



## Course progression maps for 2024 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](#). Updated 16 Jan 2024

### E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Common First Year

**You do not have VCE Units 3 & 4 Specialist Maths >30 study score and VCE Units 3 & 4 Physics >25 study score: You must enrol in Foundation mathematics (ENG1090) and Foundation physics (PHS1001)**

Year	Sem	Units			
1	Sem 1 Feb	<a href="#">ENG1012</a> Engineering design	<a href="#">ENG1090</a> Foundation mathematics *	<a href="#">PHS1001</a> Foundation physics * <i>Corequisite: ENG1090 *</i>	Arts major
	Sem 2 July	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	<a href="#">ENG1014</a> Engineering numerical analysis <i>Corequisite: ENG1005</i>	Arts major
1. If you are requiring two foundation units, you will need to take the remaining core unit ENG1013 Engineering smart systems in Semester 1 of Year 2 as an overload, and increase the total credit points needed for the double by 6 points. You cannot swap the semesters of any of the units. 2. <b>Software Engineering specialisation:</b> If you want to complete Software Engineering, you must complete ENG1013 Engineering smart systems in Year 1 (Semester 1) and ENG1011 Engineering methods in Year 2 (Semester 1) as an overload.					

**You do not have VCE Units 3 & 4 Specialist Maths >30 study score: You must enrol in Foundation mathematics (ENG1090)**

1	Sem 1 Feb	<a href="#">ENG1012</a> Engineering design	<a href="#">ENG1013</a> Engineering smart systems	<a href="#">ENG1090</a> Foundation mathematics *	Arts major
	Sem 2 July	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	<a href="#">ENG1014</a> Engineering numerical analysis <i>Corequisite: ENG1005</i>	Arts major
Tip: You can swap the semester of ENG1013 and your semester 2 Arts unit.					

**You do not have VCE Units 3 & 4 Physics >25 study score: You must enrol in Foundation physics (PHS1001)**

1	Sem 1 Feb	<a href="#">ENG1012</a> Engineering design	<a href="#">ENG1013</a> Engineering smart systems	<a href="#">PHS1001</a> Foundation physics * <i>Required: ENG1090 *</i>	Arts major
	Sem 2 July	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	<a href="#">ENG1014</a> Engineering numerical analysis <i>Corequisite: ENG1005</i>	Arts major
Tip: You can swap the semester of ENG1013 and your semester 2 Arts unit.					

**You have completed VCE Units 3 & 4 Physics >25 study score and VCE Units 3 and 4 Specialist Maths >30 study score: No foundation units are required**

1	Sem 1 Feb	<a href="#">ENG1011</a> Engineering methods	<a href="#">ENG1005</a> Engineering mathematics <i>Required: ENG1090 *</i>	<a href="#">ENG1014</a> Engineering numerical analysis <i>Corequisite: ENG1005</i>	Arts major
	Sem 2 July	<a href="#">ENG1012</a> Engineering design	<a href="#">ENG1013</a> Engineering smart systems	<a href="#">First Year engineering breadth study</a>	Arts major
Tip: You can swap the semester of your engineering elective and your semester 1 Arts unit.					

#### NOTE:

- \* 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Specialisation - Aerospace engineering

	Bachelor of Aerospace Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">ENG2005</a> Advanced engineering mathematics	<a href="#">MEC2402</a> Design methods	Arts elective 1	Arts major unit 3*	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="#">MAE2404</a> Aerodynamics 1	<a href="#">MAE2402</a> Thermodynamics and gas dynamics	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">MEC2403</a> Mechanics of materials	<a href="#">MAE3401</a> Aerodynamics 2	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">MAE2505</a> Aerospace dynamics	<a href="#">MAE3405</a> Aerospace propulsion	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">MEC3456</a> Engineering computational analysis	<a href="#">MAE3404</a> Flight vehicle dynamics	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">MAE3411</a> Aerospace structural mechanics	<a href="#">MAE3408</a> Aerospace control	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	Complete one Professional Practice domain unit	<a href="#">MAE4416</a> Orbital mechanics and spaceflight dynamics	Arts major unit 8*	<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	Arts Professional Futures unit 4	

### NOTE:

- \* **ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- 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.
- 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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts

### Specialisation - Chemical engineering

	Bachelor of Chemical Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">CHM1011</a> Chemistry 1 or <a href="#">CHM1051</a> Chemistry 1 advanced	<a href="#">ENG2005</a> Advanced engineering mathematics	Arts elective 1	Arts major unit 3*	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="#">CHE2162</a> Material and energy balances	<a href="#">CHE2161</a> Mechanics of fluids	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">CHE2164</a> Thermodynamics 1	<a href="#">CHE3167</a> Transport phenomena and numerical methods	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">CHE2163</a> Heat and mass transfer	<a href="#">CHE3162</a> Process control	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">CHE3161</a> Chemistry and chemical thermodynamics	<a href="#">CHE3165</a> Separation processes	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">CHE3166</a> Process design	<a href="#">CHE3164</a> Reaction engineering	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">CHE4162</a> Particle technology	<a href="#">Complete one Professional Practice domain unit</a>	Arts major unit 8*	<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 (12 points)		Art Professional Futures unit 4	

#### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- **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.
- 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.
- [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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts

### Specialisation - Civil engineering

	Bachelor of Civil Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">CIV2282</a> Transport and traffic engineering	<a href="#">CIV2206</a> Structural mechanics	Arts elective 1	Arts major unit 3*	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="#">CIV2235</a> Structural materials	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">CIV2263</a> Water systems	<a href="#">CIV3294</a> Structural design	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">CIV2242</a> Geomechanics 1	<a href="#">CIV3283</a> Road engineering	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">Complete one Professional Practice domain unit</a>	<a href="#">CIV3285</a> Engineering hydrology	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">CIV3247</a> Geomechanics 2	<a href="#">CIV3221</a> Building structures and technology	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">CIV4249</a> Foundation engineering	<a href="#">CIV4280</a> Bridge design and assessment	Arts major unit 8*	<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="#">CIV4212</a> Civil and environmental engineering practice	<a href="#">CIV4288</a> Water treatment	Arts Professional Futures unit 4	

#### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- 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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Specialisation - Electrical and computer systems engineering

	Bachelor of Electrical and Computer Systems Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">ENG2005</a> Advanced engineering mathematics	<a href="#">ECE2071</a> Computer organisation and programming	Arts elective 1	Arts major unit 3*	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="#">ECE2072</a> Digital systems	<a href="#">ECE2191</a> Probability and AI for engineers	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">ECE2131</a> Electrical circuits	<a href="#">ECE3073</a> Computer systems	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">ECE2111</a> Signals and systems	<a href="#">ECE3121</a> Engineering electromagnetics	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">ECE3161</a> Analogue electronics	<a href="#">ECE3141</a> Information and networks	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">ECE4132</a> Control system design	<a href="#">Level 4 or 5 ECE-coded core elective</a>	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">ECE3051</a> Electrical energy systems	<a href="#">Level 4 or 5 ECE-coded core elective</a>	Arts major unit 8*	<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="#">Complete one Professional Practice domain unit</a>	Arts Professional Futures unit 4	

### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- **ECE2072** - If you have completed the unit as a First Year technical 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.
- 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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Specialisation - Environmental engineering

	Bachelor of Environmental Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 1 February				Arts major unit 2*	
Year 1 Semester 2 July	<a href="#">BTX3100</a> Sustainability regulation for business	<a href="#">ENE2021</a> Energy and the environment	Arts elective 1	Arts major unit 3*	If two foundation units are required then overload is required for <a href="#">ENG1013</a> Engineering smart systems
Year 2 Semester 1 February	<a href="#">ENG2005</a> Advanced engineering mathematics	<a href="#">CHE2162</a> Material and energy balances	Arts elective 2	Arts major unit 4*	
Year 2 Semester 2 July	<a href="#">CHE2164</a> Thermodynamics 1	<a href="#">CIV2263</a> Water systems	Arts elective 3	Arts major unit 5*	
Year 3 Semester 1 February	<a href="#">ENE3031</a> Building sustainability	<a href="#">ENE2503</a> Materials properties and recycling	Arts elective 4	Arts major unit 6*	
Year 3 Semester 2 July	<a href="#">CIV3248</a> Groundwater and environmental geomechanics	<a href="#">CIV3285</a> Engineering hydrology	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 1 February	<a href="#">ENE3032</a> Fate and transport of contaminants	<a href="#">ENE3606</a> The air environment	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 4 Semester 2 July	<a href="#">ENG4701</a> Final year project A	<a href="#">ENE4042</a> Environment impact and risk assessment	<a href="#">Complete one Professional Practice domain unit</a>	Arts major unit 8*	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
Year 5 Semester 1 February	<a href="#">ENG4702</a> Final year project B	<a href="#">ENE4041</a> Soil remediation and solid waste management	<a href="#">CIV4212</a> Civil and environmental engineering practice	Arts Professional Futures unit 4	

### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- 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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Specialisation - Materials engineering

	Bachelor of Materials Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">MTE2101</a> Atomic-scale structure of materials	<a href="#">MTE2103</a> Mechanical properties of materials	Arts elective 1	Arts major unit 3*	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="#">MTE2201</a> Polymers	<a href="#">ENG2005</a> Advanced engineering mathematics	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">MTE2102</a> Phase equilibria and phase transformations	<a href="#">MTE3103</a> Materials life cycle	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">MTE2202</a> Functional materials 1	<a href="#">MTE3203</a> Introduction to ceramics: Properties, processing and applications	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">MTE3102</a> Plasticity of metals and alloys	<a href="#">MTE3101</a> Materials in a complex world 1: People, projects and data	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">MTE3202</a> Functional materials 2	<a href="#">MTE3201</a> Materials in a complex world 2: Characterisation, identification and selection	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
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	Arts major unit 8*	<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="#">Complete one Professional Practice domain unit</a>	<a href="#">Level 4 or 5 MTE-coded materials engineering technical elective</a>	Arts Professional Futures unit 4	

### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- 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.
- 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](#).



## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Specialisation - Mechanical engineering

	Bachelor of Mechanical Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">MEC2403</a> Mechanics of materials	<a href="#">MEC2401</a> Dynamics 1	Arts elective 1	Arts major unit 3*	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="#">MEC2404</a> Mechanics of fluids	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">MEC2402</a> Design methods	<a href="#">MEC3456</a> Engineering computational mechanics	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">MEC2405</a> Thermodynamics	<a href="#">MEC3457</a> Systems and control	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">MEC3455</a> Solid mechanics	<a href="#">MEC3451</a> Fluid mechanics 2	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">MEC3416</a> Machine design	<a href="#">MEC3453</a> Dynamics 2	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">MEC4408</a> Thermodynamics and heat transfer	<a href="#">Complete one Professional Practice domain unit</a>	Arts major unit 8*	<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="#">MEC4426</a> Computer-aided design	<a href="#">MEC4407</a> Design project	Arts Professional Futures unit 4	

### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- **MEC2404** - If you have completed MEC2404 as a First Year technical 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.
- 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.
- 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](#).



## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts

### Specialisation – Robotics and Mechatronics engineering - *Artificial intelligence stream*

	Bachelor of Robotics and Mechatronics Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">ECE2071</a> Computer organisation and programming	<a href="#">ECE2131</a> Electrical circuits	Arts elective 1	Arts major unit 3*	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="#">TRC2201</a> Mechanics	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">MEC2402</a> Design methods	<a href="#">TRC3200</a> Dynamical systems	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">ECE2072</a> Digital systems	<a href="#">ECE4179</a> Neural networks and deep learning	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">TRC3500</a> Sensors and artificial perception	<a href="#">ECE3161</a> Analogue electronics	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">TRC3600</a> Modelling and control	<a href="#">ECE4078</a> Intelligent robotics	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">TRC4800</a> Robotics	<a href="#">ECE4076</a> Computer vision	Arts major unit 8*	<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="#">Complete one Professional Practice domain unit</a>	Arts Professional Futures unit 4	

#### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- **ECE2072** - If you have completed the 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.
- 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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts

### Specialisation – Robotics and Mechatronics engineering – Automation stream

	Bachelor of Robotics and Mechatronics Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">ECE2071</a> Computer organisation and programming	<a href="#">ECE2131</a> Electrical circuits	Arts elective 1	Arts major unit 3*	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="#">TRC2201</a> Mechanics	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">MEC2402</a> Design methods	<a href="#">TRC3200</a> Dynamical systems	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">ECE2072</a> Digital systems	<a href="#">TRC4802</a> Thermo-fluids and power systems	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">TRC3500</a> Sensors and artificial perception	<a href="#">ECE3161</a> Analogue electronics	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July	<a href="#">TRC3600</a> Modelling and control	<a href="#">TRC4902</a> Mechatronics and manufacturing	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">ENG4701</a> Final year project A	<a href="#">TRC4800</a> Robotics	<a href="#">TRC4200</a> Engineering cyber-physical systems	Arts major unit 8*	<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	<a href="#">Complete one Professional Practice domain unit</a>	Arts Professional Futures unit 4	

#### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- **ECE2072** - If you have completed the 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.
- 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.
- 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](#).

## E3002 Bachelor of Engineering (Honours) and Bachelor of Arts Specialisation - Software engineering

	Bachelor of Software Engineering (Honours)		Bachelor of Arts		
Year 1 Semester 1 February	Common First Year			Arts major unit 1*	
Year 1 Semester 2 July				Arts major unit 2*	
Year 2 Semester 1 February	<a href="#">MAT1830</a> Discrete mathematics for computer science	<a href="#">FIT2085</a> Introduction to computer science	Arts elective 1	Arts major unit 3*	If two foundation units are required then overload is required for <a href="#">ENG1011</a> Engineering methods
Year 2 Semester 2 July	<a href="#">FIT2004</a> Algorithms and data structures	<a href="#">FIT2101</a> Software engineering process and management	Arts elective 2	Arts major unit 4*	
Year 3 Semester 1 February	<a href="#">FIT2099</a> Object oriented design and implementation	<a href="#">FIT3159</a> Computer architecture	Arts elective 3	Arts major unit 5*	
Year 3 Semester 2 July	<a href="#">FIT2107</a> Software quality and testing	<a href="#">FIT2100</a> Operating systems	Arts elective 4	Arts major unit 6*	
Year 4 Semester 1 February	<a href="#">FIT3170</a> Software engineering practice (12 points)	<a href="#">FIT3077</a> Software engineering: architecture and design	Arts Professional Futures unit 1	Arts major unit 7*	
Year 4 Semester 2 July		<a href="#">FIT3171</a> Databases	Arts Professional Futures unit 2 <a href="#">ATS2992</a> Global immersion guarantee program (12 cp) or <a href="#">ATS3173</a> Workplace innovation project (6 cp)	Arts Professional Futures unit 3	
Year 5 Semester 1 February	<a href="#">FIT4002</a> Software engineering industry experience studio project (12 points)	<a href="#">FIT4701</a> Final year project A	<a href="#">FIT4165</a> Computer networks	Arts major unit 8*	<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>	Arts Professional Futures unit 4	Arts Professional Futures

### NOTE:

- **\*ARTS MAJORS AVAILABLE IN THE ENGINEERING/ARTS DOUBLE DEGREE:** Chinese studies, European languages (Extended major available), Indonesian studies, International relations, Japanese studies, Korean studies, Philosophy. *Please note that only these specified arts majors will meet Engineers Australia accreditation.*
- **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 or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher.
- 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.
- 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](#).