



## Bachelor of Advanced Computer Science (Honours) (Domestic students)

<b>Program code</b> 1657	<b>Entry requirements</b> 80.00	<b>Prerequisites</b> NIL
<b>Available at</b> Gold Coast Campus, Online	ATAR/RANK 2024 ( <a href="#">more</a> )	<b>Assumed knowledge</b> Any General or Applied English subject (Units 3 and 4, C)
<b>Duration</b> 4 years full-time 8 years part-time	<b>Commencing in</b> Trimester 1 and Trimester 2	Mathematical Methods (Units 3 and 4, C)
<b>Credit points</b> 320		
<b>Indicative fee</b> \$8,000.00* per year ( <a href="#">more</a> ) * 2024 indicative annual CSP fee		

### Degree requirements: Students who started Trimester 1 - 2022

**For Domestic students and those International students not required to complete the English Language Enhancement course**

For the award of *Bachelor Advanced of Computer Science (Honours) (BAdvCompSc(hons))*, you must successfully complete 320 credit points, made up of the core courses AND

- 60 credit points for one major OR
  - if you elect not to complete a major, you will complete 60 credit points from the No Major Option list; AND
- 30 credit points of listed electives AND
- 40 credit points of free-choice electives.

**OR**

- 100 credit points for two majors AND
- 30 credit points of listed electives

### Other program requirements

You must successfully complete:

- no more than 120 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.

### Exit point

To be eligible to exit the Bachelor of Advanced Computer Science (Honours) program with the Bachelor of Computer Science, you must acquire 240 credit points as prescribed below:

- at least 200 credit points from the Bachelor Computer Science (Honours) course list for any major/s including all first year level and second year level core courses;
- no more than 40 credit points of listed electives;
- at least 60 credit points of courses at third year level or higher;
- no more than 100 credit points of courses at first year level.

To exit, you should apply for a program transfer.

### Honours

#### Classification of Honours

This degree with Honours may be awarded in the following classes:

- Class I Honours
- Class IIA Honours
- Class IIB Honours
- Class III Honours

The class of Honours to be awarded to each student in this degree will be determined on the basis of the GPA achieved for the 80 credit points of nominated courses and a minimum percentage for the Dissertation as outlined in the **Dissertation Management Procedure**.

Students who do not achieve Class III Honours will be awarded a Bachelor of Computer Science.

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

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

### English Language Enhancement

Domestic students enrolled in this program whose first language is not English may complete the following **English Language Enhancement Course** as an elective.

- **5903LHS Language and Communication for Sciences**

Students whose first language is English are not permitted to undertake this course.

### 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 this award** 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 - 2022

**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.

### English Language Enhancement course

Students required to undertake the English Language Enhancement course must complete 5903LHS in their first trimester of study.

The English Language Enhancement course is to be taken in place of a Free-choice elective in your program.

Trimester	Course code	Requirement	Course title	CP
Tri 1	<b>5903LHS</b>	English Enhancement	Language and Communication for Sciences	10

### Year 1

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1,2	1811ICT	Core to Program	Programming Principles	10
Tri 2	1808ICT	Core to Program	Discrete Structures	10
Tri 1,2,3			Free choice elective	10
			<b>OR</b>	
Tri 1,2,3	1017SCG	Free-choice Elective	Foundation Mathematics (see Note 1)	10
Tri 1,2,3			Free choice elective	10
Tri 2	1806ICT	Core to Program	Programming Fundamentals	10
			<b>OR</b>	
Tri 1,2,3	1814ICT	Core to Program	Data Management	10
Tri 2,3	1014SCG	Core to Program	Statistics (not offered from 2024)	10
			<b>OR</b>	
Tri 1	1701ICT	Core to Program	Creative Coding	10
Tri 1,3	1010ENG	Core to Program	Engineering Mathematics 1 (see Note 1) (not offered from 2024)	10
			<b>OR</b>	
Tri 1	1004ICT	Core to Program	Professional Practice in Information Technology	10
Tri 2,3	1020ENG	Core to Program	Engineering Mathematics 2 (not offered from 2024)	10
			<b>OR</b>	
Tri 2	1013ICT	Core to Program	Mathematics for Computer Science	10

Note 1: Students entering the program WITHOUT the assumed knowledge of Maths B or equivalent must complete 1017SCG in their first trimester of study.

## Year 2

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	2801ICT	Core to Program	Computing Algorithms	10
Tri 1	2800ICT	Core to Program	Object Oriented Programming	10
Tri 1			Major course	10
			<b>OR</b>	
Tri 1			Computer Science course (for students electing to not complete a major)	10
Tri 1,3	1807ICT	Core to Program	Computer and Network Architecture (not offered from 2024)	10
			<b>OR</b>	
Tri 1,3	1007ICT	Core to Program	Computer Systems and Cyber Security	10
Tri 2	2813ICT	Core to Program	Software Engineering Fundamentals (not offered from 2025)	10
			<b>OR</b>	
Tri 2	2810ICT	Core to Program	Software Technologies (offered from 2025)	10
Tri 2	2808ICT	Core to Program	Secure Development Operations	10
Tri 2			Major course	20
			<b>OR</b>	
Tri 2			Computer Science course (for students electing to not complete a major)	20

### Year 3

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			Major course	20
			<b>OR</b>	
Tri 1,2			Computer Science courses (for students electing to not complete a major)	20
Tri 1	3820ICT_P1	Core to Program	Work Integrated Learning Part 1 (capstone course)	10
			<b>AND</b>	
Tri 2	3820ICT_P2	Core to Program	Work Integrated Learning Part 2 (capstone course)	10
			<b>OR</b>	
Tri 1,2	3821ICT	Core to Program	Work Integrated Learning - Single Project	20
			<b>OR</b>	
Tri 1,2	3822ICT	Core to Program	Work Integrated Learning - Placement	20
Tri 1,2			Major course	10
			<b>OR</b>	
Tri 1,2			Computer Science course (for students electing to not complete a major)	10
Tri 1,2			Free-choice electives	20

Exit point: **Bachelor of Computer Science (1534)** (after completing the 240 credit point requirements of Years 1, 2 and 3), you should apply for a program transfer.

#### Year 4

You must complete the following courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1	6112ICT	Hons Core to Program	Research Methods in IT	10
Tri 1,2	6190ICT_P1	Hons Core to Program	Honours Thesis	10
Tri 1,2	6190ICT_P2	Hons Core to Program	Honours Thesis	10
Tri 1,2	6190ICT_P3	Hons Core to Program	Honours Thesis	10
Tri 1,2	6190ICT_P4	Hons Core to Program	Honours Thesis	10
Tri 1,2			Listed electives	30

#### 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	10
Tri 2	2803ICT	Core to Major	Systems and Distributed Computing (not offered from 2025)	10
			<b>OR</b>	
Tri 2	3005ICT	Core to Major	Distributed Programming (offered from 2026)	10
Tri 2	2812ICT	Core to Major	Perceptual Computing (not offered from 2025)	10
			<b>OR</b>	
Tri 2	3006ICT	Core to Major	Robotics and Computer Vision (offered from 2026)	10
Tri 1	3803ICT	Core to Major	Big Data Analysis (not offered from 2026)	10
			<b>OR</b>	
Tri 1	3008ICT	Core to Major	Deep Learning (offered from 2026)	10
Tri 2	3804ICT	Core to Major	Data Mining	10
Tri 1	3806ICT	Core to Major	Robotics, Agents and Reasoning	10

#### Software Development

You must complete the following courses:

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

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
			<b>OR</b>	
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
Tri 2	2812ICT	Elective to Major	Perceptual Computing (not offered from 2025)	10
			<b>OR</b>	
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
			<b>OR</b>	
Tri 1	4030ICT	Elective to Major	Big Data Analytics and Social Media (not offered from 2023)	10
			<b>OR</b>	
Tri 1,2,3	3032ICT	Elective to Major	Big Data Analytics and Social Media	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	10
Tri 2	3825ICT	Elective to Major	Theory of Computing	10
Tri 2	3906ICT	Elective to Major	Digital Forensics	10

## Electives (2 available)

### Free-choice electives

You may select free-choice electives from any course in the Bachelor of Information Technology or from the list below or any **Undergraduate free-choice elective/s** offered across the University provided prerequisites are met. If you require guidance, please liaise with your Program Director.

Trimester	Course code	Requirement	Course title	CP
Tri 1	2202NSC	Free-choice Elective	Numerical Methods	10
Tri 2	2204NSC	Free-choice Elective	Introduction to Mathematical Modelling	10
Tri 2	2303ENG	Free-choice Elective	Embedded Systems	10
Tri 1,2 or 3	2043IBA	Free-choice Elective	Innovation, Creativity and Entrepreneurship	10
Tri 2	3303ENG	Free-choice Elective	Digital Signal Processing	10
Tri 2,3	2034IBA	Free-choice Elective	Griffith Innovation Challenge	10
Tri 1	2905ICT	Free-choice Elective	Fundamentals of Cyber Security	10

### Listed electives

Note: These courses are offered subject to staff resources, student enrolments and also subject to approval by the Program Director. Please contact your Program Director for any further information and/or advice.

Students must complete 30 credit points from the following elective courses:

Trimester	Course code	Requirement	Course title	CP
Tri 1,2 or 3	6001ICT	Hons Listed Elective	Advanced Topics in Computer Science A	10
Tri 1,2 or 3	6002ICT	Hons Listed Elective	Advanced Topics in Computer Science B	10
Tri 1,2 or 3	6003ICT	Hons Listed Elective	Advanced Topics in Computer Science C	10
Tri 1,2 or 3	6004ICT	Hons Listed Elective	Advanced Topics in Computer Science D (not offered from 2024)	10