

Bachelor of Software Engineering/Bachelor of

Business Informatics (838AA.5)

Please note these are the 2024 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.	
Delivery mode	On campus	
Location	Bruce, Canberra	
Duration	4.0 years	
Faculty	Faculty of Science and Technology	
Discipline	Academic Program Area - Technology	
UAC code	366123	
English language requirements	An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent). View IELTS equivalences	

International students

 Academic entry
 To study at UC, you'll need to meet our academic entry requirements and any admission requirements

 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

On campus
Bruce, Canberra
4.0 years
Faculty of Science and Technology
Academic Program Area - Technology
056138G
An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent).

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/applynow/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
2025	Bruce, Canberra	Semester 1	03 February 2025	⊘	•
2025	Bruce, Canberra	Winter Term	26 May 2025	⊘	
2025	Bruce, Canberra	Semester 2	28 July 2025	⊘	•
2026	Bruce, Canberra	Semester 1	16 February 2026	⊘	•
2026	Bruce, Canberra	Winter Term	08 June 2026	⊘	
2026	Bruce, Canberra	Semester 2	10 August 2026	⊘	•
2027	Bruce, Canberra	Semester 1	15 February 2027	⊘	•
2027	Bruce, Canberra	Winter Term	07 June 2027	⊘	
2027	Bruce, Canberra	Semester 2	09 August 2027	⊘	•

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.

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.

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

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 Cybersecurity and System Administration (SM0056) | 24 credit points

Required - Must pass 9 credit points as follows

Introduction to Digital Forensics (9074) | 3 credit points – Level 2 Network Architecture (11484) | 3 credit points – Level 3 System and Network Administration (11514) | 3 credit points – Level 3

Restricted Choice - 15 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 must choose 4483 Software Technology 1.
- 2. Students in the 322AA BIT or 838AA BSE/BBI courses must choose 9788 Contemporary IT & E Issues.
- 3. Students in the 560AA BSE course must 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 must choose 11485 Introduction to Network Engineering.

Part C - Must pass 3 credit points from the following

• Any Undergraduate Level 3 unit from the School of Information Technology & Systems.

Part D - Must pass 3 credit points from the following

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

Advanced Cyber Security (11907) | 3 credit points - Level 3

Note:

 From Semester 2 2023, 11907 Advanced Cyber Security replaces 8019 Computer and Network Security

Part E - Must pass 3 credit points from the following

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

Introduction to Cyber Security (11906) | 3 credit points - Level 1

Note:

 From Semester 2 2023, 11906 Introduction to Cyber Security replaces 11488 Security and Support in IT

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.

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 Internet of Things (11511) | 3 credit points – Level 3 Introduction to Cyber Security (11906) | 3 credit points – Level 1

Restricted Choice - Must pass 9 credit points from the following

Part A - Must pass 3 credit points from the following

• Any unit from the School of ITS

Enterprise and Cloud Computing (9281) | 3 credit points – Level 3

Note:

- Students in 322A BIT can choose any unit from the School of ITS
- Students in 706AA BBI, 560AA BSE, or 838AA BSE/BBI must choose 9281 Enterprise and Cloud Computing

Part B - Must pass 3 credit points from the following

• Any unit from the School of ITS

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

Note:

- Students in 322A BIT or 706AA BSE can choose any unit from the School of ITS
- Students in 706AA BBI or 838AA BSE/BBI must choose 11485 Introduction to Network Engineering

Part C - Must pass 3 credit points as follows

• Any Undergraduate Level 3 unit from the School of ITS

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

Note:

• For this Major only, students may also choose unit 11271 Law, Innovation & Technologies (offered by Faculty of Business, Government & Law) for this restricted choice unit.

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) 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 Two Restricted Choice Major Units Corporate Strategy and IT Governance (9276) Systems Project and Quality Management (7173)

Year 4

Semester 1

Business Intelligence Systems (7156)Technology and Engineering Management (9789)Two Restricted Choice Major UnitsSemester 2Two Restricted Choice Major UnitsInformation & Communication Technology Project (9785)

Course information

Course duration

Standard 4 years full time or part-time equivalent. Maximum 10 years from date of enrolment to date of course completion.

Learning outcomes

Learning outcomes

Related graduate attributes

Refer to individual courses.

Majors

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

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

Download your course guide



Scholarships

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Explore Scholarships

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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.