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

Program code<br>1657<br>Available at<br>Gold Coast Campus, Online<br>Duration<br>4 years full-time<br>8 years part-time<br>\section*{Entry requirements<br><br>80.00}<br>ATAR/RANK 2024<br>(more)<br>Commencing in<br>Trimester 1 and Trimester 2<br>\section*{Credit points}<br>320<br>\section*{Indicative fee}<br>\$8,000.00* per year (more)<br>* 2024 indicative annual CSP fee

## Prerequisites <br> 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 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

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 1-2023
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.

## 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 | 5903LHS | 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 |
|  |  |  | OR |  |
| 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 |
|  |  |  | OR |  |
| Tri 1,2,3 | 1814ICT | Core to Program | Data Management | 10 |
| Tri 2,3 | 1014SCG | Core to Program | Statistics (not offered from 2024) | 10 |
|  |  |  | OR |  |
| 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 |
|  |  |  | OR |  |
| 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 |
|  |  |  | OR |  |
| 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:

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| 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 |
|  |  |  | OR |  |
| 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 |
|  |  |  | OR |  |
| 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 |
|  |  |  | OR |  |
| Tri 2 | 2810ICT | Core to <br> Program | Software Technologies (offered from 2025) | 10 |
| Tri 2 | 2808ICT | Core to Program | Secure Development Operations | 10 |
| Tri 2 |  |  | Major course | 20 |
|  |  |  | OR |  |
| 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 | 3410 ICT | Core to <br> Program | The Ethical Technologist (not offered from 2026) | 10 |
| Tri 1,2 |  |  | Major course | 20 |
|  |  |  | OR |  |
| Tri 1,2 |  | Computer Science courses (for students electing to not <br> complete a major) | 20 |  |
| Tri 1 | 3820ICT_P1 | Core to <br> Program | Work Integrated Learning Part 1 (capstone course) | 10 |
| Tri 2 | 3820 ICT_P2 | Core to <br> Program | Work Integrated Learning Part 2 (capstone course) | 10 |
| Tri 1,2 | 3821 ICT | Core to <br> Program | Work Integrated Learning - Single Project |  |
| Tri 1,2 | 3822 ICT | Core to <br> Program | Work Integrated Learning - Placement | 20 |
| Tri 1,2 |  |  | Major course | 20 |
|  |  | OR | 10 |  |
| Tri 1,2 |  | Computer Science course (for students electing to not <br> 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 | 2802 ICT | Core to <br> Major | Intelligent Systems | 10 |
| Tri 2 | 2803 ICT | Core to <br> Major | Systems and Distributed Computing (not offered from <br> 2025 ) | 10 |
| Tri 2 | 3005 ICT | Core to <br> Major | Distributed Programming (offered from 2026) | 10 |
| Tri 2 | 2812 ICT | Core to <br> Major | Perceptual Computing (not offered from 2025) | 10 |
| Tri 2 | 3006 ICT | Core to <br> Major | Robotics and Computer Vision (offered from 2026) | 10 |
| Tri 1 | 3803 ICT | Core to <br> Major | Big Data Analysis (not offered from 2026) | 10 |
| Tri 1 | 3008 ICT | Core to <br> Major | Deep Learning (offered from 2026) |  |
| Tri 2 | 3804 ICT | Core to <br> Major | Data Mining | 10 |
| Tri 1 | 3806 ICT | Core to <br> Major | Robotics, Agents and Reasoning | 10 |

## Software Development

You must complete the following courses:

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

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| 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 <br> 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 <br> Major | Object Oriented Software Development (offered from 2025) | 10 |
| Tri 2 | 2812ICT | Elective to <br> 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 <br> Major | Numerical Algorithms (not offered from 2026) | 10 |
| Tri 1 | 3803ICT | Elective to <br> 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 <br> 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 |

## 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 $1,2,3$ | 3032ICT | Listed Elective | Big Data Analytics and Social Media | 10 |
| Tri 1 | 2202 NSC | Listed Elective | Numerical Methods | 10 |
| Tri 2 | 2204 NSC | Listed Elective | Introduction to Mathematical Modelling | 10 |
| Tri 2 | 2303 ENG | Listed Elective | Embedded Systems | 10 |
| Tri 1,2 or 3 | 2043 IBA | Listed Elective | Innovation, Creativity and Entrepreneurship | 10 |
| Tri 2 | 3303ENG | Listed Elective | Digital Signal Processing | 10 |
| Tri 2,3 | 2034IBA | Listed Elective | Griffith Innovation Challenge | 10 |
| Tri 1 | 2905 ICT | Listed 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.

Program 1657 generated on Fri, 29 Mar 2024 02:49:26 GMT Students must complete 30 credit points from the following elective courses:

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

