

Bachelor of Software Engineering/Bachelor of Business Informatics (838AA.4)

Please note these are the 2021 details for this course

Domestic students

Selection rank	60
	Note:
	The selection rank is the minimum ATAR plus adjustment factors required for admission to the program in the previous year. This is an indicative guide only as ranks change each year depending on demand.

English language requirements	An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent).
	View IELTS equivalences

Duration	4.0 years
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UAC code	366123
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Faculty	Faculty of Science and Technology
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Discipline	Academic Program Area - Technology
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Location	UC - Canberra, Bruce
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Fees 

Per Unit	Per Annum	Full Course
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International students

Academic entry requirements To study at UC, you'll need to meet our academic entry requirements and any admission requirements specific to your course. Please read your course admission requirements below. To find out whether you meet UC's academic entry requirements, visit our [academic entry requirements page](#).

[View UC's academic entry requirements](#)

English language requirements An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent).

[View IELTS equivalences](#)

CRICOS code 056138G

Faculty Faculty of Science and Technology

Discipline Academic Program Area - Technology

Location UC - Canberra, Bruce

Duration 4.0 years

Fees 

Per Unit

Per Annum

Full Course

About this course

Design intelligent business systems from the ground up

Explore the design and construction of software systems alongside the latest business information systems when you choose UC's Bachelor of Software Engineering/Bachelor of Business Informatics double degree.

You'll get to pursue your interests while completing an industry-accredited qualification. Recognised by the Australian Computer Society, this cutting-edge course offers the ability to choose subjects from a range of specialty areas, such as computer security, network computing, games development, cloud computing, digital skills, data science and intelligence systems.

Helping you to become an exceptional software engineer will be work placement opportunities with UC's industry partners, and the final year research project that will see you produce and implement a real-world engineering solution for a real business.

Study a Bachelor of Software Engineering/Bachelor of Business Informatics at UC and you will:

- understand the methodology of software systems engineering using analysis and specification methods such as UML, XML, structured and soft systems methodologies
- learn to design and build systems and software using specialist engineering tools
- work within modern development environments that include Windows, Linux, mobile and cloud computing
- gain knowledge in business processes and associated work practices, requirements and information needs
- acquire theoretical knowledge to reflect critically on professional practice in the areas of business analysis, change management and implementation, project management and business strategy, and the planning of information systems
- analyse and evaluate complex problems in a range of different information systems situations
- acquire a range of software engineering and business informatics research frameworks and skills.

Career opportunities

- ICT consultant
- data scientist
- cyber security specialist/forensics
- system architect/technical architect
- user interface designer
- artificial intelligence/machine learning engineer
- web/mobile app developer
- software engineer
- games developer
- IT test engineer
- robotics specialist
- business analyst
- web developer
- IT systems test engineer
- information systems manager
- IT auditor
- project manager

Professional accreditation

This course is accredited with the Australian Computer Society at the professional level.

Admission requirements

Admission to this course is based on an entrance rank. A rank can be achieved by the following means:

- Year 12 ATAR
- other Australian Qualification
- work experience

- overseas qualification

We also offer a number of entry initiatives that give you the opportunity to gain entry to the University via alternate pathway programs and admissions schemes.

More information is available on our Alternative Entry page: <http://www.canberra.edu.au/future-students/applications/apply-now/alternative-entry>

Assumed knowledge

Basic knowledge and skills in ICT (Information and Communication Technology); Basic numeracy and literacy skills.

Periods course is open for new admissions

Year	Location	Teaching period	Teaching start date	Domestic	International
2022	UC - Canberra, Bruce	Semester 1	07 February 2022	✓	✓
2022	UC - Canberra, Bruce	Winter Term	30 May 2022	✓	
2022	UC - Canberra, Bruce	Semester 2	01 August 2022	✓	✓
2023	UC - Canberra, Bruce	Semester 1	06 February 2023	✓	✓
2023	UC - Canberra, Bruce	Winter Term	30 May 2023	✓	
2023	UC - Canberra, Bruce	Semester 2	31 July 2023	✓	✓

Credit arrangements

There are currently no formal credit transfer arrangements for entry to this course. Any previous study or work experience will only be considered as part of the application process in accordance with current [course rules and university policy](#). Credit is not permitted towards completion of a graduate certificate.

Course requirements

Bachelor of Software Engineering/Bachelor of Business Informatics (838AA) | 96 credit points

Required - 72 credit points as follows

[Expand All](#) | [Collapse All](#)

Core Major in Information Technology and Systems (CM0018) | 24 credit points

Required - Must pass 21 credit points as follows

Introduction to Information Technology (4478) | 3 credit points – Level 1

Database Design (5915) | 3 credit points – Level 1

Professional Practice in IT (7722) | 3 credit points – Level 1

Information & Communication Technology Project (9785) | 6 credit points – Level 3

Technological Innovation and Entrepreneurship (11408) | 3 credit points – Level 2

Systems Analysis and Modelling (11486) | 3 credit points – Level 1

Restricted Choice - Must pass 3 credit points from the following

Information Systems in Organisations (6348) | 3 credit points – Level 1

Introduction to Network Engineering (11485) | 3 credit points – Level 1

Note:

- 1. Students in the 322AA BIT, 560AA BSE or ITB101 BET courses must choose 11485 Introduction to Network Engineering.
- 2. Students in the 706AA BBI course must choose 6348 Information Systems in Organisations.
- 3. Students in the 838AA BSE/BBI combined course must do both 11485 Intro to Network Engineering AND 6348 Info Systems in Organisations. The extra cps will count towards the chosen Specialist Major.

Specialist Major in Software Engineering (SM0053) | 24 credit points

Required - Must pass 24 credit points as follows

Software Technology 1 (4483) | 3 credit points – Level 1

Discrete Mathematics (6698) | 3 credit points – Level 1

Software Technology 2 (7170) | 3 credit points – Level 2

Web Design and Programming (7175) | 3 credit points – Level 2

Technology and Engineering Management (9789) | 3 credit points – Level 3

System Software (11489) | 3 credit points – Level 3

Software Systems Architecture (11491) | 3 credit points – Level 3

Mobile Technologies (11492) | 3 credit points – Level 3

Specialist Major in Business Informatics (SM0060) | 24 credit points

Required - Must pass 21 credit points as follows

Designing Human-Computer Interaction (6389) | 3 credit points – Level 2

Business Intelligence Systems (7156) | 3 credit points – Level 3
Systems Project and Quality Management (7173) | 3 credit points – Level 3
Corporate Strategy and IT Governance (9276) | 3 credit points – Level 3
Enterprise Systems (11366) | 3 credit points – Level 1
Workflow and Process Management (11481) | 3 credit points – Level 2
Social Informatics (11490) | 3 credit points – Level 1

Restricted Choice - Must pass 3 credit points from the following

Information Security (11487) | 3 credit points – Level 2
Information Security (11759) | 3 credit points – Level 3

Note:

- Effective from 1/7/21 the unit code for Information Security has changed from 11487 to 11759.

Restricted Choice - Must select 1 of the following

Specialist Major in Robotics and AI (SM0058) | 24 credit points

Required - Must pass 18 credit points as follows

Soft Computing (7168) | 3 credit points – Level 3
Engineering Mathematics (10087) | 3 credit points – Level 1
Foundations of Robotics (11370) | 3 credit points – Level 2
Computer Vision and Image Analysis (11376) | 3 credit points – Level 3
Advanced Robotics (11479) | 3 credit points – Level 3
Pattern Recognition and Machine Learning (11482) | 3 credit points – Level 3

Restricted Choice - Must pass 6 credit points from the following

- any units offered by the School of Information Technology & Systems, with at least 3 credit points at Advanced (3) level, including the following units:

Software Technology 2 (7170) | 3 credit points – Level 2
Information Sciences Internship (7899) | 3 credit points – Level 3
Information Sciences Internship (Extended) (10152) | 3 credit points – Level 3
Advances in Information Sciences and Engineering (11480) | 3 credit points – Level 3

Note:

- Restricted Choice units should be chosen to either meet the prerequisites of the units in the Major

or to complement Major units for a better learning outcome.

Specialist Major in Cloud Computing and IoT (SM0055) | 24 credit points

Required - Must pass 15 credit points as follows

Contemporary IT & E Issues (9788) | 3 credit points – Level 3

Cloud Computing Architecture (11368) | 3 credit points – Level 3

Foundations of Robotics (11370) | 3 credit points – Level 2

Security and Support in IT (11488) | 3 credit points – Level 1

Internet of Things (11511) | 3 credit points – Level 3

Restricted Choice - Must pass 9 credit points from the following

- any units offered by the School of Information Technology & Systems, with at least 3 credit points at Advanced (3) level, including the following units:

Information Sciences Internship (7899) | 3 credit points – Level 3

Information Sciences Internship (Extended) (10152) | 3 credit points – Level 3

Law, Innovation and Technologies (11271) | 3 credit points – Level 3

Advances in Information Sciences and Engineering (11480) | 3 credit points – Level 3

Note:

1. Restricted Choice units should be chosen to either meet the prerequisites of the units in the Major or to complement Major units for a better learning outcome.
2. Exclusive to this Major only, students may also choose unit 11271 Law, Innovation & Technologies (offered by Faculty of Business, Government & Law) as one of the Restricted Choices units.

Specialist Major in Cybersecurity and System Administration (SM0056) | 24 credit points

Required - Must pass 15 credit points as follows

Computer and Network Security (8019) | 3 credit points – Level 3

Introduction to Digital Forensics (9074) | 3 credit points – Level 2

Network Architecture (11484) | 3 credit points – Level 3

Security and Support in IT (11488) | 3 credit points – Level 1

System and Network Administration (11514) | 3 credit points – Level 3

Restricted Choice - 9 credit points as follows

Part A - Must pass 3 credit points from the following

[Software Technology 1 \(4483\) | 3 credit points – Level 1](#)

[Contemporary IT & E Issues \(9788\) | 3 credit points – Level 3](#)

[Information Security \(11759\) | 3 credit points – Level 3](#)

Note:

- 1. Students in the 706AA BBI course should choose 4483 Software Technology 1.
- 2. Students in the 322AA BIT or 838AA BSE/BBI courses should choose 9788 Contemporary IT & E Issues.
- 3. Students in the 560AA BSE course should choose 11759 Information Security (or previous unit code 11487).

Part B - Must pass 3 credit points from the following

- Any unit from the School of Information Technology & Systems.

[Introduction to Network Engineering \(11485\) | 3 credit points – Level 1](#)

Note:

- 1. Students in the 706AA BBI or 838AA BSE/BBI courses should choose 11485 Introduction to Network Engineering.

Specialist Major in Data Science (SM0057) | 24 credit points

Required - Must pass 15 credit points as follows

[Introduction to Statistics \(6540\) | 3 credit points – Level 1](#)

[Data Analytics and Business Intelligence \(8696\) | 3 credit points – Level 3](#)

[Introduction to Data Science \(11372\) | 3 credit points – Level 3](#)

[Exploratory Data Analysis and Visualisation \(11374\) | 3 credit points – Level 3](#)

[Pattern Recognition and Machine Learning \(11482\) | 3 credit points – Level 3](#)

Restricted Choice - Must pass 9 credit points from the following

- any units offered by the School of Information Technology & Systems, with at least 3 credit points at Advanced (3) level, including the following units:

[Information Sciences Internship \(7899\) | 3 credit points – Level 3](#)

[Information Sciences Internship \(Extended\) \(10152\) | 3 credit points – Level 3](#)

[AR/VR for Data Analysis and Communication \(11464\)](#) | 3 credit points – Level 3

[Advances in Information Sciences and Engineering \(11480\)](#) | 3 credit points – Level 3

Note:

- Restricted Choice units should be chosen to either meet the prerequisites of the units in the Major or to complement Major units for a better learning outcome.

Individual units may only count towards one major. Only 4 majors can be completed in this course, including core and specialist majors.

In addition to course requirements, in order to successfully complete your course you must meet the inherent requirements. Please refer to the [inherent requirements statement](#) applicable to your course

Typical study pattern

UC - Canberra, Bruce

Standard Full Time, Semester 1 Commencing

Year 1

Semester 1

[Database Design \(5915\)](#)

[Enterprise Systems \(11366\)](#)

[Introduction to Information Technology \(4478\)](#)

[Professional Practice in IT \(7722\)](#)

Semester 2

[Discrete Mathematics \(6698\)](#)

[Information Systems in Organisations \(6348\)](#)

[Software Technology 1 \(4483\)](#)

[Systems Analysis and Modelling \(11486\)](#)

Year 2

Semester 1

[Designing Human-Computer Interaction \(6389\)](#)

[Introduction to Network Engineering \(11485\)](#)

[Software Technology 2 \(7170\)](#)

Technological Innovation and Entrepreneurship (11408)

Semester 2

Social Informatics (11490)

Software Systems Architecture (11491)

Systems Project and Quality Management (7173)

Web Design and Programming (7175)

Year 3

Semester 1

Information Security (11759)

Mobile Technologies (11492)

Workflow and Process Management (11481)

One Restricted Choice Major Unit

Semester 2

Corporate Strategy and IT Governance (9276)

System Software (11489)

Two Restricted Choice Major Units

Year 4

Semester 1

Technology and Engineering Management (9789)

Two Restricted Choice Major Units

Business Intelligence Systems (7156)

Semester 2

Two Restricted Choice Major Units

Information & Communication Technology Project (9785)

Standard Full Time, Semester 1, 2020 Commencing

Year 1

Semester 1

Database Design (5915)

Enterprise Systems (11366)

Introduction to Information Technology (4478)

Professional Practice in IT (7722)

Semester 2

Discrete Mathematics (6698)

Information Systems in Organisations (6348)

Software Technology 1 (4483)

Systems Analysis and Modelling (11486)

Year 2

Semester 1

Designing Human-Computer Interaction (6389)

Introduction to Network Engineering (11485)

Software Technology 2 (7170)

Technological Innovation and Entrepreneurship (11408)

Semester 2

Social Informatics (11490)

Software Systems Architecture (11491)

Web Design and Programming (7175)

One Restricted Choice Major Unit

Year 3

Semester 1

Information Security (11759)

Mobile Technologies (11492)

System Software (11489)

Workflow and Process Management (11481)

Semester 2

Corporate Strategy and IT Governance (9276)

Systems Project and Quality Management (7173)

Two Restricted Choice Major Units

Year 4

Semester 1

Technology and Engineering Management (9789)

Two Restricted Choice Major Units

Business Intelligence Systems (7156)

Semester 2

Two Restricted Choice Major Units

Information & Communication Technology Project (9785)

Standard Full Time, Semester 2 Commencing

Year 1

Semester 2

Discrete Mathematics (6698)

Information Systems in Organisations (6348)

Social Informatics (11490)

Systems Analysis and Modelling (11486)

Year 2

Semester 1

Database Design (5915)

Enterprise Systems (11366)

Introduction to Information Technology (4478)

Professional Practice in IT (7722)

Semester 2

Introduction to Network Engineering (11485)

Software Systems Architecture (11491)

Software Technology 1 (4483)

Web Design and Programming (7175)

Year 3

Semester 1

Designing Human-Computer Interaction (6389)

Software Technology 2 (7170)

Technological Innovation and Entrepreneurship (11408)

[Workflow and Process Management \(11481\)](#)

Semester 2

[Systems Project and Quality Management \(7173\)](#)

Three Restricted Choice Major Units

Year 4

Semester 1

[Information Security \(11759\)](#)

[Mobile Technologies \(11492\)](#)

[System Software \(11489\)](#)

[Technology and Engineering Management \(9789\)](#)

Semester 2

[Corporate Strategy and IT Governance \(9276\)](#)

Three Restricted Choice Major Units

Year 5

Semester 1

[Information & Communication Technology Project \(9785\)](#)

One Restricted Choice Major Unit

[Business Intelligence Systems \(7156\)](#)

Course information

Course duration

Standard eight semesters full-time or equivalent. Maximum twenty semesters.

Learning outcomes

Learning outcomes	Related graduate attributes
Refer to individual courses.	-

Majors

- [Specialist Major in Cloud Computing and IoT \(SM0055\)](#)
- [Specialist Major in Robotics and AI \(SM0058\)](#)
- [Specialist Major in Software Engineering \(SM0053\)](#)
- [Specialist Major in Business Informatics \(SM0060\)](#)
- [Core Major in Information Technology and Systems \(CM0018\)](#)
- [Specialist Major in Cybersecurity and System Administration \(SM0056\)](#)
- [Specialist Major in Data Science \(SM0057\)](#)

Awards

Award	Official abbreviation
Bachelor of Software Engineering	BSE
Bachelor of Business Informatics	B BusInformatics

Honours

Refer to individual courses.

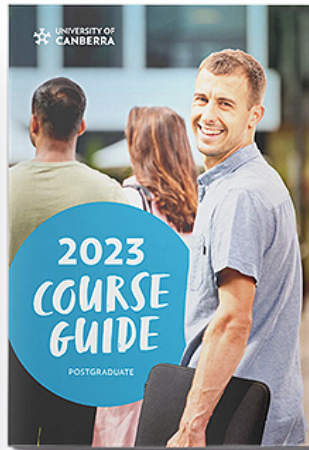
Related courses

- [Bachelor of Business Informatics \(706AA\)](#)
- [Bachelor of Business Informatics \(Brisbane\) \(706AB\)](#)
- [Bachelor of Software Engineering \(560AA\)](#)

Enquiries

Student category	Contact details
Prospective International Students	Email international@canberra.edu.au or Phone +61 2 6201 5342
Prospective Domestic Students	Email study@canberra.edu.au or Phone 1800 UNI CAN (1800 864 226)
Current and Commencing Students	In person, Student Centre Building 1 or Email Student.Centre@canberra.edu.au

Download your course guide



Scholarships

Find the scholarship that's the right fit for you

[Explore Scholarships](#)

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CRICOS 00212K

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UC acknowledges the Ngunnawal people, traditional custodians of the lands where Bruce campus is situated. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of Canberra and the region. We also acknowledge all other First Nations Peoples on whose lands we gather.