

## Course progression map for 2020 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: 9 October 2020

### E3011 Bachelor of Engineering (Honours) and Bachelor of Information Technology

#### Common first year

If no foundation units are required:					
Year	Sem	Units			
1	1	<a href="#">ENG1001</a> Engineering design: lighter, faster, stronger	<a href="#">ENG1005</a> Engineering mathematics	<a href="#">ENG1060</a> Computing for engineers	<a href="#">FIT1047</a> Introduction to computer systems networks and security
	2	<a href="#">ENG1002</a> Engineering design: cleaner, safer, smarter	<a href="#">ENG1003</a> Engineering mobile apps	<a href="#">Level one engineering unit</a>	<a href="#">FIT1048</a> Fundamentals of C++ or <a href="#">FIT1045</a> Algorithms and programming fundamentals in Python or <a href="#">FIT1051</a> Programming fundamentals in Java

Tip: You can swap the semesters of your engineering elective and FIT1047.

If you need to enrol in foundation physics and maths*:					
1	1	<a href="#">ENG1002</a> Engineering design: cleaner, safer, smarter	<a href="#">PHS1001</a> Foundation physics	<a href="#">ENG1090</a> Foundation mathematics	<a href="#">FIT1047</a> Introduction to computer systems networks and security
	2	<a href="#">ENG1003</a> Engineering mobile apps	<a href="#">ENG1005</a> Engineering mathematics	<a href="#">ENG1060</a> Computing for engineers	<a href="#">FIT1048</a> Fundamentals of C++ or <a href="#">FIT1045</a> Algorithms and programming fundamentals in Python or <a href="#">FIT1051</a> Programming fundamentals in Java

If you require two foundation units, you will need to take the remaining core unit [ENG1001](#) Engineering design: lighter, faster, stronger 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 the units.

If you need to enrol in foundation maths:					
1	1	<a href="#">ENG1002</a> Engineering design: cleaner, safer, smarter	<a href="#">ENG1003</a> Engineering mobile apps	<a href="#">ENG1090</a> Foundation mathematics	<a href="#">FIT1047</a> Introduction to computer systems networks and security
	2	<a href="#">ENG1001</a> Engineering design: lighter, faster, stronger	<a href="#">ENG1005</a> Engineering mathematics	<a href="#">ENG1060</a> Computing for engineers	<a href="#">FIT1048</a> Fundamentals of C++ or <a href="#">FIT1045</a> Algorithms and programming fundamentals in Python or <a href="#">FIT1051</a> Programming fundamentals in Java

If you need to enrol in foundation physics:					
1	1	<a href="#">ENG1002</a> Engineering design: cleaner, safer, smarter	<a href="#">ENG1003</a> Engineering mobile apps	<a href="#">PHS1001</a> Foundation physics	<a href="#">FIT1047</a> Introduction to computer systems networks and security
	2	<a href="#">ENG1001</a> Engineering design: lighter, faster, stronger	<a href="#">ENG1005</a> Engineering mathematics	<a href="#">ENG1060</a> Computing for engineers	<a href="#">FIT1048</a> Fundamentals of C++ or <a href="#">FIT1045</a> Algorithms and programming fundamentals in Python or <a href="#">FIT1051</a> Programming fundamentals in Java

#### Note:

- You are required to complete at least 420 hours of Continuous Professional Development (CPD) in order to graduate. For further information refer to the [CPD webpage](#).
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2020 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: 9 October 2020

### E3011 Bachelor of Engineering (Honours) and Bachelor of Information Technology

#### Engineering specialisation - Electrical and computer systems engineering; IT major – Computer networks and security

	Bachelor of Electrical and Computer Systems Engineering (Honours)		Bachelor of Information Technology		
YEAR 1 Semester 1	<b>Common First Year</b>			<a href="#">FIT1047</a> Introduction to computer systems networks and security	
YEAR 1 Semester 2				<a href="#">FIT1048</a> Fundamentals of C++ or <a href="#">FIT1045</a> Algorithms and programming fundamentals in Python or <a href="#">FIT1051</a> Programming fundamentals in Java	
YEAR 2 Semester 1	<a href="#">ENG2005</a> Advanced engineering mathematics	<a href="#">ECE2071</a> Computer organisation and programming	<a href="#">FIT2094</a> Databases	<a href="#">FIT2093</a> Introduction to cyber security	If two foundation units are required then overload is required for <a href="#">PHS1001</a> Foundation physics
YEAR 2 Semester 2	<a href="#">ECE2191</a> Probability models in engineering	<a href="#">ECE2072</a> Digital systems	<a href="#">FIT1049</a> IT professional practice	<a href="#">FIT2100</a> Operating systems	
YEAR 3 Semester 1	<a href="#">ECE3073</a> Computer systems	<a href="#">ECE2131</a> Electrical circuits	<a href="#">FIT elective</a>	<a href="#">FIT2001</a> Systems development or <a href="#">FIT2099</a> Object-oriented design and implementation	
YEAR 3 Semester 2	<a href="#">ECE2111</a> Signals and systems	<a href="#">ECE3121</a> Engineering electromagnetics	<a href="#">FIT2002</a> IT project management	<a href="#">FIT elective</a>	
YEAR 4 Semester 1	<a href="#">ECE3161</a> Analogue electronics	<a href="#">ECE3141</a> Information and networks	<a href="#">FIT3173</a> Software security	<a href="#">FIT3165</a> Computer networks	
YEAR 4 Semester 2	<a href="#">ECE3091</a> Engineering design	<a href="#">ECSE technical elective at level 4</a>	<a href="#">FIT3031</a> Network security	<a href="#">FIT2081</a> Mobile applications development or <a href="#">FIT3142</a> Distributed computing	
YEAR 5 Semester 1	<a href="#">ECE3051</a> Electrical energy systems	<a href="#">ECE4094</a> Project A	<a href="#">ECE4099</a> Professional practice	<a href="#">FIT3047</a> IE Studio project 1	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
YEAR 5 Semester 2	<a href="#">ECE4132</a> Control system design	<a href="#">ECE4095</a> Project B	<a href="#">ECSE technical elective at level 4</a>	<a href="#">FIT3048</a> IE Studio project 2	

Note:

- You are required to complete at least 420 hours of Continuous Professional Development (CPD) in order to graduate. For further information refer to the [CPD webpage](#).
- For enrolment advice, please refer to the [Course advisers webpage](#).

## Course progression map for 2020 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: 9 October 2020

### E3011 Bachelor of Engineering (Honours) and Bachelor of Information Technology

#### Engineering specialisation - Software engineering; IT major – Computer Networks and Security

	Bachelor of Software Engineering (Honours)		Bachelor of Information Technology		
YEAR 1 Semester 1	<b>Common First Year</b>			<a href="#">FIT1047</a> Introduction to computer systems, networks and security	
YEAR 1 Semester 2				<a href="#">FIT1048</a> Fundamentals of C++ or <a href="#">FIT1045</a> Algorithms and programming fundamentals in Python or <a href="#">FIT1051</a> Programming fundamentals in Java	
YEAR 2 Semester 1	<a href="#">MAT1830</a> Discrete mathematics for computer science	<a href="#">FIT2085</a> Introduction to computer science	<a href="#">FIT2094</a> Databases	<a href="#">FIT2093</a> Introduction to cyber security	If two foundation units are required then overload is required for <a href="#">PHS1001</a> Foundation physics
YEAR 2 Semester 2	<a href="#">FIT2004</a> Algorithms and data structures	<a href="#">FIT2101</a> Software engineering process and management	<a href="#">FIT1049</a> IT professional practice	<a href="#">FIT elective</a>	
YEAR 3 Semester 1	<a href="#">FIT3159</a> Computer architecture	<a href="#">FIT2099</a> Object oriented design and implementation	<a href="#">FIT elective</a>	<a href="#">FIT2001</a> Systems development	
YEAR 3 Semester 2	<a href="#">FIT2107</a> Software quality and testing	<a href="#">FIT2100</a> Operating systems	<a href="#">FIT2002</a> IT project management	<a href="#">FIT elective</a>	
YEAR 4 Semester 1	<a href="#">FIT3170</a> Software engineering practice (12 points)	<a href="#">FIT3077</a> Software engineering: architecture and design	<a href="#">FIT3173</a> Software security	<a href="#">FIT2081</a> Mobile applications development	
YEAR 4 Semester 2		<a href="#">Level 3 or 4 SE approved elective</a>	<a href="#">FIT3031</a> Network security	<a href="#">FIT3142</a> Distributed computing	
YEAR 5 Semester 1	<a href="#">FIT4002</a> Software engineering industry experience studio project (12 points)	<a href="#">FIT4165</a> Computer networks	<a href="#">Software engineering technical elective at level 4 or above</a>	<a href="#">FIT3047</a> IE Studio project 1	<a href="#">ENG0001</a> Continuous Professional Development (0 credit points)
YEAR 5 Semester 2		<a href="#">FIT4003</a> Software engineering research project (12 points)		<a href="#">FIT3048</a> IE Studio project 2	

Note:

- You are required to complete at least 420 hours of Continuous Professional Development (CPD) in order to graduate. For further information refer to the [CPD webpage](#).
- For enrolment advice, please refer to the [Course advisers webpage](#).