

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science

#### Common first year

You do not have VCE Units 3 & 4 Specialist Maths >30 study score <u>and</u> VCE Units 3 & 4 Physics >25 study score: You must enrol in Foundation mathematics (ENG1090) <u>and</u> Foundation physics (PHS1001)				
Year 1 Semester 1 February	<a href="#">PHS1001</a> Foundation physics* <i>Corequisite: ENG1090 *</i>	<a href="#">ENG1090</a> Foundation mathematics*	Science unit	Science unit
Year 1 Semester 2 July	<a href="#">ENG1013</a> Engineering smart systems	<a href="#">ENG1005</a> Engineering mathematics	Science unit	Science unit
Year 2 Semester 1 February	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1014</a> Engineering numerical analysis <i>Required: ENG1005</i>	Science unit	Science unit
<a href="#">ENG1012</a> Engineering design				
1. If you require two foundation units, you will need to take the remaining core unit ENG1013 Engineering smart systems in semester one of year two as an overload, and increase the total credit points needed for the double by 6 points. Tip: You can swap the semesters of ENG1013 and ENG1005.				

You do not have VCE Units 3 & 4 Specialist Maths >30 study score: You must enrol in Foundation mathematics (ENG1090)				
Year 1 Semester 1 February	<a href="#">ENG1013</a> Engineering smart systems	<a href="#">ENG1090</a> Foundation mathematics*	Science unit	Science unit
Year 1 Semester 2 July	<a href="#">ENG1014</a> Engineering numerical analysis <i>Required: ENG1005</i>	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	Science unit	Science unit
Year 2 Semester 1 February	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1012</a> Engineering design	Science unit	Science unit
Tip: You can swap the semesters of ENG1013 and ENG1005.				

You do not have VCE Units 3 & 4 Physics >25 study score: You must enrol in Foundation physics (PHS1001)				
Year 1 Semester 1 February	<a href="#">ENG1013</a> Engineering smart systems	<a href="#">PHS1001</a> Foundation physics*	Science unit	Science unit
Year 1 Semester 2 July	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	Science unit	Science unit
Year 2 Semester 1 February	<a href="#">ENG1014</a> Engineering numerical analysis <i>Required: ENG1005</i>	<a href="#">ENG1012</a> Engineering design	Science unit	Science unit
Tip: You can swap the semesters of ENG1013 and ENG1005.				

You have completed VCE Units 3 & 4 Physics >25 study score <u>and</u> VCE Units 3 and 4 Specialist Maths >30 study score: No foundation units are required				
Year 1 Semester 1 February	<a href="#">ENG1014</a> Engineering numerical analysis <i>Required: ENG1005</i>	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	Science unit	Science unit
Year 1 Semester 2 July	<a href="#">ENG1012</a> Engineering design	<a href="#">ENG1013</a> Engineering smart systems	Science unit	Science unit
Year 2 Semester 1 February	<a href="#">ENG1011</a> Engineering methods	<a href="#">First Year engineering technical elective</a>	Science unit	Science unit
Tip: You can swap the semester of ENG1013 and your Engineering elective unit.				

- NOTE:
- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
  - \* Foundation units: You enrol in the foundation units ENG1090 and/or PHS1001 if you have not completed the Australian VCE (Units 3 & 4) or equivalent Specialist mathematics and/or Physics with [the required study score](#).
  - Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
  - For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Aerospace Engineering

	Bachelor of Aerospace Engineering (Honours)		Bachelor of Science		
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	
Year 2 Semester 2 July	<a href="#">ENG2005</a> Advanced engineering mathematics	<a href="#">MAE2404</a> Aerodynamics 1 From 2026 See <a href="#">Progression plan</a>	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">MEC2403</a> Mechanics of materials From 2026 Replace with <a href="#">MMA2002</a>	<a href="#">MAE2402</a> Thermodynamics and gas dynamics From 2026 See <a href="#">Progression plan</a>	Level 3 science major unit	Science elective	
Year 3 Semester 2 July	<a href="#">MAE3408</a> Aerospace control In 2025 Replace with <a href="#">MEC3457</a> From 2026 Replace with <a href="#">MMA2005</a>	<a href="#">MAE2505</a> Aerospace dynamics From 2026 Replace with <a href="#">MMA2004</a>	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	<a href="#">MEC2402</a> Design methods From 2026 Replace with <a href="#">MMA2001</a>	<a href="#">MAE3404</a> Flight vehicle dynamics In 2025 Replace with <a href="#">TRC3200</a> From 2026 Replace with <a href="#">MAE3002</a>	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	<a href="#">MAE3411</a> Aerospace structural mechanics	<a href="#">MAE3405</a> Aerospace propulsion See <a href="#">Progression plan</a>	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">MEC4404</a> Professional practice Replace with one <a href="#">Professional Practice domain unit</a>	<a href="#">MAE4416</a> Orbital mechanics and spaceflight dynamics	<a href="#">MAE3401</a> Aerodynamics 2 See <a href="#">Progression plan</a>	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	<a href="#">MAE4410</a> Flight vehicle design	<a href="#">MAE4426</a> Finite element analysis and composite structures From 2026 Replace with <a href="#">MMA4001</a>	<a href="#">MEC3456</a> Engineering computational analysis From 2026 Replace with <a href="#">MMA3001</a>	

NOTE: Please read the [Aerospace Engineering Progression Plan](#) alongside this course map to guide your progression.

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- MAE2505** - If you have completed MAE2505 as a First Year technical elective, you must replace the core with another unit from the aerospace engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Chemical Engineering

	Bachelor of Chemical Engineering (Honours)		Bachelor of Science		
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	
Year 2 Semester 2 July	<a href="#">CHE2161</a> Mechanics of fluids	<a href="#">CHE2163</a> Heat and mass transfer	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">CHM1011</a> Chemistry 1 (if not already completed at level 1) or <a href="#">CHM1051</a> Chemistry 1 Advanced	<a href="#">CHE2164</a> Thermodynamics 1	Level 3 science major unit	Science elective	
Year 3 Semester 2 July	<a href="#">CHE2162</a> Materials and energy balances	<a href="#">ENG2005</a> Advanced engineering mathematics	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	<a href="#">CHE3161</a> Chemistry and chemical thermodynamics	<a href="#">CHE3165</a> Separation processes	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	<a href="#">CHE3166</a> Process design	<a href="#">CHE3164</a> Reaction engineering	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">CHE4162</a> Particle technology	CHE4161 Engineer in society Replace with one <a href="#">Professional Practice domain unit</a>	<a href="#">CHE3167</a> Transport phenomena and numerical methods	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	<a href="#">CHE4170</a> Design project		<a href="#">CHE3162</a> Process control	

#### NOTE:

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- CHM1011 or CHM1051** - If you have completed either unit as a First Year technical elective, you must replace the core with another unit from the chemical engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- CHE4164 and CHE4165 – From 2025, the integrated industrial project opportunities become part of the ENG4701 and ENG4702 Final year projects.
- CHE4170 - You should not overload in the semester when undertaking this unit.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Civil Engineering

	Bachelor of Civil Engineering (Honours)		Bachelor of Science			
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2		
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2		
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change		If two foundation units are required then overload is required for <a href="#">ENG1013</a> Engineering smart systems
Year 2 Semester 2 July	<a href="#">ENG2005</a> Advanced engineering mathematics	Science elective	Level 2 science major unit	Level 2 or 3 science elective		
Year 3 Semester 1 February	<a href="#">CIV2282</a> Transport and traffic engineering	<a href="#">CIV2263</a> Water systems	<a href="#">CIV2206</a> Structural mechanics	Level 3 science major unit		
Year 3 Semester 2 July	<a href="#">CIV2242</a> Geomechanics 1	<a href="#">CIV2235</a> Structural materials	Level 3 science major unit	Level 2 or 3 science elective		
Year 4 Semester 1 February	<a href="#">CIV3285</a> Engineering hydrology	<a href="#">CIV3294</a> Structural design	Level 3 science major unit	Level 2 or 3 science elective		
Year 4 Semester 2 July	<a href="#">CIV3247</a> Geomechanics 2	<a href="#">CIV3221</a> Building structures and technology	Level 3 science major unit	Level 2 or 3 science elective		
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">CIV4249</a> Foundation engineering	CIV4286 Project management for civil engineers <span style="color: red;">Replace with one</span> <a href="#">Professional Practice domain unit</a>	<a href="#">CIV4280</a> Bridge design and assessment	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)	
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	<a href="#">CIV3283</a> Road engineering	<a href="#">CIV4212</a> Civil and environmental engineering practice	<a href="#">CIV4288</a> Water treatment		

**NOTE:**

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### 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 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	If two foundation units are required then overload is required for <a href="#">ENG1013</a> Engineering smart systems
Year 2 Semester 2 July	<a href="#">ENG2005</a> Advanced engineering mathematics	<a href="#">ECE2072</a> Digital systems	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">ECE2071</a> Computer organisation and programming Unit title change from 2025	<a href="#">ECE2131</a> Electrical circuits	Level 3 science major unit	Science elective	
Year 3 Semester 2 July	<a href="#">ECE2111</a> Signals and systems	<a href="#">ECE2191</a> Probability models in engineering	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	<a href="#">ECE3051</a> Electrical energy systems	<a href="#">ECE3073</a> Computer systems	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	<a href="#">ECE3121</a> Engineering electromagnetics In 2024: Replace with <a href="#">ECE3122</a>	<a href="#">ECE3161</a> Analogue electronics	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">ECE3141</a> Information and networks	ECE4099 Professional Practice Replace with one <a href="#">Professional Practice domain unit</a>	<a href="#">Level 4 or 5 ECE-coded core elective</a>	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	<a href="#">ECE4191</a> Engineering integrated design	<a href="#">ECE4132</a> Control system design	<a href="#">Level 4 or 5 ECE-coded core elective</a>	

#### NOTE:

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- ECE2072** - If you have completed the unit as a First Year elective, you must replace the core with another unit from the electrical and computer systems engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- Engineering minors are not available in the Engineering double degree courses
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Environmental Engineering

	Bachelor of Environmental Engineering (Honours)		Bachelor of Science		
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	If two foundation units are required then overload is required for <a href="#">ENG1013</a> Engineering smart systems
Year 2 Semester 2 July	<a href="#">ENG2005</a> Advanced engineering mathematics	CHE2162 Material and energy balances From 2026 Replace with <a href="#">ENE2268</a>	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">ENE2021</a> Energy and the environment	<a href="#">CIV2263</a> Water systems	Level 3 science major unit	Science elective	
Year 3 Semester 2 July	<a href="#">CHE2164</a> Thermodynamics 1	<a href="#">ENE2503</a> Materials properties and recycling	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	CIV3248 Groundwater and environmental geomechanics From 2025: Replace with <a href="#">ENE4043</a>	<a href="#">ENE3031</a> Building sustainability	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	<a href="#">ENE3606</a> The air environment	<a href="#">ENE3032</a> Fate and transport of contaminants	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">BTX3100</a> - Sustainability regulation for business	<a href="#">CIV3285</a> Engineering hydrology	<a href="#">ENE4042</a> Environment impact and risk assessment	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	CIV4286 Project management for civil engineers Replace with one <a href="#">Professional Practice domain unit</a>	<a href="#">CIV4212</a> Civil and environmental engineering practice	<a href="#">ENE4041</a> Soil remediation and solid waste management	

**NOTE:**

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Materials Engineering

	Bachelor of Materials Engineering (Honours)		Bachelor of Science		
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	
Year 2 Semester 2 July	<a href="#">MTE2201</a> Polymers Unit title change from 2025	<a href="#">ENG2005</a> Advanced engineering mathematics	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">MTE2101</a> Atomic-scale structure of materials	<a href="#">MTE2102</a> Phase equilibria and phase transformations	<a href="#">MTE2103</a> Mechanical properties of materials	Level 2 or 3 science elective	
Year 3 Semester 2 July	MTE3101 Materials in a complex world 1: People, projects and data From 2026 Replace with <a href="#">MTE2204</a>	<a href="#">MTE3203</a> Introduction to ceramics: Properties, processing and applications	Level 3 science major unit	Level 3 science major unit	
Year 4 Semester 1 February	MTE2202 Functional materials 1 From 2026 Replace with <a href="#">MTE3104</a>	<a href="#">MTE3103</a> Materials life cycle	<a href="#">MTE3102</a> Plasticity of metals and alloys	Level 2 or 3 science elective	
Year 4 Semester 2 July	<a href="#">MTE3201</a> Materials in a complex world 2: Characterisation, identification and selection	<a href="#">MTE3202</a> Functional materials 2 Unit title change from 2026	Science elective	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">MTE4101</a> Integrated design project	<a href="#">MTE4102</a> Advanced materials processing and manufacturing	Level 3 science major unit	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	MTE4201 Materials in a complex world 3: Impact in society Replace with one <a href="#">Professional Practice domain unit</a>	<a href="#">Level 4 or 5 MTE-coded materials engineering technical elective</a>	Level 3 science major unit	

**NOTE:**

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Mechanical Engineering

	Bachelor of Mechanical Engineering (Honours)		Bachelor of Science		
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	
Year 2 Semester 2 July	MEC2401 Dynamics 1 <small>From 2026 Replace with <a href="#">MMA2004</a> - See <a href="#">Progression plan</a></small>	Science elective	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	MEC2402 Design methods <small>From 2026 Replace with <a href="#">MMA2001</a></small>	MEC2403 Mechanics of materials <small>From 2026 Replace with <a href="#">MMA2002</a></small>	<a href="#">ENG2005</a> Advanced engineering mathematics	Level 3 science major unit	
Year 3 Semester 2 July	MEC2404 Mechanics of fluids <small>From 2026 See <a href="#">Progression plan</a></small>	MEC3456 Engineering computational analysis <small>From 2026 Replace with <a href="#">MMA3001</a> - See <a href="#">Progression plan</a></small>	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	<a href="#">MEC3455</a> Solid Mechanics <small>Unit title change from 2026</small>	MEC2405 Thermodynamics <small>From 2026 See <a href="#">Progression plan</a></small>	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	<a href="#">MEC3416</a> Machine design <small>Unit title change from 2026</small>	MEC3457 Systems and control <small>From 2026 Replace with <a href="#">MMA2005</a></small>	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">MEC4408</a> Thermodynamics and heat transfer <small>Unit title change from 2026</small>	<a href="#">MEC3451</a> Fluid Mechanics 2	MEC4404 Professional practice <small>Replace with one <a href="#">Professional Practice domain unit</a></small>	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	MEC4426 Computer-aided design <small>From 2026 Replace with <a href="#">MMA4001</a></small>	<a href="#">MEC3453</a> Dynamics 2 <small>Unit title change from 2026</small>	<a href="#">MEC4407</a> Design project <small>Unit title change from 2026</small>	

NOTE: Please read the [Mechanical Engineering Progression Plan](#) alongside this course map to guide your progression.

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- MEC2404** - If you have completed MEC2404 as a First Year elective, you must replace the core with another unit from the mechanical engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### 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 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	If two foundation units are required then overload is required for <a href="#">ENG1013</a> Engineering smart systems
Year 2 Semester 2 July	<a href="#">ENG2005</a> Advanced engineering mathematics	Science elective	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">ECE2071</a> Systems programming	MEC2402 Design methods <small>From 2026 Replace with <a href="#">MMA2001</a></small>	<a href="#">ECE2131</a> Electrical circuits	Level 3 science major unit	
Year 3 Semester 2 July	TRC2201 Mechanics <small>From 2026 Replace with <a href="#">MMA2004</a></small>	<a href="#">ECE2072</a> Digital systems	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	<a href="#">TRC3500</a> Sensors and artificial perception	ECE3161 Analogue electronics <small>From 2026 Replace with <a href="#">ECE3073</a></small>	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	TRC3600 Feedback control systems <small>From 2026 Replace with <a href="#">MMA2005</a></small>	<a href="#">ECE4078</a> Intelligent robotics	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">TRC3200</a> Dynamical systems	<a href="#">ECE4076</a> Computer vision	<a href="#">TRC4800</a> Robotics	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	ECE4191 Engineering integrated design <small>From 2026 Replace with <a href="#">TRC4407</a></small>	<a href="#">ECE4179</a> Neural networks and deep learning	TRC4002 Professional practice <small>Replace with one <a href="#">Professional Practice domain unit</a></small>	

NOTE: Please read the [Robotics and Mechatronics Engineering Progression Plan](#) alongside this course map to guide your progression.

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- ECE2071 or ECE2072** - If you have completed either unit as a First Year technical elective, you must replace the core with another unit from the robotics and mechatronics engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### 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 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	
Year 2 Semester 2 July	<a href="#">ENG2005</a> Advanced engineering mathematics	Science elective	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">ECE2071</a> Systems programming	MEC2402 Design methods From 2026 Replace with <a href="#">MMA2001</a>	<a href="#">ECE2131</a> Electrical circuits	Level 3 science major unit	
Year 3 Semester 2 July	TRC2201 Mechanics From 2026 Replace with <a href="#">MMA2004</a>	<a href="#">ECE2072</a> Digital systems	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 1 February	<a href="#">TRC3500</a> Sensors and artificial perception	ECE3161 Analogue electronics From 2026 Replace with <a href="#">ECE3073</a>	Level 3 science major unit	Level 2 or 3 science elective	
Year 4 Semester 2 July	TRC3600 Feedback control systems From 2026 Replace with <a href="#">MMA2005</a>	TRC4802 Thermo-fluids and power systems In 2025 only: Replace with MEC2404 or MEC2405 From 2026 Replace with <a href="#">MMA2003</a> – See <a href="#">Progression plan</a>	Level 3 science major unit	Level 2 or 3 science elective	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">TRC3200</a> Dynamical systems	TRC4200 Engineering cyber-physical systems In 2025 only: Replace with ECE4076 or ECE4179 From 2026 Replace with <a href="#">ECE4076</a>	<a href="#">TRC4800</a> Robotics	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	<a href="#">ENG4702</a> Final year project B	<a href="#">TRC4407</a> Automation design project In 2024 and 2025 only: Replace with ECE4191	TRC4902 Mechatronics and manufacturing From 2026 Replace with <a href="#">ECE4179</a>	TRC4002 Professional practice Replace with one <a href="#">Professional Practice domain unit</a>	

NOTE: Please read the [Robotics and Mechatronics Engineering Progression Plan](#) alongside this course map to guide your progression.

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- ECE2071 or ECE2072** - If you have completed either unit as a First Year technical elective, you must replace the core with another unit from the robotics and mechatronics engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2023 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 does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to updates. Update version: 14 October 2025

### E3007 Bachelor of Engineering (Honours) and Bachelor of Science Specialisation - Software Engineering

	Bachelor of Software Engineering (Honours)		Bachelor of Science		
Year 1 Semester 1 February	Common first year		Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 1 Semester 2 July			Level 1 approved science major sequence 1	Level 1 approved science sequence 2	
Year 2 Semester 1 February			Level 2 science major unit	SCI1000 Science communication to influence change	If two foundation units are required then overload is required for <a href="#">ENG1013</a> Engineering smart systems
Year 2 Semester 2 July	<a href="#">FIT2085</a> Introduction to computer science	<a href="#">FIT2101</a> Software engineering process and management	Level 2 science major unit	Level 2 or 3 science elective	
Year 3 Semester 1 February	<a href="#">MAT1830</a> Discrete mathematics for computer science	<a href="#">FIT2099</a> Object-oriented design and implementation	<a href="#">FIT2004</a> Algorithms and data structures	Level 3 science major unit	
Year 3 Semester 2 July	<a href="#">FIT2107</a> Software quality and testing	<a href="#">FIT2100</a> Operating systems	Level 2 or 3 science elective	Level 3 science major unit	
Year 4 Semester 1 February	<a href="#">FIT3170</a> Software engineering practice (12 credit points)	<a href="#">FIT3077</a> Software engineering: architecture and design	<a href="#">FIT3159</a> Computer architecture	Level 3 science major unit	
Year 4 Semester 2 July		<a href="#">FIT3171</a> Databases	Science elective	Level 3 science major unit	
Year 5 Semester 1 February	<a href="#">FIT4002</a> Software engineering industry experience studio project (12 credit points)	<a href="#">FIT4701</a> Final year project A	<a href="#">FIT4165</a> Computer networks	Level 2 or 3 science elective	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 2 July		<a href="#">FIT4702</a> Final year project B	<a href="#">Level 4 or 5 software engineering core elective</a>	Level 2 or 3 science elective	

**NOTE:**

- It is important that you follow the course map unit sequence, as units are designed to build on prior knowledge. Taking units out of sequence can disrupt your progression and cause delays due to semester offerings and enrolment rules.
- MAT1830 or FIT2085** - If you have completed either unit as a First Year technical elective, you must replace the core with another unit from the software engineering technical electives list. The replacement unit must be at the same level as the core unit or higher.
- Engineering minors are not available in the Engineering double degree courses.
- 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](#).
- Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester.
- For enrolment advice, please refer to the [Course advisers webpage](#).