

Course progression map for 2025 commencing students – **JULY ADMISSION**

This progression map provides advice on the optimal sequencing of units and guidance on planning unit enrolment for each semester of study in conjunction with the required units outlined in the course 'Requirements' section of the [Handbook](#). Please note that the map may be updated to reflect changes to course requirements. Be sure to review it for the latest information before re-enrolling. *Last updated: 5 December 2024*

E3001 Bachelor of Engineering (Honours)
Common First Year

Specialisation – Software engineering

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)

1	Sem 2 July	ENG1012 Engineering design	PHS1001 Foundation physics * <i>Required: ENG1090 *</i>	MTH1020 Analysis of change * <i>This unit is in lieu of ENG1090 (which has only Sem 1 offering in Clayton)</i>	First Year engineering breadth study+
	Sem 1 Feb	ENG1011 Engineering methods	ENG1005 Engineering mathematics <i>Required: ENG1090 *</i>	ENG1014 Engineering numerical analysis <i>Corequisite: ENG1005</i>	ENG1013 Engineering smart systems

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

1	Sem 2 July	ENG1011 Engineering methods	MTH1020 Analysis of change * <i>This unit is in lieu of ENG1090 (which has only Sem 1 offering in Clayton)</i>	Elective [^]	First Year engineering breadth study+ <i>Or swap semester with the Elective unit</i>
	Sem 1 Feb	ENG1012 Engineering design	ENG1013 Engineering smart systems	ENG1005 Engineering mathematics <i>Required: ENG1090 *</i>	ENG1014 Engineering numerical analysis <i>Corequisite: ENG1005</i>

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

1	Sem 2 July	ENG1005 Engineering Mathematics <i>Required: ENG1090 *</i>	ENG1013 Engineering smart systems	PHS1001 Foundation physics * <i>Required: ENG1090 *</i>	First Year engineering breadth study+ <i>Or swap semester with the Elective unit</i>
	Sem 1 Feb	ENG1011 Engineering methods	ENG1012 Engineering design	ENG1014 Engineering numerical analysis <i>Corequisite: ENG1005</i>	Elective [^]

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

Year	Period	Units			
1	Sem 2 July	ENG1005 Engineering mathematics <i>Required: ENG1090 *</i>	ENG1014 Engineering numerical analysis <i>Corequisite: ENG1005</i>	Elective [^]	First Year engineering breadth study+ <i>Or swap semester with the Elective unit</i>
	Sem 1 Feb	ENG1011 Engineering methods	ENG1012 Engineering design	ENG1013 Engineering smart systems	Elective [^]

Notes:

- * 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](#).
- + **Software engineering:** If you intend to specialise in software engineering, you must select and complete [FIT1045](#) as the First Year engineering breadth study as it provides essential grounding in programming and prepares you for advanced software engineering units.
- [^]Elective units may be chosen either from the [First Year engineering breadth study](#) list or from other faculties within the University, provided you meet the unit requisites.
- Care should be taken to ensure units are maintained in sequence.
- For enrolment advice, please speak with a course adviser from your home campus.

Course progression map for 2025 commencing students – **JULY ADMISSION [For Direct entry]**

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study in conjunction with the required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to change and should be consulted prior to re-enrolment for updates. Updated 18 July 2025

E3001 Bachelor of Engineering (Honours)

Specialisation – Software engineering

Year	Sem	Units			
1	Sem 2 July	Common First Year			
	Sem 1 Feb				
2	Sem 2 July	FIT2085 Fundamentals of algorithms for engineers	FIT2099 Object-oriented design and implementation	FIT2101 Software engineering process and management	FIT2107 Software quality and testing
	Sem 1 Feb	FIT3170 Software engineering practice (12 points)	FIT1058 Foundations of computing or MAT1830 Discrete mathematics for computer science	FIT3077 Software engineering: Architecture and design	FIT2004 Algorithms and data structures
3	Sem 2 July		FIT2100 Operating systems	FIT3171 Databases	Level 1, 2 or 3 elective or engineering technical elective
	Sem 1 Feb	FIT4002 Software engineering industry experience studio project (12 points)	FIT3159 Computer architecture	Level 1, 2 or 3 elective or engineering technical elective	Level 3 or 4 software engineering technical elective
4	Sem 2 July		FIT4701 Final year software engineering project A	Level 3, 4 or 5 software engineering technical elective	Level 3 or 4 software engineering technical elective
	Sem 1 Feb	FIT4165 Computer networks	FIT4702 Final year software engineering project B	Level 3, 4 or 5 software engineering technical elective	Level 4 or 5 software engineering core elective

Malaysia students enrol in [ENG0002](#) Industrial training (0 credit points)

Clayton students enrol in [ENG0001](#) Continuous Professional Development (0 credit points)

Notes:

- [TECHNICAL ELECTIVES LIST](#) is located on the Faculty's current student course information webpage
- 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.
- No more than 60 credit points of level 1 units can be credited to the Bachelor of Engineering (Honours).
- No more than 12 credit points of level 5 units can be undertaken in the Bachelor of Engineering (Honours). The level 5 units can be undertaken only in the final year of study.
- Engineering minors are not available within the Software engineering specialisation.
- You are required to complete either the [Continuous Professional Development](#) (if you studying in Australia) or [Industrial training](#) (if you are studying in Malaysia) in order to graduate.
- For enrolment advice, please speak with a course adviser from your home campus.

Course progression map for 2025 commencing students – JULY ADMISSION [For Direct entry]

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study in conjunction with the required units as described in the course 'Requirements' section of the [Handbook](#). Please note that the map is subject to change and should be consulted prior to re-enrolment for updates. Updated 18 July 2025

E3001 Bachelor of Engineering (Honours)

Specialisation – Software engineering – *Industry-based Learning*

Year	Period	Units				
1	Sem 2 July	Common first year				
	Sem 1 Feb					
2	Sem 2 July	FIT2085 Fundamentals of algorithms for engineers	FIT2099 Object-oriented design and implementation	FIT2101 Software engineering process and management	FIT2107 Software quality and testing	
	Sem 1 Feb	FIT3170 Software engineering practice (12 points)	FIT1058 Foundations of computing or MAT1830 Discrete mathematics for computer science	FIT3077 Software engineering: Architecture and design	FIT2004 Algorithms and data structures	
3	Sem 2 July		FIT2100 Operating systems	FIT3171 Databases	Level 1, 2 or 3 elective or engineering technical elective	Level 1, 2 or 3 elective or engineering technical elective
	Sem 1 Feb	FIT4701 Final year software engineering project A	FIT3159 Computer architecture	Level 3 or 4 software engineering technical elective	Level 3 or 4 software engineering technical elective	Malaysia students enrol in ENG0002 Industrial training (0 credit points)
4	Sem 2 July	FIT4042 Industry based learning (18 points)			*See footnote	Clayton students enrol in ENG0001 Continuous Professional Development (0 credit points)
	Sem 1 Feb	FIT4702 Final year software engineering project B	FIT4165 Computer networks	Level 3, 4 or 5 software engineering technical elective	Level 3, 4 or 5 software engineering technical elective	

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- Engineering minors are not available within the Software engineering specialisation.
- Depending on placement location when you undertake FIT4042, you may have to either overload a semester or undertake a summer unit in order to complete your course on time. Only Australian residents are allowed to extend an additional semester.
- You are required to complete the [Continuous Professional Development](#) (if studying in Australia) or [Industrial training](#) (if studying in Malaysia) in order to graduate.
- For enrolment advice, please speak with a course adviser from your home campus.

Course progression map for 2025 commencing students – **JULY ADMISSION [For Monash College pathway]**

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E3001 Bachelor of Engineering (Honours)

Specialisation – Software engineering

Year	Sem	Units			
1	Sem 2 July	Common First Year			
	Sem 1 Feb				
2	Sem 2 July	FIT2085 Fundamentals of algorithms for engineers	FIT2099 Object-oriented design and implementation	FIT2101 Software engineering process and management	FIT2107 Software quality and testing
	Sem 1 Feb	FIT3170 Software engineering practice (12 points)	FIT1058 Foundations of computing or MAT1830 Discrete mathematics for computer science	FIT3077 Software engineering: Architecture and design	FIT2004 Algorithms and data structures
3	Sem 2 July		FIT2100 Operating systems	FIT3171 Databases	Level 1, 2 or 3 elective or engineering technical elective
	Sem 1 Feb	FIT4002 Software engineering industry experience studio project (12 points)	FIT3159 Computer architecture	Level 1, 2 or 3 elective or engineering technical elective	Level 3 or 4 software engineering technical elective
4	Sem 2 July		FIT4701 Final year software engineering project A	Level 4 or 5 software engineering core elective	Level 3, 4 or 5 software engineering technical elective
	Sem 1 Feb	FIT4165 Computer networks	FIT4702 Final year software engineering project B	Level 3 or 4 software engineering technical elective	Level 3, 4 or 5 software engineering technical elective

Malaysia students enrol in [ENG0002](#) Industrial training (0 credit points)

Clayton students enrol in [ENG0001](#) Continuous Professional Development (0 credit points)

Notes:

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- For enrolment advice, please speak with a course adviser from your home campus.

Course progression map for 2025 commencing students – **JULY ADMISSION [For Monash College pathway]**

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E3001 Bachelor of Engineering (Honours)

Specialisation – Software engineering – *Industry-based Learning*

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1	Sem 2 July	Common first year			
	Sem 1 Feb				
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	Sem 1 Feb	FIT3170 Software engineering practice (12 points)	FIT1058 Foundations of computing or MAT1830 Discrete mathematics for computer science	FIT3077 Software engineering: Architecture and design	FIT2004 Algorithms and data structures
3	Sem 2 July		FIT2100 Operating systems	FIT3171 Databases	Level 1, 2 or 3 elective or engineering technical elective
	Sem 1 Feb	FIT4701 Final year software engineering project A	FIT3159 Computer architecture	Level 3 or 4 software engineering technical elective	Level 3, 4 or 5 software engineering technical elective
4	Sem 2 July	FIT4042 Industry based learning (18 points)			*See footnote
	Sem 1 Feb	FIT4702 Final year software engineering project B	FIT4165 Computer networks	Level 3 or 4 software engineering technical elective	Level 3, 4 or 5 software engineering technical elective

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