MONASH University

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. Please note that the map is subject to updates. Updated on 6 October 2025

E3012 Bachelor of Engineering (Honours) and Bachelor of Design

Engineering 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	ENG1090 Foundation mathematics *	DGN1000 Design studio 1 (12 cps)		BLK1000 Indigenous Australian creative practice and ways of knowing	OHS1000 Intro to art & design health and safety (0 cps)
	Sem 2 July	ENG1012 Engineering design	IDN1002 Industrial design studio 2 (12 cps)		TDN1002 Design and the avant-garde	
2	Sem 1 Feb	DWG1201 Drawing: Introduction	TDN2001 Sociologies of design	IDN2001 Industrial design studio 3 (12 cps)		PHS1001 Foundation physics *
	Sem 2 July	ENG1011 Engineering methods	ENG1005 Engineering mathematics *Required: ENG1090 **	ENG1014 Engineering numerical analysis *Corequisite: ENG1005*	ENG1013 Engineering smart systems	

If you require two foundation units, you will need to take the remaining core unit PHS1001 Foundation physics in semester one of year two as an overload, and increase the total credit points needed for the double by 6 points You cannot swap the semesters of any of these units.

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

1	Sem 1 Feb	ENG1090 Foundation mathematics *	DGN1000 Design studio 1 (12 cps)		BLK1000 Indigenous Australian creative practice and ways of knowing	OHS1000 Intro to art & design health and safety (0 cps)
	Sem 2 July	ENG1012 Engineering design	IDN1002 Industrial design studio 2 (12 cps)		TDN1002 Design and the avant-garde	
2	Sem 1 Feb	DWG1201 Drawing: Introduction	TDN2001 Sociologies of design	IDN2001 Industrial design studio 3 (12 cps)		
	Sem 2 July	ENG1011 Engineering methods	ENG1005 Engineering mathematics *Required: ENG1090 **	ENG1014 Engineering numerical analysis *Corequisite: ENG1005*	ENG1013 Engineering smart systems	

Tip: You can swap ENG1002 with ENG1001.

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

1	Sem 1 Feb	PHS1001 Foundation physics *	DGN1000 Design studio 1 (12 cps)		BLK1000 Indigenous Australian creative practice and ways of knowing	OHS1000 Intro to art & design health and safety (0 cps)
	Sem 2 July	ENG1012 Engineering design	IDN1002 Industrial design studio 2 (12 cps)		TDN1002 Design and the avant-garde	
2	Sem 1 Feb	DWG1201 Drawing: Introduction	TDN2001 Sociologies of design	IDN2001 Industrial design studio 3 (12 cps)		
	Sem 2 July	ENG1011 Engineering methods	ENG1005 Engineering Mathematics *Required: ENG1090 **	ENG1014 Engineering numerical analysis *Corequisite: ENG1005*	ENG1013 Engineering smart systems	

Tip: You can swap ENG1002 with ENG1001.

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	ENG1013 Engineering smart systems	DGN1000 Design studio 1 (12 cps)		BLK1000 Indigenous Australian creative practice and ways of knowing	OHS1000 Intro to art & design health and safety (0 cps)
	Sem 2 July	ENG1012 Engineering design	IDN1002 Industrial design studio 2 (12 cps)		TDN1002 Design and the avant-garde	
2	Sem 1 Feb	DWG1201 Drawing: Introduction	TDN2001 Sociologies of design	IDN2001 Industrial design studio 3 (12 cps)		
	Sem 2 July	ENG1011 Engineering methods	ENG1005 Engineering mathematics *Required: ENG1090 **	ENG1014 Engineering numerical analysis *Corequisite: ENG1005*	First Year engineering breadth study	

Tip: You can swap the semesters for ENG1003 and the Engineering elective or swap ENG1002 with ENG1001.

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.

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E3012 Bachelor of Engineering (Honours) and Bachelor of Design

Engineering specialisations - Mechanical engineering
Design specialisation - Industrial design

Year 1 Semester 1 February	Engineering Common First Year units	DGN1000 Design studio 1		BLK1000 Indigenous Australian creative practice and ways of knowing	OHS1000 Introduction to art and design health and safety (0 pts)
Year 1 Semester 2 July		IDN1002 Industrial design studio 2		TDN1002 Design and the avant-garde	
Year 2 Semester 1 February	DWG1201 Drawing: Introduction	TDN2001 Sociologies of design	IDN2001 Industrial design studio 3		If two foundation units are required then overload is required for PHS1001 Foundation physics
Year 2 Semester 2 July	Engineering Common First Year units				
Year 3 Semester 1 February	MEC2403 Mechanics of materials From 2026 Replace with MMA2002	MEC2402 Design methods From 2026 Replace with MMA2001	ENG2005 Advanced engineering mathematics	TDN3001 Research for design	
Year 3 Semester 2 July	MEC2401 Dynamics 1 From 2026 Replace with MMA2004 - See Progression plan	MEC2404 Mechanics of fluids From 2026 See Progression plan	MEC3456 Engineering computational analysis From 2026 Replace with MMA3001 - See Progression plan	MEC3416 Machine design Unit title change from 2026	
Year 4 Semester 1 February	MEC3455 Solid Mechanics Unit title change from 2026	MEC2405 Thermodynamics From 2026 See Progression plan	IDN3001 Industrial design studio 4		
Year 4 Semester 2 July	MEC3457 Systems and control From 2026 Replace with MMA2005	TDN3002 Design strategy and professional practice	IDN3002 Industrial design studio 5		
Year 5 Semester 1 February	ENG4701 Final year project A	MEC4408 Thermodynamics and heat transfer Unit title change from 2026	MEC3451 Fluid Mechanics 2	MEC4404 Professional practice Replace with one Professional Practice domain unit	ENG0001 Continuous Professional Development (0 credit points)
Year 5 Semester 2 July	ENG4702 Final year project B	MEC4426 Computer-aided design From 2026 Replace with MMA4001	MEC3453 Dynamics 2 Unit title change from 2026	MEC4407 Design project Unit title change from 2026	

Mechanical engineering
Industrial design

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.
- 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.