

# Bachelor of Information Technology (BITC) - BIT

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 903741; Online: 903745;  
Springfield campus: 923741

CRICOS code (International applicants): 007490J

**This program is currently undergoing internal reaccreditation. This may result in changes to the program for 2022.**

|                           | <b>On-campus</b>  | <b>Online</b>   |
|---------------------------|---|---|
| <b>Start:</b>             | Semester 1 (February)<br>Semester 2 (July)  | Semester 1 (February)<br>Semester 2 (July)<br>Semester 3 (November)                                   |
| <b>Campus:</b>            | Springfield, Toowoomba  | -   |
| <b>Fees:</b>              | Commonwealth supported place<br>Domestic full fee paying place<br>International full fee paying place | Commonwealth supported place<br>Domestic full fee paying place<br>International full fee paying place |
| <b>Standard duration:</b> | 3 years full-time, up to 6 years part-time  |   |

**Notes:**

The Information Technology Management major and Networking and Security major are available at Springfield campus.

## Contact us

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- apply problem-solving skills and use information technology for problem solving as an individual or within a team
- think critically, constructively and logically about project management principles and tools to plan project completions
- communicate clearly and coherently to present relevant knowledge and ideas to a range of audiences
- identify, collect, analyse and manage information for a broad range of information technology issues and challenges
- demonstrate an understanding of ethical standards and socially responsible information technology practices.

## Major objectives

### **Applied Computer Science major**

On completion of the Applied Computer Science major, graduates should be able to:

- display detailed knowledge of and be competent in the fundamentals of structured programming, and the application of basic algorithms and data structures
- evaluate the difference between the major programming language paradigms, and be able to select the paradigm best suited to solve a problem
- demonstrate sound knowledge of operating systems principles and display familiarity with various modern operating systems
- demonstrate a sound knowledge of web technology and techniques both at the client and the server side
- design and implement web-based user interfaces in accordance to technical, stylistic, and open access standards
- evaluate and apply methods for planning and managing large software projects, including design, development and maintenance aspects
- demonstrate detailed knowledge of the fundamental principles of database systems and be able to apply these using database software.

### Data Analytics major

On completion of the Data Analytics major, graduates should be able to:

- capture, manage and analyse large volumes of data (big data) both structured and unstructured using appropriate techniques and technologies
- effectively communicate information and knowledge obtained from large volumes (big data) in appropriate formats for the intended audience
- analyse large volumes of data in a critical ethical and professional manner.

### **Information Systems Development major**

On completion of the Information Systems Development major, graduates should be able to:

- demonstrate an understanding of the electronic business framework for areas such as marketing, supply chains and mobile commerce
- demonstrate an ability to design and analyse b

- demonstrate an understanding of information systems security and control issues
- recognise the importance of IT service management and demonstrate understanding of the important best practice frameworks
- identify information needs appropriate to their area of specialisation, and apply the techniques required to gather and interpret such information
- demonstrate skills in the analysis and determination of technological issues at management level.

### Networking and Security major

On completion of the Networking and Security major, graduates should be able to:

- design, install, configure, troubleshoot, and maintain networks and their operating systems
- install, configure and manage network, system, user, and security services
- demonstrate acquired skills in development of new systems to operate networks
- interface networks with wide area networks such as the Internet and newer network architectures
- demonstrate sound knowledge of the operating systems that are used to provide services on networks, including at least Linux and Windows
- demonstrate detailed knowledge of the fundamental principles of database systems and be able to apply these using database software.

### Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is a single national, comprehensive system of qualifications offered by higher education institutions (including universities), vocational education and training institutions and secondary schools. Each AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 07. Graduates at this level will have broad and coherent knowledge and skills for professional work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting [www.aqf.edu.au](http://www.aqf.edu.au).

### Program Information Set

View USQ's admission criteria, student profiles and a summary of all offers made under [Course Admission Information Set](#) via the QTAC website.

### Admission requirements

To be eligible for admission, applicants must satisfy the following requirements:

- Have achieved a minimum Australian Tertiary Admission Rank (ATAR) of **62.7**, or equivalent qualification.<sup>^</sup>
- English Language Proficiency requirements for Category 2.

Applicants are advised to also address the following:

- [Assumed Knowledge](#) expectations: English (Units 3 & 4, C). Data Analytics major - General Mathematics (Units 3 & 4, C) or equivalent.
- Recommended Prior Study:  
Applied Computer Science major and Networking and Security major - General Mathematics (Units 3 & 4, C)<sup>\*</sup> (Units 3 & 4, C) or equivalent.  
Data Analytics major - Mathematical Methods<sup>\*</sup> (Units 3 & 4, C) or equivalent.

<sup>\*</sup> Open Access College has courses available via [Tertiary Preparation Program](#) which will allow students to up-skill in Mathematics prior to entry.

All students are required to satisfy the applicable [English language requirements](#).

If students do not meet the English language requirements they may apply to study a University-approved [English language program](#). On successful completion of the English language program, students may be admitted to an award program.

^ These are determined by the University for specific programs each Semester. The 2021 ATAR and tertiary entrance ranks are based on agreed QTAC schedules which assess formal study at Year 12 or [equivalent level](#), tertiary, preparatory, professional or v

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MGT1000 Organisations and Behaviour  
MKT1001 Introduction to Marketing  
POL1000 Government and Business  
STA1003 Further Statistics

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**Footnotes**

- + Student Completion
- \* Please refer to the Course Handbook

should not complete LAW1500 Introduction to Business and Law

Computer Science, Data Analytics or Networking and Security as one of their options.

139.9456 Tm (as their options) T1056 Tm (T1101 Disc 935bles:) Tenro

**Major**

All students must complete at least one major study.

Students must complete at least one major study. A major study is a specific discipline.

**Discipline**

Students must complete at least one discipline.

Students who are studying for a Bachelor of Information Technology or they may complete a graduate degree program in the area of Business, Information Systems or Marketing in the undergraduate degree programs in another discipline in which there is a first and second major is known as a double major. If a degree program contains less than 8 units, students must complete at least 8 units of courses offered at the University of Southern Queensland in total. The sets of courses that make up each major are listed in the following tables:

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**Data Analytics major**





When students select a minor(s), courses will only count towards that minor(s) if they have not already counted towards another selected major or minor. Not all minors are available on-campus at all campuses. Students may choose courses from those listed in the [Minor Studies](#) section of this Handbook. Enrolment requirements must be satisfied for any course selected.

### **Electives/Approved courses**

Students not completing a double major must select 4 units of elective courses from courses offered at undergraduate level in the area of Business, Law or Sciences or, with the approval of the Faculty of Business, Education, Law and Arts, from other undergraduate courses offered at the University of Southern Queensland. Pre-requisite enrolment requirements must be satisfied for any course selected.

CSC1402 will not be approved as an electiv

## **Recommended Enrolment Pattern - Applied Computer Science**

Students are able to enrol in any offered mode of a course (on-campus, external or online), regardless of the program mode of study they enrolled in.

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