CRICOS: 00025B TEQSA: PRV12080v

Recommended Enrolment Plans

For Students Commencing Bachelor of Engineering (Hons)/Dual Degrees



Valid for Semester 2, 2025

This document provides course selection information and recommended enrolment plans for students commencing Bachelor of Engineering (Hons) [BE(Hons)]/Dual Degrees in Semester 2, 2025. This is intended to be used in conjunction with the resources provided at:

- Engineering, Architecture and Information Technology Programs & Courses
- Bachelor of Engineering (Honours)/Dual Degrees video playlist

Not sure which engineering specialisation you want to do?

Flexible First Year might help!

The 'Flexible First Year' option allows you to do courses related to a range of specialisations, to then choose your specialisation at the end of first year.

Remember - You don't need to decide whether you want to do a Major or Minor (if your dual degree allows it) until the end of second year of your program.

As such, it is highly recommended that you <u>make an academic advising appointment</u> to assist you to choose your courses for your first semester.

Already know which engineering specialisation you want to do?

If you already know which engineering specialisation you want to do, you can focus your courses from first year.

An enrolment plan is provided for each of the six specialisations for those who have, and who have not completed High School Specialist Mathematics (or equivalent).

You will also see that some specialisations have space for electives; and you will see footnotes suggesting some courses you may consider in these elective slots.

If you did not complete Specialist Mathematics or need to catch-up on High School Physics or Chemistry in a BE(Hons)/Dual program, then (in most cases) you will need to complete additional courses as you have no room for general electives.

Need help? Make an Academic Advising Appointment.

If after reviewing these materials you need some help to choose your courses, <u>make an academic advising appointment.</u>

What courses do you need to do?

		Flexible First Year	Chemical	Civil	Electrical	Mechanical	Mechatronic	Software
	ENGG1100 Professional Engineering	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Core	ENGG1001 or CSSE1001 "Programming"	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Core	MATH1051 or MATH1071	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MATH1052 or MATH1072	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ENGG1300 Intro to Electrical Systems	Yes ¹			Yes	Yes	Yes	Yes
Specialisation -	ENGG1500 Thermodynamics	Yes ¹	Yes			Yes		
Specialisation	ENGG1700 Statics and Materials	Yes ¹		Yes		Yes	Yes	
	Other Courses		СНЕМ1100					MATH1061 INFS1200 ²
	High School Specialist Mathematics or MATH1050	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High School Courses or UQ Equivalents	High School Chemistry or CHEM1090	See discipline	Yes	_ 3	_ 4	Yes		
	High School Physics or PHYS1171	info to the right		Yes	Yes	Yes	Yes	

¹ See the next page for some limitations

² MATH1061 and/or INFS1200 can be completed in 2nd year

Flexible First Year - Dual Degree Options

Careful choices still need to be made.

All specialisations have space to allow for at least **TWO** of ENGG1300, ENGG1500 or ENGG1700

If you want to do all **THREE** then in every specialisation (except Mechanical Engineering) one of ENGG1300 or ENGG1500 or ENGG1700 **must count as a General Elective.**

Mechanical Engineering is the only specialisation that requires all three of ENGG1300 and ENGG1500 and ENGG1700.

As a dual degree student, you do not have space for any general electives.

So what does this mean?

For all specialisations **except Mechanical Engineering** – dual degree students should complete a maximum of **TWO** courses from ENGG1300, ENGG1500 or ENGG1700.

For all students who are intending to follow the Mechanical Engineering specialisations

- Dual degree students should complete ENGG1500 and ENGG1700 in year 1
- ENGG1300 should be completed in Year 2

Make an academic advising appointment for support.

Recommendations for choosing between ENGG1300 ENGG1500 and ENGG1700

Specialisation	ENGG1300	ENGG1500	ENGG1700
CHEMICAL		Required	Suggested ¹
CIVIL		Suggested ²	Required
ELECTRICAL	Required		Suggested ³
MECHANICAL	Required ⁴	Required	Required
MECHATRONIC	Required		Required
SOFTWARE	Required	Either Su	uggested

¹ Completing ENGG1700 makes taking the Biomedical and Materials Engineering Majors in year 3 a little easier.

² Completing ENGG1500 makes taking the Environmental Engineering Major in year 3 a little easier.

³ Completing ENGG1700 makes taking the Biomedical Engineering Major in year 3 a little easier.

⁴ If you are going to study Mechanical Engineering - RECOMMEND delaying ENGG1300 to year 2.

Selecting Your Courses for First Year BE(Hons) Dual Degrees

The priority at the moment is choosing sensible courses for your **first semester.**

Your first semester - Semester 2 2025 (July)

ENGG1100 1

MATH1050 or MATH1051 or MATH1071 eNGG1300 or ENGG1500 or ENGG1700 or ENGG1001 or CSSE1001 or CHEM1100

or High School Catch-up

Dual Degree Course

Make an academic advising appointment.

You MUST enrol in a course that contributes to the dual degree in every semester.

In many cases, your first semester (things you are interested in) will allow you to then focus (or maintain breadth) in second semester.

Articulation or Advanced Standing students

If you are an articulation student, or have credit for prior study, you must follow your individual study plan.

¹ If ENGG1100 has reached capacity, substitute with ENGG1001 or CSSE1001 and complete ENGG1100 in your second semester

Selecting your Semester 1 Mathematics Course

All students should enrol in one of MATH1050, MATH1051 or MATH1071 in their first semester of the BE(Hons). Figure 1 below provides a guide to identifying which course to enrol in based on the mathematics you completed at high school in Queensland (or interstate/international equivalent).

- Where the appropriate course is MATH1050, refer to the plans below labelled "Not Completed Specialist Mathematics with a grade of C or above".
- Where the appropriate course is MATH1051, refer to the plans below labelled "Completed Specialist Mathematics with a grade of C or above".
- Where the most appropriate course is MATH1071, refer to the plans below labelled "Completed Specialist Mathematics with a grade of C or above"; and substitute MATH1071 in the place of MATH1051 (similarly, if you choose to do MATH1072 in semester 2, substitute this in the place of MATH1052).

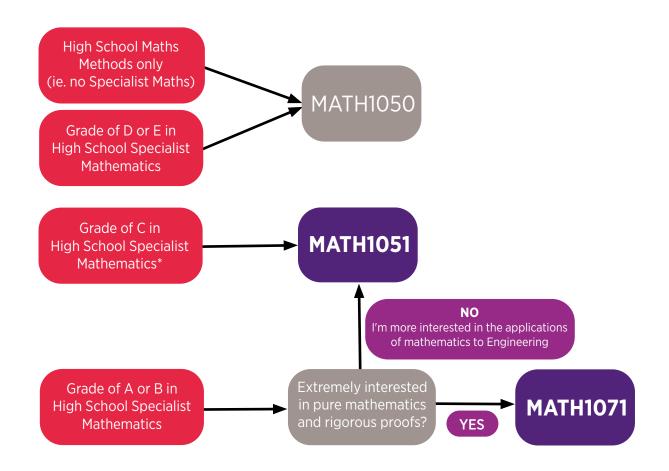


Figure 1 Guide to selecting your mathematics course in the first semester of the BE(Hons) based on high school mathematics, grade and interest.

^{*} Students with a Grade of C in High School Specialist Mathematics can choose to enrol in MATH1050 if they are not confident in their mathematics ability (i.e., it's a long time since you completed high school). If this applies to you, and you are finding MATH1051 difficult, you can change your enrolment to MATH1050 during the first two weeks of semester.



Selecting your Programming Course (ENGG1001 or CSSE1001)

ENGG1001 Programming for Engineers (Sem 1 & Sem 2)
OR

CSSE1001 Introduction to Software Engineering (Sem 1 & Sem 2)

Which one to choose?

All students are required to complete a programming course in their first year. Both ENGG1001 and CSSE1001 teach foundations of programming in Python. These courses are considered equivalent, and you can proceed to any specialisation with either course.

- **CSSE1001** teaches programming in a computing context. It is recommended if you are intending on continuing to Specialisations in **Electrical or Software Engineering**.
- **ENGG1001** teaches programming in the context of engineering modelling problems. It is recommended if you are intending on continuing to Specialisations in **Civil, Chemical or Mechanical Engineering.**
- If you are intending on continuing to a Specialisation in **Mechatronic Engineering, or are in the Flexible First Year**, choose whichever course interests you the most.

Dual Degree with Specialisation in Chemical Engineering



Recommended Enrolment Plan

Valid for Semester 2, 2025

Core Courses	Specialisation	Engineering Electives
Dual Degree	Prep Courses	

Completed High School Specialist Mathematics with a grade of C or above.					
V1	Sem 2 July	ENGG1100	MATH1051	CHEM1100	Dual Degree Course
Y1	Sem 1 Feb	ENGG1001	MATH1052	ENGG1500	Dual Degree Course

	Not Completed High School Specialist Mathematics with a grade of C or above.				
	Sem 2 July	ENGG1100	MATH1050	СНЕМ1100	Dual Degree Course
Y1	Summer Semester	MATH1051			
	Sem 1 Feb	ENGG1001	MATH1052	ENGG1500	Dual Degree Course

- No High School Chemistry? Make an academic advising appointment.
- If your dual program is with B.Mathematics, B.Sc(Mathematics) or B.Sc(Physics), and you are unable to complete MATH1051 in Summer Semester, you should seek academic advice prior to the commencement of Sem 1 (Feb) to plan your program.
- If your dual program is with B.InfTech, it is recommended that you enrol in CSSE1001 instead of ENGG1001.
- If your dual program is with B.CompSci, it is recommended that you enrol in CSSE1001 in Sem 2 (July), rather than ENGG1001 in Sem 1 (Feb); and then complete two dual degree courses (MATH1061 and INFS1200) in Sem 1 (Feb).
- If you are required to complete MATH1050, completing MATH1051 during Summer Semester will provide greater flexibility in your program after year 1. If you are unable to complete MATH1051 during summer semester, make an academic advising appointment during your first semester to plan your program.

Dual Degree with Specialisation in Civil Engineering



CREATE CHANGE

Recommended Enrolment Plan

Valid for Semester 2, 2025

Core Courses	Specialisation	Engineering Electives
Dual Degree	Prep Courses	

Completed High School Specialist Mathematics with a grade of C or above.					
V1	Sem 2 July	ENGG1100	MATH1051	ENGG1700	Dual Degree Course
Y1	Sem 1 Feb	ENGG1001	MATH1052	Elective	Dual Degree Course

	Not Completed High School Specialist Mathematics with a grade of C or above.				
	Sem 2 July	ENGG1100	MATH1050	ENGG1700	Dual Degree Course
Y1	Summer Semester	MATH1051			
	Sem 1 Feb	ENGG1001	MATH1052	Elective	Dual Degree Course

- No High School Physics? Make an academic advising appointment.
- If your dual program is with B.Mathematics, B.Sc(Mathematics) or B.Sc(Physics), and you are unable to complete MATH1051 in Summer Semester, you should seek academic advice prior to the commencement of Sem 1 (Feb) to plan your program.
- If your dual program is with B.InfTech, it is recommended that you enrol in CSSE1001 instead of ENGG1001.
- If your dual program is with B.CompSci, it is recommended that you enrol in CSSE1001 in Sem 2 (July), rather than ENGG1001 in Sem 1 (Feb); and then complete two dual degree courses (MATH1061 and INFS1200) in Sem 1 (Feb).
- If you are required to complete MATH1050, completing MATH1051 during Summer Semester will provide greater flexibility in your program after year 1. If you are unable to complete MATH1051 during summer semester, make an academic advising appointment during your first semester to plan your program.

Dual Degree with Specialisation in Electrical Engineering



Recommended Enrolment Plan

Valid for Semester 2, 2025

Core Courses	Specialisation	Engineering Electives
Dual Degree	Prep Courses	

	Completed High School Specialist Mathematics with a grade of C or above.				
V1	Sem 2 July	ENGG1100	MATH1051	ENGG1300	Dual Degree Course
Y1	Sem 1 Feb	CSSE1001	MATH1052	Elective	Dual Degree Course

	Not Completed High School Specialist Mathematics with a grade of C or above.				
	Sem 2 July	ENGG1100	MATH1050	ENGG1300	Dual Degree Course
Y1	Summer Semester	MATH1051			
	Sem 1 Feb	CSSE1001	MATH1052	Elective	Dual Degree Course

- No High School Physics? Make an academic advising appointment.
- If your dual program is with B.Mathematics, B.Sc(Mathematics) or B.Sc(Physics), and you are unable to complete MATH1051 in Summer Semester, you should seek academic advice prior to the commencement of Sem 1 (Feb) to plan your program.
- If your dual program is with B.InfTech, it is recommended that you enrol in CSSE1001 instead of ENGG1001.
- If your dual program is with B.CompSci, it is recommended that you enrol in CSSE1001 in Sem 2 (July) rather than Sem 1 (Feb); and then complete two dual degree courses (MATH1061 and INFS1200) in Sem 1 (Feb).
- If you are required to complete MATH1050, completing MATH1051 during Summer Semester will provide greater flexibility in your program after year 1. If you are unable to complete MATH1051 during summer semester, make an academic advising appointment during your first semester to plan your program.

Dual Degree with Specialisation in Mechanical Engineering



Recommended Enrolment Plan

Valid for Semester 2, 2025

The table below shows the required:

Core Courses	Specialisation	Engineering Electives
Dual Degree	Prep Courses	

	Completed High School Specialist Mathematics with a grade of C or above.				
Y1	Sem 2 July	ENGG1100	MATH1051	ENGG1500	Dual Degree Course
	Sem 1 Feb	ENGG1001	MATH1052	ENGG1700	Dual Degree Course

Not Completed High School Specialist Mathematics with a grade of C or above.					
Y1	Sem 2 July	ENGG1100	MATH1050	ENGG1500	Dual Degree Course
	Summer Semester	MATH1051			
	Sem 1 Feb	ENGG1001	MATH1052	ENGG1700	Dual Degree Course

- ENGG1300 must be completed in year 2 or 3.
- No High School Physics? Make an academic advising appointment.
- No High School Chemistry? Make an academic advising appointment.
- If your dual program is with B.Mathematics, B.Sc(Mathematics) or B.Sc(Physics), and you are unable to complete MATH1051 in Summer Semester, you should seek academic advice prior to the commencement of Sem 1 (Feb) to plan your program.
- If your dual program is with B.InfTech, it is recommended that you enrol in CSSE1001 instead of ENGG1001.
- If your dual program is with B.CompSci, it is recommended that you enrol in CSSE1001 in Sem 2 (July) rather than Sem 1 (Feb); and then complete two dual degree courses (MATH1061 and INFS1200) in Sem 1 (Feb).
- If you are required to complete MATH1050, completing MATH1051 during Summer Semester will provide greater flexibility in your program after year 1. If you are unable to complete MATH1051 during summer semester, make an academic advising appointment during your first semester to plan your program.

CRICOS: 00025B TEQSA: PRV12080

Dual Degree with Specialisation in Mechatronic Engineering



Recommended Enrolment Plan

Valid for Semester 2, 2025

Core Courses	Specialisation	Engineering Electives
Dual Degree	Prep Courses	

Completed High School Specialist Mathematics with a grade of C or above.							
Y1	Sem 2 July	ENGG1100	MATH1051	ENGG1300	Dual Degree Course		
	Sem 1 Feb	ENGG1001 or CSSE1001	MATH1052	ENGG1700	Dual Degree Course		

Not Completed High School Specialist Mathematics with a grade of C or above.					
Y1	Sem 2 July	ENGG1100	MATH1050	ENGG1300	Dual Degree Course
	Summer Semester	MATH1051			
	Sem 1 Feb	ENGG1001 or CSSE1001	MATH1052	ENGG1700	Dual Degree Course

- No High School Physics? Make an academic advising appointment.
- If your dual program is with B.Mathematics, B.Sc(Mathematics) or B.Sc(Physics), and you are unable to complete MATH1051 in Summer Semester, you should seek academic advice prior to the commencement of Sem 1 (Feb) to plan your program.
- If your dual program is with B.InfTech, it is recommended that you enrol in CSSE1001 instead of ENGG1001.
- If your dual program is with B.CompSci, it is recommended that you enrol in CSSE1001 in Sem 2 (July) rather than Sem 1 (Feb); and then complete two dual degree courses (MATH1061 and INFS1200) in Sem 1 (Feb).
- If you are required to complete MATH1050, completing MATH1051 during Summer Semester will provide greater flexibility in your program after year 1. If you are unable to complete MATH1051 during summer semester, make an academic advising appointment during your first semester to plan your program.

Dual Degree with Specialisation in Software Engineering



Recommended Enrolment Plan

Valid for Semester 2, 2025

Core Courses	Specialisation	Engineering Electives
Dual Degree	Prep Courses	

	Completed High School Specialist Mathematics with a grade of C or above.					
Y1	Sem 2 July	ENGG1100	CSSE1001	MATH1051	Dual Degree Course	
	Sem 1 Feb	MATH1052	ENGG1300	MATH1061 or INFS1200	Dual Degree Course	

Not Completed High School Specialist Mathematics with a grade of C or above.					
Y1	Sem 2 July	ENGG1100	CSSE1001	MATH1050	Dual Degree Course
	Summer Semester	MATH1051			
	Sem 1 Feb	MATH1052	ENGG1300	MATH1061 or INFS1200	Dual Degree Course

- If your dual program is with B.Mathematics, B.Sc(Mathematics) or B.Sc(Physics), and you are unable to complete MATH1051 in Summer Semester, you should seek academic advice prior to the commencement of Sem 1 (Feb) to plan your program.
- If you are required to complete MATH1050, completing MATH1051 during Summer Semester will provide greater flexibility in your program after year 1. If you are unable to complete MATH1051 during summer semester, make an academic advising appointment during your first semester to plan your program.