

# **Bachelor of Engineering (Honours)/Bachelor of Aviation (Domestic students)**

Program code

1584

Available at

Nathan Campus

**Duration** 

4 years full-time accelerated 5 years full-time equivalent

**Credit points** 

400

**Indicative fee** 

\$9,000.00\* per year (more)

\* 2024 indicative annual CSP fee

**Entry requirements** 

ATAR/RANK 2024

(more)

70.00

Commencing in

Trimester 1

**Prerequisites** 

NIL

**Assumed knowledge** 

Any General or Applied English subject (Units 3 and 4, C)

Mathematical Methods (Units 3 and 4,

C)

### Degree requirements: Students who started Trimester 1 - 2023

For the award of Bachelor of Engineering (Honours)/Bachelor of Aviation (BEng(Hons)/BAvn), you must successfully complete 400 credit points, made up of the core courses AND

• 130 credit points for an Engineering major (including a 10 credit point foundation course).

#### Other program requirements

You must successfully complete:

- no more than 140 credit points of Level 1 courses (the first digit of a course code denotes the level);
- at least 60 credit points of Level 3 courses or higher.

You must also complete a minimum of 12 weeks (60 days) of approved experience in an Engineering practice environment (or a satisfactory alternative) during your degree studies.

#### Honours

#### Classification of Honours - Bachelor of Engineering (Honours)

The class of Honours to be awarded to each student in this degree will be determined by the School Assessment Board on the basis of the Program Grade Point Average for the engineering components of the program and the performance in the final year IAP course.

A minimum IAP mark of 50% is required for the award of the Bachelor of Engineering (Honours).

Students who have repeated the IAP course will be eligible for no higher than Class III Honours. A second fail in the IAP course will result in termination of the student's enrolment in the program.

## **Cut-offs for Honours Classifications**

- Class I Honours:
  - Program Grade Point Average 6.200 (minimum)
  - Minimum IAP Mark 80%
- Class IIA Honours:
  - Program Grade Point Average 5.650 (minimum)
  - Minimum IAP Mark 70%
- Class IIB Honours:
  - Program Grade Point Average 5.000 (minimum)
  - Minimum IAP Mark 60%
- Class III Honours:

- Program Grade Point Average < 5.000
- Minimum IAP Mark 50%

#### Australian Qualifications Framework (AQF) Level and Type

The Australian Qualifications Framework (AQF) is the national policy for regulated qualifications in Australian education and training. The Bachelor of Aviation is accredited as an AQF Level 7 - Bachelor Degree. The Bachelor of Engineering (Honours) is accredited as an AQF Level 8 - Bachelor Honours Degree.

#### Program learning outcomes

#### **Program learning outcomes**

Program Learning Outcomes communicate to the community the value of the Griffith educational experience as benchmarked against national qualification standards.

Program Learning Outcomes for the Bachelor of Engineering (Honours) and Bachelor of Aviation describe the knowledge, skills and the application of knowledge and skills you will acquire through studying the Griffith program of your choice.

#### Course list: Students starting Trimester 1 - 2023

Course offering information in program structures is a guide only. Please check the actual offering information in the Course Catalogue.

Students must check the prerequisite and incompatible requirements before selecting any course within this program.

#### Year 1

Students entering the program WITHOUT the assumed knowledge of Maths Methods or equivalent may choose to undertake 1017SCG Foundation Mathematics in their first trimester of study. Please contact the Program Director for further advice.

Trimester	Course code	Requirement	Course title	CP
Tri 1	1017SCG	Listed Elective	Foundation Mathematics (see Note 1)	10

Note 1: Students who choose to complete 1017SCG (Foundation Maths) in Tri 1, are advised to complete 1010ENG (Maths 1) in Tri 2 and 1020ENG (Maths 2) in Tri 3.

#### Year 1

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	1018ENG	Hons Core to Program	Engineering Science	10
Tri 1,3	1010ENG	Hons Core to Program	Engineering Mathematics 1 (see Note 1)	10
Tri 1	1505NSC	Core to Program	Flight Procedures I	10
Tri 1	1017ENG	Hons Core to Program	Engineering Materials	10
Tri 2	1504NSC	Core to Program	Aviation Biology and Medicine	10
Tri 2,3	1020ENG	Hons Core to Program	Engineering Mathematics 2 (see Note 1)	10
Tri 2	1008ENG	Hons Core to Program	Programming and Computing for Engineers	10
Tri 2	1508NSC	Core to Program	Airways Operation and Design	10
Tri 3	1022ENG	Hons Core to Program	Engineering Design Practice	10
Tri 3		Hons Core to Program	Foundation course for chosen Engineering major	10

Note 1: Students who are required to complete 1017SCG (Foundation Maths) in Tri 1, are advised to complete 1010ENG (Maths 1) in Tri 2 and 1020ENG (Maths 2) in Tri 3.

#### Year 2

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2205NSC	Core to Program	Calculus II	10
Tri 1,2 or 3			Chosen Engineering major courses	80

**Transfer point:** Bachelor of Engineering (Honours) (1542) with the Electronic and UAV Engineering major. Students should apply for a program transfer.

Year 3

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	3304ENG	Hons Core to Program	Control Systems	10
Tri 1	2520NSC	Core to Program	Core to Program  Aircraft Operations, Performance and Planning Par I	
Tri 1	2517NSC	Core to Program	Aviation Meteorology	10
Tri 1,2			Chosen Engineering major courses	20
Tri 2	2519NSC	Core to Program	Navigation	10
Tri 2	3533NSC	Core to Program	Aircraft Operations, Performance and Planning Part II	10
Tri 3	3528NSC	Core to Program	Navigational Systems	10
Tri 3	2539NSC	Core to Program	Introduction to Aviation Law	10
Tri 3	2533NSC	Core to Program	Flight Procedures II	10
Tri 3	2523NSC	Core to Program	Light Aircraft Systems	10

#### Year 4

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2521NSC	Core to Program	Aerodynamics Part I	10
Tri 1	2515NSC	Core to Program	Human Factors for Pilots I	10
Tri 1,2		Core to Major	Chosen Engineering major course	20
Tri 2	3004ENG	Hons Core to Program	Project Management Principles	10
Tri 2	3520NSC	Core to Program	Aerodynamics Part II	10
Tri 3	6002ENG	Hons Diss Core Prog	IAP	40

Note 1: It is a requirement that students complete a minimum of 60 days of approved experience in an Engineering practice environment (or satisfactory alternative) during their degree studies.

## Bachelor of Engineering (Honours) - Majors (2 available) Electronic Engineering

#### Year 1

You must complete the following foundation course:

Trimester	Course code	Requirement	Course title	CP
Tri 3	1301ENG	Hons Core to Major	Electric Circuits	10

## Year 2

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2319ENG	Hons Core to Major	Introduction to Electronics	10
Tri 1	2322ENG	Hons Core to Major	Engineering C	10
Tri 2	2314ENG	Hons Core to Major	Engineering Electromagnetics	10
Tri 2	2303ENG	Hons Core to Major	Embedded Systems	10
Tri 2	1303ENG	Hons Core to Major	Digital Systems	10
Tri 2	2301ENG	Hons Core to Major	Semiconductor Devices and Circuits	10
Tri 3	6001ENG	Hons Core to Major	Avionics and Aircraft Practice	20

#### Year 3

You must complete the following course:

7	Frimester	Course code	Requirement	Course title	CP
	Tri 1	2305ENG	Hons Core to Major	Signals and Systems	10
Ī	Tri 2	3324ENG	Hons Core to Major	Communication Systems and Circuits	10

#### Year 4

You must complete the following course:

Trimester	Course code	Requirement	Course title	CP
Tri 1	3301ENG	Hons Core to Major	Practical Electronics	10
Tri 2	6303ENG	Hons Core to Major	Advanced Communication Systems	10

# Mechanical Engineering

#### Year 1

You must complete the following foundation course:

Trim	ester	Course code	Requirement	Course title	CP
Tri	3	1501ENG	Hons Core to Major	Engineering Mechanics	10

#### Year 2

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2517ENG	Hons Core to Major	Kinematics and Dynamics	10
Tri 1	2101ENG	Hons Core to Major	Mechanics of Materials I	10
Tri 1	2002ENG	Hons Core to Major	Fluid Mechanics and Hydraulics	10
Tri 2	2501ENG	Hons Core to Major	Manufacturing Technology	10
Tri 2	2318ENG	Hons Core to Major	Electromechanics	10
Tri 2	2201ENG	Hons Core to Major	Engineering Thermodynamics	10
Tri 2	1508ENG	Hons Core to Major	Digital Design and Modelling	10
Tri 3	2701ENG	Hons Core to Major	Aircraft Practical	10

## Year 3

You must complete the following course:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2502ENG	Hons Core to Major	Mechanical Engineering Design	10
Tri 2	2105ENG	Hons Core to Major	Mechanics of Materials 2	10

## You must complete the following course:

Trimester	Course code	Requirement	Course title	CP
Tri 1	3508ENG	Hons Core to Major	Materials and Manufacturing	10
Tri 2	3511ENG	Hons Core to Major	Design of Machine Elements	10