UNIVERSITY OF CANBERRA

Bachelor of Secondary Education/Bachelor of Mathematics and Computing Technology Studies (329JA.1)

Please note these are the 2019 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	UC Canberra - Bruce Campus
Duration	4.0 years
Faculty	Faculty of Education
Discipline	Academic Program Area - Education
UAC code	
English language requirements	There are non-standard English language requirements for this course. To be eligible you must have an overall academic IELTS or equivalent of 7.5 with no band score below 7.0 and a score of not less than 8.0 in both speaking and listening. For alternate/equivalent ways of meeting the English requirements for this course

	please view the English Proficiency Requirements document on the university website. View IELTS equivalences

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
Delivery mode	
Location	UC Canberra - Bruce Campus
Duration	4.0 years
Faculty	Faculty of Education
Discipline	Academic Program Area - Education
CRICOS code	088698M
English language requirements	There are non-standard English language requirements for this course. To be eligible you must have an overall academic IELTS or equivalent of 7.5 with no band score below 7.0 and a score of not less than 8.0 in both speaking and listening. For alternate/equivalent ways of meeting the English requirements for this course please view the English Proficiency Requirements document on the university website. View IELTS equivalences

About this course

Power-up the next generation with cutting-edge technology skills

Secondary school teacher, vocational training instructor, guidance officer ... these are all careers that with this Double Degree, will fire-up your interactive neurons and present in-demand job opportunities in a constantly evolving digital age.

Combining a vast array of maths and technology- based subjects including database design, linear algebra, IT support and communication

literacy, this course will award you specialised knowledge in a variety of teaching practices and introduce you to the needs of a diverse range of students.

You will learn how to develop and implement effective assessment strategies, carry out program and reporting evaluations and implement alternative and enhanced literacy and numeracy strategies.

And what does this all add up to? After a series of education units within a professional placement environment, you'll be awarded with registration from the ACT Teacher Quality Institute. That computes!

Combine a Bachelor of Secondary Education / Bachelor of Maths and Computing Technology Studies at UC and you will:

- demonstrate specialised knowledge and skills in both mathematics and computing technology studies across a range of classes and year groups within a secondary school environment
- learn the theories and principles that are the foundation for educational practice in secondary settings
- demonstrate an understanding of student needs and differences and develop teaching activities for a range of indigenous, EALD and mainstream settings
- develop and implement effective assessment strategies and carry out evaluation of teaching programs, resources and your own teaching
- apply the requisite content knowledge for all secondary school curriculum areas to teaching, assessment and reporting methods, alternate/enhanced literacy and numeracy strategies and the effective use of ICT in teaching and learning.

Work-integrated learning

In this course, you will undertake professional experience placements as part of the Faculty of Education, Science, Technology & Maths' commitment to supporting work-integrated learning, which will enhance your employability and ensure you're armed with the right mix of skills and knowledge to take a super-confident leap into your future career.

Career opportunities

Opportunities exist for Bachelor of Secondary Education / Bachelor of Maths and Computing Technology graduates in a range of sectors including in:

- Secondary School Teacher
- Head of Department
- Principal
- Guidance Officer
- Learning Support Teacher
- Student Advisor
- Education Advisor
- Vocational Education and Training Instructor

Course specific information

Applicants must meet normal university requirements for admission to an undergraduate course.

Professional accreditation

This course is registered by the ACT Teacher Quality Institute (TQI) and recognised as a teaching qualification throughout Australia.

Admission requirements

Normal UC requirements for admission to an undergraduate course.

Additional admission requirements

Students must obtain a Working with Vulnerable People Check.

Assumed knowledge

ACT: English & Maths (T with C minimum pass) NSW: Higher School Certificate English & Maths minimum.

Periods course is open for new admissions

This course is not open for new admissions.

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 Secondary Education/Bachelor of Mathematics and Computing Technology Studies (329JA) | 96 credit points

Expand All | Collapse All

Required - Must pass 87 credit points as follows

Major in Secondary Educational Studies (MJ0281) | 24 credit points

Required - Must pass 21 credit points as follows

Addressing Challenges in Educational Environments (9857) | 3 credit points — Level 4

Classroom Climate and Organisation (9860) | 3 credit points — Level 2

Context of the Education Profession (9862) | 3 credit points — Level 1

Curriculum - Planning, Assessing and Reporting (9868) | 3 credit points — Level 3

Designing Learning for Diversity and Inclusion (9869) | 3 credit points — Level 2

Human Development and Learning (9874) | 3 credit points — Level 1

Philosophy of Education (9892) | 3 credit points — Level 2

Note:

- From 2019 the code for 9868 Curriculum - Planning, Assessing & Reporting has changed to 10425.

Restricted Choice - Must pass 3 credit points from the following

Principles of Learning and Teaching Materials Design (9895) | 3 credit points — Level 2

Using Design Principles and Technologies in Education (10451) | 3 credit points — Level 3

Note:

- From 2020 unit 9895 Principles of Learning & Teaching Materials Design has been replaced by 10451 Using Design Principles & Technologies in Education.

Major in Advanced Mathematics (MJ0271) | 21 credit points

Required - Must pass 21 credit points as follows

Mathematical Structures (6543) | 3 credit points — Level 2

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

Mathematical Modelling (8103) | 3 credit points — Level 2

Mathematical Perspectives (8104) | 3 credit points — Level 3

Linear Algebra (8110) | 3 credit points — Level 2

Mathematics Extension Studies (9884) | 3 credit points — Level 4

Engineering Mathematics (10087) | 3 credit points — Level 1

Major in Information Technology (MJ0276) | 18 credit points

Required - Must pass 18 credit points as follows

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

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

Systems Analysis and Modelling (6365) | 3 credit points — Level 2

Security and Support in IT (7167) | 3 credit points — Level 2

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

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

Note:

- From 2019 the unit code for Systems Analysis and Modelling has changed to 11486 and for Security & Support in IT to 11488.

Required Units - Must pass 24 credit points as follows

Core Literacy (9863) | 3 credit points — Level 1

Information and Communication Technology Literacy (9878) | 3 credit points — Level 2

Secondary Mathematics PCK 2 (9911) | 3 credit points — Level 3

Secondary Technologies PCK 1 (9914) | 3 credit points — Level 3

Statistics in Education (9917) | 3 credit points — Level 2

The Educational Workplace (9919) | 3 credit points — Level 1

Secondary Technologies PCK 2 (9967) | 3 credit points — Level 3

Secondary Mathematics PCK 1 (9968) | 3 credit points — Level 3

Restricted Choice - Must pass 9 credit points from the following

- - - any Level 2 or Level 3 IT and Engineering units that are not already required in the course and for which pre-requisites have been achieved
- - - any Level 2 or Level 3 statistics units

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

Core Literacy (9863)

Introduction to Information Technology (4478)

Statistics in Education (9917)

The Educational Workplace (9919)

Semester 2

Context of the Education Profession (9862)

Database Design (5915)

Discrete Mathematics (6698)

Human Development and Learning (9874)

Year 2

Semester 1

Engineering Mathematics (10087)

Restricted Choice Unit

Curriculum - Planning, Assessing and Reporting (9868)

Mathematical Structures (6543)

Semester 2

Classroom Climate and Organisation (9860)

Designing Learning for Diversity and Inclusion (9869)

Restricted Choice Unit

Systems Analysis and Modelling (6365)

Year 3

Semester 1

Linear Algebra (8110)

Principles of Learning and Teaching Materials Design (9895)

Secondary Mathematics PCK 1 (9968)

Secondary Technologies PCK 1 (9914)

Semester 2

Contemporary IT & E Issues (9788)

Restricted Choice Unit

Mathematical Modelling (8103)

Secondary Mathematics PCK 2 (9911)

Year 4

Semester 1

Mathematics Extension Studies (9884)

Philosophy of Education (9892)

Security and Support in IT (7167)

Technology and Engineering Management (9789)

Semester 2

Addressing Challenges in Educational Environments (9857)

Information and Communication Technology Literacy (9878)

Mathematical Perspectives (8104)

Course information

Course duration

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

Learning outcomes

Learning outcomes	Related graduate attributes
Knowledge: Demonstrate specialised knowledge and skills in two disciplines of Mathematics and Computer Technology in order to enhance the teaching and learning in these areas across the range of classes and year groups within a Secondary School environment, Demonstrate that they possess the appropriate scientific, literacy and numeracy knowledge to properly inform their teaching, communication and administrative responsibilities; Demonstrate knowledge of theories and principles that are the foundation for educational issues and practice in Secondary settings; Demonstrate knowledge of the theoretical frameworks that underpin a comprehensive understanding of secondary school learners; Demonstrate knowledge and understanding of student needs and differences and the relevance of these to learning in inclusive, indigenous, EALD and mainstream settings within secondary schools.	1.1 employ up to date and relevant knowledge and skills; 1.2 communicate effectively; 1.3 use creativity, critical thinking, analysis and research skills to solve theoretical and real world problems; 2.5 make creative use of technology in their learning and professional lives; 3.3 adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas; 3.4 evaluate and adopt new technology.
Skills: Plan and develop appropriate and engaging teaching activities for secondary school students from a diverse range of backgrounds; Demonstrate specialised knowledge and skills in the Mathematics and Computer	1.1 employ up to date and relevant knowledge and skills; 1.2 communicate effectively; 1.4 work collaboratively as part of a team,

Technology areas; Develop and implement effective assessment strategies and carry out evaluation of teaching programs, resources and their own teaching.	negotiate, and resolve conflict; 1.5 display initiative and drive, and use their organisation skills to plan and manage their workload; 3.1 reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; 3.2 be self aware;
Application of Skills and Knowledge: Apply the requisite content knowledge for Secondary School Curriculum areas in Mathematics and Computing Technology to teaching, assessment and reporting methods, alternate/enhanced literacy and numeracy strategies and the effective use of ICT in teaching and learning; Reflect effectively on their practice and on their experiences within their profession and use that reflection to engage in a process of continual improvement. Engage professionally with colleagues, parents/carers and the community including through professional learning.	2.2 adopt an informed and balanced approach across professional and international boundaries; 2.3 understand issues in their profession from the perspective of other cultures; 2.4 communicate effectively in diverse cultural and social settings; 2.5 make creative use of technology in their learning and professional lives; 2.1 think globally about issues in their profession; 2.2 adopt an informed and balanced approach across professional and international boundaries; 2.6 behave ethically and sustainably in their professional and personal lives. 3.1 reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; 3.2 be self aware;

	3.3 adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas; 1.4 work collaboratively as part of a team, negotiate, and resolve conflict; 2.2 adopt an informed and balanced approach across professional and international boundaries; 2.3 understand issues in their profession from the perspective of other cultures; 2.4 communicate effectively in diverse cultural and social settings; 3.1 reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; 3.2 be self aware.

Majors

- Major in Secondary Educational Studies (MJ0281)
- Major in Advanced Mathematics (MJ0271)
- Major in Information Technology (MJ0276)

Awards

Award	Official abbreviation
Bachelor of Mathematics and Computing Technology Studies	B M Comp Tech
Bachelor of Secondary Education	B Sec Ed

Honours

None.

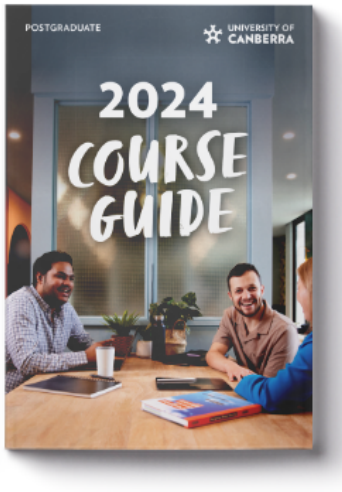
Alternative exits

Bachelor of Educational Studies

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	Please contact the University Student Centre by Email student.centre@canberra.edu.au or Phone 1300 301 727

Download your course guide



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CRICOS 00212K

TEQSA Provider ID: PRV12003 (Australian University)

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.