

# Bachelor of Engineering (Hons)/Bachelor of Mathematics 2020 Dual Degree Program Structure

It is important that you read and understand the following information.

To be eligible to enrol in a dual degree program you must ensure that you satisfy the entry requirements for both programs.

Once enrolled it is your responsibility to ensure that you complete all the requirements for each section of this dual program in order to graduate with both degrees. The following information is designed to help you plan your enrolment to meet this goal. Further information can be found in the Official Rules and Course lists under the **Program Rules and Requirements** link for each program in the Programs and courses website: [https://my.uq.edu.au/programs-courses/program.html?acad\\_prog=2401](https://my.uq.edu.au/programs-courses/program.html?acad_prog=2401).

You may need to amend this plan depending on your choice of major. You are not required to submit this program plan for approval. However, if you have any questions or concerns about meeting program requirements, especially when you are nearing the end of your program, please contact the relevant Faculty for advice.

**Please note:** Students exiting early with one component of a dual degree must complete the single degree requirements of that component. Students will then be required to follow the single degree rules to complete the remaining component from that dual degree.

## PROGRAM GUIDELINES

You must complete a total of 80 units for this dual degree program.

Restrictions apply to enrolment in ECON1050, ECON1310, PHYS1001, STAT1201, STAT1301. Details of specific course restrictions are available at: <http://www.eait.uq.edu.au/be-dual-programs> and <https://www.eait.uq.edu.au/bachelor-engineering-electives>.

### **Bachelor of Engineering (Hons) requirements:**

- ❖ 60 units from the BE(Hons) course list, comprising–
  - (i) 52 to 60 units from the BE(Hons) course list for a BE(Hons) field; and
  - (ii) The balance, if any, from courses on the BE(Hons) course list or Part B and/or Part C of the BMath course list or other courses approved by the executive dean.
- ❖ A student must undertake the BE(Hons) component of the dual program in an approved field.
- ❖ The prerequisites required for the major must be completed as either compulsory/elective courses towards the BE(Hons) program.
- ❖ Students must complete no more than 4 units of Level 1 non-engineering courses (i.e. courses not listed on the BE(Hons) course list).
- ❖ BE(Hons) students should discuss their enrolment plan with an academic adviser. The list of academic advisers is available at: <http://www.eait.uq.edu.au/eng-academic-advice>.

### **Bachelor of Mathematics requirements:**

- ❖ 20 units from the BMath course list, comprising–
  - (i) 6 to 8 units from Part A of the BMath course list being all MATH coded courses which are not common compulsory courses; and
  - (ii) The balance from Part B or Part C of the BMath course list or a combination of both.
- ❖ A student must gain 8 units for late year (Level 3 or higher) courses from Part A and/or Part B of the BMath course list.
- ❖ A student may not undertake the BMath component of the dual program in any field.
- ❖ A list of recommended BMath study plans is available at: <https://planner.science.uq.edu.au/content/bmath>.
- ❖ Please contact the Faculty of Science on (07) 3365 1888 for more information.

## Special rules

### Courses in both course lists

- (1) All common compulsory courses must be counted towards the BE(Hons) component of the dual program.
- (2) Where a course is compulsory in one component of the dual program but not in the other, then it must be counted towards the component in which it is compulsory.
- (3) MATH1050, if taken, must be counted towards the BMath component.
- (4) When there is a choice as to which courses count toward each component of the dual program then the highest graded courses shall count towards the BE(Hons) component and the balance toward the BMath component.

### Course Substitutions

- (1) A student who is undertaking a BE(Hons) field which lists MATH2000 as compulsory is required to instead complete MATH2001 towards the BE(Hons) component.
- (2) A student who is undertaking a BE(Hons) field which lists MATH2010 and either STAT2201 or STAT2202 as compulsory may instead complete MATH2100 towards the BMath component and STAT2203 towards the BE(Hons) component.

## BACHELOR OF ENGINEERING (HONS)/BACHELOR OF MATHEMATICS 2020 DUAL DEGREE PROGRAM STRUCTURE

*You can use this outline to plan your program structure.*

BACHELOR OF ENGINEERING (HONS)		BACHELOR OF MATHEMATICS	
Please consult your academic adviser for course selection	Units	Please consult your academic adviser for course selection	Units
<b>YEAR ONE</b>		<b>YEAR ONE</b>	
<b>Semester 1</b>		<b>Semester 1</b>	
ENGG1100 Engineering Design	2	MATH1050 Mathematical Foundations (if required) <sup>#</sup>	2
MATH1051 or MATH1071 <sup>#</sup>	2		
Part A course(s) from chosen major (Refer to the First Year Engineering guide or Course List)	2		
<b>Semester 2</b>		<b>Semester 2</b>	
ENGG1200 Engineering Modelling & Problem Solving	2	MATH1061 Discrete Mathematics <sup>†</sup>	2
MATH1051 and/or MATH1052 or MATH1072 <sup>#</sup>	2		
Part A course from chosen major (Refer to the First Year Engineering guide or Course List)	2		
<b>Summer Semester</b>		<b>Summer Semester</b>	
<b>YEAR TWO</b>		<b>YEAR TWO</b>	
<b>Semester 1</b>		<b>Semester 1</b>	
Part A courses from chosen major	6 - 8	MATH2400 Mathematical Analysis or MATH2401 Mathematical Analysis and Advanced Topics	2
MATH2001 Advanced Calculus & Linear Algebra II*			
<b>Semester 2</b>		<b>Semester 2</b>	
Part A courses from chosen major	6	Part B or C BMath course	2
<b>Summer Semester</b>		<b>Summer Semester</b>	
<b>YEAR THREE</b>		<b>YEAR THREE</b>	
<b>Semester 1</b>		<b>Semester 1</b>	
Part A courses from chosen major and/or electives from chosen major	6	Part B or C BMath course if MATH2400 or MATH2401 has been completed	2
<b>Semester 2</b>		<b>Semester 2</b>	
Part A courses from chosen major and/or electives from chosen major	6	Part B or C BMath course	2
<b>Summer Semester</b>		<b>Summer Semester</b>	
<b>YEAR FOUR</b>		<b>YEAR FOUR</b>	
<b>Semester 1</b>		<b>Semester 1</b>	
Part A from chosen major and/or electives from chosen major; and/or Balance, if any, Engineering or Math elective(s)	4 - 6	MATH3401 Complex Analysis Balance from Part B or C BMath courses	2 0 - 2
<b>Semester 2</b>		<b>Semester 2</b>	
Part A from chosen major and/or electives from chosen major; and/or Balance, if any, Engineering or Math elective(s)	4 - 8	Part B or C BMath courses	0 - 4
<b>Summer Semester</b>		<b>Summer Semester</b>	
<b>YEAR FIVE</b>		<b>YEAR FIVE</b>	
<b>Semester 1</b>		<b>Semester 1</b>	
Part A from chosen major and/or electives from chosen major; and/or Balance, if any, Engineering or Math elective(s)	2 - 6	Part B or C BMath courses	2 - 6
<b>Semester 2</b>		<b>Semester 2</b>	
ENGG4900 Professional Practice and the Business Environment	2	Part B or C BMath courses	6
<b>Total</b>	<b>60</b>	<b>Total (ensure 8 units of Level 3 Part A/B courses)</b>	<b>20</b>

<sup>#</sup> Students without Queensland Senior Maths C should complete MATH1050 toward the BMath before MATH1051 or MATH1071. Students can defer MATH1051 to semester 2, and MATH1052 to summer semester.

<sup>†</sup> MATH1061 counts towards the BE(Hons) component for software engineering students.

\* MATH2001 must be completed by civil and software based engineering specialisations as part of the BMath.

*Please note: Summer Semester is optional.*

**Please ensure your BE(Hons) major is correctly listed in mySI-net.**