Bachelor of Engineering (Honours)/Bachelor of Computer Science (Domestic students)

Program code
1585

Available at
Gold Coast Campus

Duration
5 years full-time
10 years part-time

Credit points
400

Indicative fee
$8,500.00* per year (more)
* 2024 indicative annual CSP fee

Entry requirements
70.00
ATAR/RANK 2024
(more)

Commencing in
Trimester 1 and Trimester 2

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 Computer Science [BEng(Hons)/BCompSc]*, you must successfully complete 400 credit points, made up of

- 160 credit points of core courses
- 20 credit points of foundation courses for your chosen Engineering major;
- 160 credit points for an Engineering major;
- 60 credit points for a Computer Science major;

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 Computer Science 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 Computer Science 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.

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

Year 1

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1,3	1010ENG	Hons Core to Program	Engineering Mathematics 1	10
Tri 1,3	1022ENG	Hons Core to Program	Engineering Design Practice	10
Tri 1	1018ENG	Hons Core to Program	Engineering Science	10
Tri 1	1017ENG	Hons Core to Program	Engineering Materials	10
Tri 2	1020ENG	Hons Core to Program	Engineering Mathematics 2	10
Tri 2	1008ENG	Hons Core to Program	Programming and Computing for Engineers	10

Electrical and Electronic Engineering

You must complete the following of foundation courses:

Trimester	Course code	Requirement	Course title	CP
Tri 2	1305ENG	Mandatory Prereq	Engineering Programming	10
Tri 2	1301ENG	Mandatory Prereq	Electric Circuits	10

Mechanical Engineering

You must complete the following of foundation courses:

Trimester	Course code	Requirement	Course title	CP
Tri 2	1501ENG	Mandatory Prereq	Engineering Mechanics	10
Tri 2	1508ENG	Mandatory Prereq	Digital Design and Modelling	10

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 2	1808ICT	Core to Program	Discrete Structures	10
Tri 1,2	1811ICT	Core to Program	Programming Principles	10
Tri 2			Engineering major courses	50

Year 3

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	1807ICT	Core to Program	Computer and Network Architecture (not offered from 2024)	10
			OR	
Tri 1,3	1007ICT	Core to Program	Computer Systems and Cyber Security	10
Tri 1	2801ICT	Core to Program	Computing Algorithms	10
Tri 2	2813ICT	Core to Program	Software Engineering Fundamentals (not offered from 2025)	10
			OR	
Tri 2	2810ICT	Core to Program	Software Technologies (offered from 2025)	10
Tri 1,2			Engineering major courses	20
Tri 1,2			Computer Science major courses	30
			OR	
Tri 1,2			Computer Science courses (for students not electing to complete a major)	30

Year 4

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2800ICT	Core to Program	Object Oriented Programming	10
Tri 2	2808ICT	Core to Program	Secure Development Operations	10
Tri 2	3004ENG	Hons Core to Program	Project Management Principles	10
Tri 1,2			Engineering major courses	30
Tri 1,2			Computer Science major courses	20
			OR	
Tri 1,2			Computer Science courses (for students not electing to complete a major)	20

Year 5

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	3410ICT	Core to Program	The Ethical Technologist (not offered from 2026)	10
Tri 1,2			Engineering major courses	60
Tri 1,2			Computer Science major courses	10
			OR	
Tri 1,2			Computer Science courses (for students not electing to complete a major)	10

Bachelor of Computer Science - Majors (2 available)
Data Science and Artificial Intelligence

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2802ICT	Core to Major	Intelligent Systems (see Note)	10
Tri 2	2803ICT	Core to Major	Systems and Distributed Computing (not offered from 2025)	10
			OR	
Tri 2	3005ICT	Core to Major	Distributed Programming (offered from 2026)	10
Tri 1	3803ICT	Core to Major	Big Data Analysis (not offered from 2026)	10
Tri 2	3804ICT	Core to Major	Data Mining	10
Tri 2	2812ICT	Core to Major	Perceptual Computing (not offered from 2025)	10
			OR	
Tri 2	3006ICT	Core to Major	Robotics and Computer Vision (offered from 2026)	10
Tri 1	3806ICT	Core to Major	Robotics, Agents and Reasoning	10

Note: Students of this program will be exempted from prerequisite limitations for 2802ICT.

Software Development

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2802ICT	Core to Major	Intelligent Systems (see Note)	10
Tri 2	2803ICT	Core to Major	Systems and Distributed Computing (not offered from 2025)	10
			OR	
Tri 2	3005ICT	Core to Major	Distributed Programming (offered from 2026)	10
Tri 1	3801ICT	Core to Major	Numerical Algorithms (not offered from 2026)	10
			OR	
Tri 2	3813ICT	Core to Major	Software Frameworks (not offered from 2026)	10
Tri 2	2805ICT	Core to Major	System and Software Design (not offered from 2025)	10
			OR	
Tri 2	2006ICT	Core to Major	Object Oriented Software Development (offered from 2025)	10
Tri 1	3805ICT	Core to Major	Advanced Algorithms	10
Tri 1	3825ICT	Core to Major	Theory of Computing	10

Note: Students of this program will be exempted from prerequisite limitations for 2802ICT.

Bachelor of Computer Science - No Major Option (1 available)
Computer Science (for students not completing a major)

You must complete 60 credit points from the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2802ICT	Elective to Major	Intelligent Systems	10
Tri 2	2803ICT	Elective to Major	Systems and Distributed Computing (not offered from 2025)	10
			OR	
Tri 2	3005ICT	Elective to Major	Distributed Programming (offered from 2026)	10
Tri 2	2805ICT	Elective to Major	System and Software Design (not offered from 2025)	10
			OR	
Tri 2	2006ICT	Elective to Major	Object Oriented Software Development (offered from 2025)	10
Tri 2	2812ICT	Elective to Major	Perceptual Computing (not offered from 2025)	10
			OR	
Tri 2	3006ICT	Elective to Major	Robotics and Computer Vision (offered from 2026)	10
Tri 1	3801ICT	Elective to Major	Numerical Algorithms (not offered from 2026)	10
Tri 1	3803ICT	Elective to Major	Big Data Analysis (not offered from 2026)	10
Tri 1	3806ICT	Elective to Major	Robotics, Agents and Reasoning	10
Tri 2	3804ICT	Elective to Major	Data Mining	10
Tri 1	3805ICT	Elective to Major	Advanced Algorithms (not offered from 2026)	10
Tri 2	3825ICT	Elective to Major	Theory of Computing	10
Tri 2	3906ICT	Elective to Major	Digital Forensics	10

Bachelor of Engineering (Honours) - Majors (2 available)
Electrical and Electronic Engineering (Gold Coast)

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 2	2318ENG	Hons Core to Major	Electromechanics	10
Tri 2	2305ENG	Hons Core to Major	Signals and Systems	10
Tri 2	2314ENG	Hons Core to Major	Engineering Electromagnetics	10
Tri 2	3325ENG	Hons Core to Major	Numerical Engineering Methods	10

Year 3

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 2	2322ENG	Hons Core to Major	Engineering C	10
Tri 2	2303ENG	Hons Core to Major	Embedded Systems	10

Year 4

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	3304ENG	Hons Core to Major	Control Systems	10
Tri 1	3312ENG	Hons Core to Major	Electrical Design Project	10
Tri 1	3322ENG	Hons Core to Major	Electromagnetic Waves and Propagation	10

Year 5

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	6321ENG	Hons Core to Major	Discrete Time Signal Processing	10
Tri 1	6315ENG	Hons Core to Major	Communication Systems	10
Tri 2	6002ENG	Hons Core to Major	IAP (see Note)	40

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

Mechanical Engineering

Year 2

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2101ENG	Hons Core to Major	Mechanics of Materials I	10
Tri 2	2201ENG	Hons Core to Major	Engineering Thermodynamics	10
Tri 2	2318ENG	Hons Core to Major	Electromechanics	10
Tri 2	2105ENG	Hons Core to Major	Mechanics of Materials 2	10
Tri 2	2501ENG	Hons Core to Major	Manufacturing Technology	10

Year 3

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2502ENG	Hons Core to Major	Mechanical Engineering Design	10
Tri 2	3511ENG	Hons Core to Major	Design of Machine Elements	10

Year 4

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2002ENG	Hons Core to Major	Fluid Mechanics and Hydraulics	10
Tri 1	2517ENG	Hons Core to Major	Kinematics and Dynamics	10
Tri 1	3304ENG	Hons Core to Major	Control Systems	10

Year 5

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	3508ENG	Hons Core to Major	Materials and Manufacturing	10
Tri 1	4007ENG	Hons Core to Major	Heat and Mass Transfer Engineering	10
Tri 2	6002ENG	Hons Core to Major	IAP (see Note)	40

Note: 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.