replace with MTE3202 from 2022.	MTE3546 Polymers and ceramics 2 Replace with MTE3203 from 2022. See footnote 2	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	MTE4525 Project 1 Replace with ENG4701 from 2022	MTE3541 Materials durability Replace with MTE3103 from 2022.	MTE4572 Polymer and composite processing and engineering See footnote 3	MTE4571 Materials engineering design and practice See footnote 3	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	MTE4526 Project 2 Replace with ENG4702 from 2022	MTE3547 Materials characterisation and modelling See footnote 1	MTE4573 Processing and engineering of metals and ceramics See footnote 3	Level 4 or 5 materials technical elective	

Note:

1. **MTE2101 and MTE3101 will be replacing MTE2541 and MTE3547** respectively. If you have completed MTE2541 prior to 2021, you must complete MTE3547 (last offering 2021). Otherwise, complete MTE2101 and MTE3101 combination.
2. **MTE2201 and MTE3203 will be replacing MTE2545 and MTE3546** respectively. If you have completed MTE2545 prior to 2021, you must complete MTE3546 (last offering 2021). Otherwise, complete MTE2201 and MTE3203 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.
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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Mechanical Engineering

	Bachelor of Mechanical Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first year engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	Science elective	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	MEC2402 Engineering design 1 Unit title change in 2021	MEC2403 Mechanics of materials	MEC2401 Dynamics I	Science major level 3	
YEAR 3 Semester 2	MEC2404 Mechanics of fluids	MEC2405 Thermodynamics	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	MEC3455 Solid Mechanics	MEC3456 Engineering computational analysis	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	MEC3416 Engineering design 2 Unit title change in 2021	MEC3457 Systems and control	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	MEC4401 Final year project Replace with ENG4701 from 2022	MEC4408 Thermodynamics and heat transfer	MEC3451 Fluid Mechanics 2	MEC4404 Professional practice	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	MEC4402 Final year project – Thesis Replace with ENG4702 from 2022	MEC4426 Computer-aided design	MEC3453 Dynamics 2	MEC4407 Engineering design 3 Unit title change from 2021	

Note:

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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation – Robotics and Mechatronics Engineering – *Artificial intelligence stream*

	Bachelor of Robotics and Mechatronics Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	Science elective	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	ECE2071 Computer organisation and programming	MEC2402 Engineering design 1 Unit title change in 2021	ECE2131 Electrical circuits	Science major level 3	
YEAR 3 Semester 2	TRC2201 Mechanics	ECE2072 Digital systems	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	TRC3500 Sensors and artificial perception	TRC3200 Dynamical systems	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	TRC3600 Modelling and control	ECE4078 Intelligent robotics	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	TRC4000 Robotics and mechatronics final year project 1 Replace with ENG4701 from 2022	TRC4800 Robotics	ECE3161 Analogue electronics	ECE4076 Computer vision	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	TRC4001 Robotics and mechatronics final year project 2 Replace with ENG4702 from 2022	ECE3091 Engineering design Replace with ECE4191 from 2022	ECE4179 Neural networks and deep learning	TRC4002 Professional practice	

Note:

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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation – Robotics and Mechatronics Engineering - *Automation stream*

	Bachelor of Robotics and Mechatronics Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	Science elective	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	ECE2071 Computer organisation and programming	MEC2402 Engineering design 1 Unit title change in 2021	ECE2131 Electrical circuits	Science major level 3	
YEAR 3 Semester 2	TRC2201 Mechanics	ECE2072 Digital systems	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	TRC3500 Sensors and artificial perception	TRC3200 Dynamical systems	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	TRC3600 Modelling and control	TRC3000 Automation project	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	TRC4000 Robotics and mechatronics final year project 1 Replace with ENG4701 from 2022	TRC4800 Robotics	ECE3161 Analogue electronics	TRC4200 Engineering cyber-physical systems	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	TRC4001 Robotics and mechatronics final year project 2 Replace with ENG4702 from 2022	TRC4902 Mechatronics and manufacturing	TRC4802 Thermo-fluids and power systems	TRC4002 Professional practice	

Note:

- 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.

MONASH University

Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Mechatronics Engineering*

	Bachelor of Mechatronics Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	ENG2005 Advanced engineering mathematics	Science elective	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	ECE2071 Computer organisation and programming	MEC2402 Engineering design 1 Unit title change in 2021	ECE2131 Electrical circuits	Science major level 3	
YEAR 3 Semester 2	TRC2201 Mechanics	TRC2001 Introduction to systems engineering	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 1	ECE3161 Analogue electronics	TRC3200 Dynamical systems	Science major level 3	Science elective level 2 or 3	
YEAR 4 Semester 2	TRC3600 Modelling and control	TRC3000 Mechatronics project 2	Science major level 3	Science elective level 2 or 3	
YEAR 5 Semester 1	TRC4000 Mechatronics final year project 1 Replace with ENG4701 from 2022	TRC4800 Robotics	TRC3500 Sensors and artificial perception	ECE3141 Information and networks	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	TRC4001 Mechatronics final year project 2 Replace with ENG4702 from 2022	TRC4902 Mechatronics and manufacturing	TRC4802 Thermo-fluids and power systems	TRC4002 Professional practice	

Note:

ROBOTICS AND MECHATRONICS ENGINEERING will replace the Mechatronics Engineering specialisation in 2020.

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- For enrolment advice, please refer to the Course advisers webpage.

Source: *Monash University 2019 Handbook*

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Course progression map for 2019 commencing students

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E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation - Software Engineering

	Bachelor of Software Engineering (Honours)		Bachelor of Science		
YEAR 1 Semester 1	**Common first level engineering**		Science major level 1 approved science sequence 1	Level 1 approved science sequence 2	
YEAR 1 Semester 2			Science major level 1 sequence 1	Level 1 approved science sequence 2	
YEAR 2 Semester 1			Science major level 2	Level 1 science unit	If two foundation units are required then overload is required for ENG1003 Engineering mobile apps
YEAR 2 Semester 2	FIT2085 Introduction to computer science	FIT2101 Software engineering process and management	Science major level 2	SCI2010 Scientific practice and communication or SCI2015 Scientific practice and communication (advanced)	
YEAR 3 Semester 1	MAT1830 Discrete mathematics for computer science	FIT2099 Object-oriented design and implementation	FIT2004 Algorithms and data structures	Science major level 3	
YEAR 3 Semester 2	FIT2107 Software quality and testing	FIT2100 Operating systems	Science elective level 2 or 3	Science major level 3	
YEAR 4 Semester 1	FIT3170 Software engineering practice	FIT3077 Software engineering: architecture and design	FIT3159 Computer architecture	Science major level 3	
YEAR 4 Semester 2		FIT3171 Databases	Science elective	Science major level 3	
YEAR 5 Semester 1	FIT4002 Software engineering industry experience studio project	FIT4003 Software engineering research project Replace with FIT4701 from 2023	FIT4165 Computer networks	Science elective level 2 or 3	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Semester 2		Replace with FIT4702 from 2023	Level 4 or 5 software engineering technical elective	Science elective level 2 or 3	

Note:

- All students 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.