Bachelor of Information Technology (Computer Science)

Year 2021
QUT code IN01
 QTAC code 418801
 CRICOS 012656E
 Duration 3 years full time, 6 years part time
 OP 14
 Rank 70
 Total credit points 288
 Deferment You can defer your offer and postpone the start of your course for one year.

Domestic fee (indicative, subject to annual review)
2021: CSP $9,800 per year full-time (96 credit points)
2020 CSP $9,600 per year full-time (96 credit points)

Offer Guarantee Yes
Course contact askqut@qut.edu.au 3138 2000
Campus Gardens Point
Start months July, February

Computer science is the scientific and practical approach to computer-based system design, development and operation. It deals with areas ranging from the fundamental principles of computation through to tools and techniques for IT system development and evaluation, including identifying and solving systems design issues associated with efficiency, usability and security. Computer science applications extend into specialised areas including mobile computing, artificial intelligence, robotics, and large-scale information management involving information retrieval and web search engines.

If you want to work with cutting-edge technology and be a part of creating technologies that have not yet been invented, a computer science career could be for you.

Why choose this course?
Modern information technology professionals need to know more than technology. They need to have a comprehensive understanding of the complex interplay between technology, data, business, and people. This major equips future graduates with the key technical skills and knowledge related to processes, data, services, and tools required to analyse, design, and manage IT projects to digitally transform industries.

We provide our graduates with what industry is seeking: a skillset that enables you to create innovative technology solutions to make businesses more effective and efficient.

Assumed knowledge
Before you start this course we assume you have sound knowledge in these areas
• English
• Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

Course structure
Requirements for the completion of IN01 Bachelor of Information Technology (Study Area A) are as follows:
• 72 credit points (6 units) of information technology core units, which includes 24 credit points (2 units) of option unit* selected from an approved list
• 120 credit points (10 units) of major core units

Kelvin O'Shea
Real-world opportunities

‘The internship I undertook while studying gave me an opportunity I would not have expected. The experience was challenging, exciting and motivating. It helped me develop my technical skills and understand how knowledge translates from university to the real world.’

Accurate as at 02/07/2020. For the latest information see:
Customise your degree

Foster your passion and shape your career through complementary study areas. As well as choosing a major area of study, your course includes a second study area, which can be either a second major or double minor.

A second major can complement your major area of study, giving you the opportunity to develop a significant depth of knowledge and skills in two discipline areas.

IT Second Majors
- Computational and Simulation Science combines the study of science and mathematical models with the use of computers to provide quantitative analysis and visualisation in order to gain insight to the solution of scientific problems from a range of scientific application areas. Computational and Simulation Science second major graduates will be in demand, to apply the latest computing and computational techniques to specialist application areas.
- Data Science provides the necessary skills to be a data scientist including statistical methods and data visualisation, computational tools for and data management techniques for large datasets, and high-performance computing resources and techniques. This unique skill-set in statistics and computing will allow you to cope with sophisticated models applied to complex and/or large datasets.

You might prefer to expand the breadth of your studies by adding to your major with two minors. You can choose from the information technology discipline, or you can broaden your studies by completing minors that offer general knowledge and insights in study areas from across the university.

IT Minors
- Business Process Management is a systematic approach to making the workflow of the organization more effective. You will learn how to discover, analyse, model, improve, automate and monitor various business processes.
- Enterprise Systems are large scale application software packages that support business processes and information flows across departments. This minor develops the knowledge and skills required in supporting Enterprise Systems within the modern organisation.
- HCI develops the knowledge and skills to engage in human-centred design activities involving emerging technologies in order to create new forms of human-computer interaction.
- Intelligent Systems an introduction to the field of robotics and intelligent systems technologies to students interested in careers in this area. Students will develop knowledge and skills to specialise in developing physical and virtual intelligent systems.
- Mobile Applications develops the knowledge and skills to design, develop and distribute applications or games delivered as a Mobile Application. It examines the role and application of ubiquitous and mobile technologies to the individual and enterprises.
- Social Technologies develops the knowledge and skills to engage in innovation processes using current and emerging social media. It examines the role and application of social media to the individual, social entities and enterprises.
- Software Development develops the knowledge and skills to enable students to develop sophisticated software systems in a variety of environments and problem domains.
- Technology Innovation provides students with a broad set of skills to engage in innovation processes for technology intensive environments which can be applied in a corporate or start-up setting. In addition, students will develop competencies related to design and business.
- Computational and Simulation Science provides students with knowledge of modelling, simulation and visualisation as used in a range of scientific application areas.
- Information Systems develops skills in working with people, data, business processes, and technology in finding innovative ways of making these more effective and efficient.
- Computer Science provides students with both practical skills in IT system development plus an understanding of the basic principles underlying modern computing technologies, and an appreciation for how such principles help us design and assess IT systems.
- Programming develops the knowledge and skills to be able to design and build software systems for a variety of environments and problem domains.

IT Extension Minors
- Data-centric Computing develops the knowledge and skills needed to specialize in developing better and novel data-centric systems using a variety of tools, techniques and theories.
- Networks and Security develops the knowledge and skills involved in contemporary electronic communications infrastructure, concentrating on fundamental networking technologies and information security principles.

Careers and outcomes

Computer science graduates are experienced in software development, familiar with networked systems and have an understanding of the underlying foundations of all modern computer based technologies. Depending on your choice of study areas, opportunities also exist to gain specific expertise in information security, networks and communications, intelligent systems, data-centric computing, or humancomputer interaction.

Graduates work in a wide variety of roles such as web developer, database manager, network administrator, electronic commerce developer, data communications specialist, software engineer, systems programmer, multimedia specialist, computer scientist, systems analyst or programmer. Career opportunities are unbounded with information technology being an integral part of all commercial, industrial, government, social and personal activities.

Professional recognition

This program is ACS accredited, giving eligibility for ACS membership, recognition by ACS for certification and migration skills assessment, and international recognition by signatories of the Seoul Accord.

Fees
HECS-HELP
You may be eligible for HECS-HELP, a loan scheme to help you pay your course fees, if you are an Australian citizen or hold an Australian permanent humanitarian visa. For other conditions read the HECS-HELP information.

Student Services and Amenities Fee
You'll need to pay the student services and amenities fee as part of your course costs. You may be eligible for SA-HELP, a loan scheme to help you pay your student services and amenities fee, if you are an Australian citizen or hold an Australian permanent humanitarian visa. For other conditions read the SA-HELP information.