UNIVERSITY OF CANBERRA

Bachelor of Secondary Education/Bachelor of Science (328JA.3)

Please note these are the 2023 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 Education
Discipline	Academic Program Area - Education
UAC code	364063
English language requirements	There are non-standard English language requirements for this course. To be eligible you must have an overall IELTS Academic score (or equivalent) of 7.5, a score of not less than 8.0 in both speaking and listening, and no band score below 7.0. 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	On campus
Location	Bruce, Canberra
Duration	4.0 years
Faculty	Faculty of Education
Discipline	Academic Program Area - Education
CRICOS code	088697A
English language requirements	There are non-standard English language requirements for this course. To be eligible you must have an overall IELTS Academic score (or equivalent) of 7.5, a score of not less than 8.0 in both speaking and listening, and no band score below 7.0. 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

Launch your science career with a bang

If you have a love of all things science, and want to use that to enliven the minds of young people aged 12 to 18, then this four-year double degree is for you. You'll select two disciplines from a choice of scientific streams, including biology, chemistry, ecology and mathematics, and will learn how to align your specialisations to core teaching principles and to the design of programs that celebrate integration, diversity and inclusion.

Across a number of Pedagogical Content Knowledge (PCK) units, taught on-site in a secondary school environment, you'll explore your theoretical scientific learning in a practical setting, gaining a good understanding of how a secondary school operates. You'll graduate energised, motivated and enthusiastic, with all the necessary knowledge and skills required to pass on your passion for science to

students across Years 7 to 12.

Study a Bachelor of Secondary Education/Bachelor of Science at UC and you will:

- demonstrate specialised knowledge and skills in two science disciplines, 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, English as an Additional Language or Dialect (EALD) and mainstream settings
- develop and implement effective assessment strategies and carry out evaluation of teaching programs, resources and your own teaching
- apply the required content knowledge for all secondary school curriculum areas to teaching and reporting methods, alternate/enhanced literacy and numeracy strategies, and the effective use of Information and Communication Technologies (ICT) in teaching and learning.

Work Integrated Learning

A teaching degree, by its very nature, is the embodiment of Work Integrated Learning (WIL), with its focus on compulsory professional teaching practice. During this course, you'll undertake a minimum of 80 days of practical placement across a range of different secondary school levels and settings, including science-specific positions, culminating in a 30-day teaching placement in your final year.

In addition to this, the course content is developed by secondary education professionals, and kept relevant and up-to-date through consistent monitoring of, and engagement with, the industry. You'll undertake authentic assessment tasks which are highly relevant to the day-to-day practice of teaching, and will take part in regular professional development activities, field trips to educational STeM sites such as Questacon, lectures hosted by guest speakers from a range of education and teaching backgrounds, and more.

Career opportunities

- Secondary school teacher
- Science teacher
- Chemistry teacher
- Biology teacher
- Earth and Environmental Science teacher
- Physics teacher
- Maths teacher
- Head of department
- Principal
- Deputy principal
- Executive teacher
- Head teacher welfare
- Director of curriculum
- Year adviser
- Special needs teacher

- Gifted and talented teacher
- Relief teacher
- Guidance officer
- Careers adviser
- Learning support teacher
- Student adviser
- Education adviser
- Schools policy adviser
- Vocational education and training instructor
- Private tutor
- Schools engagement coordinator

Course-specific information

This course is registered by the ACT Teacher Quality Institute (TQI) and recognised as a teaching qualification throughout Australia. On graduating, students must register with the appropriate state teaching body in order to teach. Students must obtain a Working with Vulnerable People Check before their first placement.

Professional accreditation

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

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

Additional admission requirements

All applicants will be required to complete a written statement in response to questions designed to assess their suitability for the teaching profession. Applicants' responses to these questions must be deemed satisfactory for them to be admitted to this course. You can find the questions in the 'resources' section of the online application portal when you are applying. You can upload your responses in PDF format as part of your application. https://www.canberra.edu.au/about-uc/faculties/education/docs/UG-Teacher-Education-questionnaire.pdf

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 Science (328JA) | 96 credit points

Expand All | Collapse All

Required - 36 credit points as follows

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

Required - Must pass 24 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

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

Curriculum - Assessment, Planning and Reporting (10425) | 3 credit points — Level 2

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

Required Units - Must pass 12 credit points as follows

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

Core Mathematics (9864) | 3 credit points — Level 1

Using Data to Improve Learning (10354) | 3 credit points — Level 3

Ways of Knowing, Being and Doing in Education (10450) | 3 credit points — Level 1

Engaging with LANTITE (10453) | 0 credit points — Level 1

- Students may select an alternative unit to Core Mathematics with the approval of the Program Director for Secondary Education.

Restricted Choice - 60 credit points as follows

Education - Must pass 12 credit points as follows

Discipline Units PCK 1 - Must pass 6 credit points from the following

Secondary Science PCK 1 (9912) | 3 credit points — Level 3

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

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

Discipline Units PCK 2 - Must pass 6 credit points from the following

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

Secondary Science PCK 2 (9913) | 3 credit points — Level 3

Teachers as Professionals (9918) | 6 credit points — Level 4

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

Science - Must pass 48 credit points as follows

- 1. Teaching areas are defined by the Board of Studies, Teaching & Educational Standards NSW Subject Content Requirements.

- 2. Some teaching areas have requirements that are beyond what is set out in the Majors. For all Majors, students may not complete more than two Level 1 units.

Mathematics - May select from

Major in Mathematics (MJ0148) | 18 credit points

Required - Must pass 18 credit points as follows

Mathematical Methods (577) | 3 credit points — Level 1

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

Technologies - May select from

Minor in Mathematical Structures and Computation (MN0072) | 12 credit points

Required - Must pass 12 credit points as follows

Coding Theory (6539) | 3 credit points — Level 3

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

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

Mathematics for Information Sciences (7089) | 3 credit points — Level 1

Minor in Information Systems (MN0045) | 12 credit points

Required - Must pass 12 credit points as follows

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

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

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

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

Note:

- From 2019 the unit code for 6365 Systems Analysis and Modelling has changed to 11486.

Minor in Software Engineering (MN0109) | 12 credit points

Required - Must pass 9 credit points as follows

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

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

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

Restricted Choice - Must pass 3 credit points from the following

Distributed Systems Technology (7159) | 3 credit points — Level 3

Object Oriented Software Design (7165) | 3 credit points — Level 3

Major in Food Technology Teaching (Restricted) (MJ0203) | 18 credit points

Required - Must pass 18 credit points as follows

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Nutritional Science (8257) | 3 credit points — Level 2

Nutrition, Society and Health (8259) | 3 credit points — Level 3

Acquisition of Vocational Skills 2 (part A) (8795) | 0 credit points — Level 2

Acquisition of Vocational Skills 2 (part B) (8796) | 6 credit points — Level 2

Introductory Nutrition (9280) | 3 credit points — Level 1

Major in Design and Technology Teaching (MJ0199) | 18 credit points

Required - Must pass 6 credit points as follows

Study of Vocational Education in Schools (10102) | 6 credit points — Level 3

Restricted Choice - 12 credit points as follows

- Select 1 of the following options:

Option A - Must pass 12 credit points as follows

Technology Skills for Teaching 1 (A) (10103) | 3 credit points — Level 2

Technology Skills for Teaching 1 (B) (10104) | 3 credit points — Level 2

Technology Skills for Teaching 2 (A) (10105) | 3 credit points — Level 2

Technology Skills for Teaching 2 (B) (10106) | 3 credit points — Level 2

Option B - Must pass 12 credit points as follows

Acquisition of Vocational Skills 1 (part A) (8793) | 0 credit points — Level 1

Acquisition of Vocational Skills 1 (part B) (8794) | 6 credit points — Level 1

Acquisition of Vocational Skills 2 (part A) (8795) | 0 credit points — Level 2

Acquisition of Vocational Skills 2 (part B) (8796) | 6 credit points — Level 2

Major in Information Systems (MJ0059) | 18 credit points

Required - Must pass 12 credit points as follows

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

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

Document and Workflow Management (6388) | 3 credit points — Level 3

Systems Project and Quality Management (7173) | 3 credit points — Level 3

Note:

- From 2019 the unit code for 6365 Systems Analysis and Modelling has changed to 11486.
- From 2020 unit 6388 Document and Workflow Management has been replaced by unit 11481 Workflow and Process Management.

Restricted Choice - Must pass 6 credit points as follows

Part A - Must pass 3 credit points from the following

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

Management Information Systems (9524) | 3 credit points — Level 2

Part B - Must pass 3 credit points from the following

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

Corporate Strategy and IT Governance (9276) | 3 credit points — Level 3

Major in Secondary Industrial Technology (Construction) Teaching (MJ0307) | 18 credit points

Required - Must pass 12 credit points as follows

Industrial Design Fundamentals (11046) | 3 credit points — Level 1

3D Digital Design Fundamentals (11047) | 3 credit points — Level 1

Materials and Processes (11051) | 3 credit points — Level 2

Materials and Processes - Advanced (11052) | 3 credit points — Level 3

Restricted Choice - Must pass 6 credit points from the following

Option A - Must pass 6 credit points as follows

Design for Medium-Complexity (11050) | 3 credit points — Level 2

Design for High-Complexity (11053) | 3 credit points — Level 3

Option B - Must pass 6 credit points as follows

Acquisition of Vocational Skills 2 (part A) (8795) | 0 credit points — Level 2

Acquisition of Vocational Skills 2 (part B) (8796) | 6 credit points — Level 2

Option C - Must pass 6 credit points as follows

Technology Skills for Teaching 1 (A) (10103) | 3 credit points — Level 2

Technology Skills for Teaching 1 (B) (10104) | 3 credit points — Level 2

Major in Secondary Graphics and Multi-Media Technology Teaching (MJ0306) | 18 credit points

Required - Must pass 3 credit points from the following

Digital Media Art 1: Narrative Production (11837) | 3 credit points — Level 1

Restricted Choice - 15 credit points as follows

Part A - Must pass 3 credit points from the following

Visual Representation Techniques (11041) | 3 credit points — Level 1

Visual Communication Theory and Principles (11062) | 3 credit points — Level 1

Principles of Typography and Layout (11063) | 3 credit points — Level 1

Introduction to Interaction Design (11655) | 3 credit points — Level 1

Digital Media Art 2: Image Production (11836) | 3 credit points — Level 1

Part B - Must pass 12 credit points from the following

Front-end Web Design (11056) | 3 credit points — Level 2

Design for Digital Contexts (11064) | 3 credit points — Level 2

Character Design and Animation (11133) | 3 credit points — Level 2

Sound Design (11134) | 3 credit points — Level 2

3D Media Art Production (11838) | 3 credit points — Level 2

Emerging Production Technologies (11839) | 3 credit points — Level 3

Digital Production Project (11840) | 3 credit points — Level 3

Web Frameworks and Dynamic Data (11841) | 3 credit points — Level 2

Science - May select from

Breadth Minor in Earth & Environmental Science for Secondary Teaching (BN0006) | 12 credit points

Required - Must pass 12 credit points as follows

- Meeting Environmental Challenges: Foundations (11771) | 3 credit points — Level 1
- Diversity of Life and Habitats (11772) | 3 credit points — Level 1
- Applied Ecology (11773) | 3 credit points — Level 2
- Land and Water (11776) | 3 credit points — Level 2

Breadth Major in Earth & Environmental Science for Secondary Teaching (BM0050) | 18 credit points

Required - Must pass 18 credit points as follows

- Meeting Environmental Challenges: Foundations (11771) | 3 credit points — Level 1
- Diversity of Life and Habitats (11772) | 3 credit points — Level 1
- Applied Ecology (11773) | 3 credit points — Level 2
- Land and Water (11776) | 3 credit points — Level 2
- Tackling Environmental Challenges: Conservation (11777) | 3 credit points — Level 3
- Tackling Environmental Challenges: Water (11778) | 3 credit points — Level 3

Breadth Minor in Chemistry for Secondary Teaching (BN0004) | 12 credit points

Required - Must pass 12 credit points as follows

- Chemical Concepts (11724) | 3 credit points — Level 1
- Chemical Foundations (11768) | 3 credit points — Level 1
- Chemical Analysis (11769) | 3 credit points — Level 2
- Chemical Applications (11770) | 3 credit points — Level 3

Breadth Minor in Biology for Secondary Teaching (BN0005) | 12 credit points

Required - Must pass 12 credit points as follows

- Biological Concepts (11722) | 3 credit points — Level 1

Mechanisms of Disease (11727) | 3 credit points — Level 2

Infectious Diseases (11730) | 3 credit points — Level 3

Foundations of Inheritance, Diversity and Evolution (11732) | 3 credit points — Level 1

Breadth Major in Chemistry for Secondary Teaching (BM0048) | 18 credit points

Required - Must pass 18 credit points as follows

Chemical Concepts (11724) | 3 credit points — Level 1

Therapeutic Chemistry (11728) | 3 credit points — Level 2

Fundamentals of Biochemistry (11733) | 3 credit points — Level 2

Chemical Foundations (11768) | 3 credit points — Level 1

Chemical Analysis (11769) | 3 credit points — Level 2

Chemical Applications (11770) | 3 credit points — Level 3

Breadth Major in Biology for Secondary Teaching (BM0049) | 18 credit points

Required - Must pass 18 credit points as follows

Biological Concepts (11722) | 3 credit points — Level 1

Mechanisms of Disease (11727) | 3 credit points — Level 2

Infectious Diseases (11730) | 3 credit points — Level 3

Foundations of Inheritance, Diversity and Evolution (11732) | 3 credit points — Level 1

Genetics and Genomics (11736) | 3 credit points — Level 2

Advanced Genetics and Genomics (11737) | 3 credit points — Level 3

Note:

- Must complete two 18 credit point Science Majors and one 12 credit point Science Minor. At least two unit sets must be selected from the following list and must be from different subject areas.

Superseded Majors - May select from

Minor in Environmental Management (MN0037) | 12 credit points

Restricted Choice - 6 credit points as follows

Part A - Must pass 3 credit points from the following

Indigenous Societies and Heritage (8158) | 3 credit points — Level 3

Indigenous Heritage and Landscapes (9634) | 3 credit points — Level 3

Part B - Must pass 3 credit points from the following

Communication in Science (4732) | 3 credit points — Level 1

Sustainable Communities (6875) | 3 credit points — Level 2

Quantitative Skills for Sustainability (8784) | 3 credit points — Level 1

Required - Must pass 6 credit points as follows

Minor in Biological Chemistry (MN0008) | 12 credit points

Required - Must pass 12 credit points as follows

Chemistry 1a (1516) | 3 credit points — Level 1

Chemistry 1b (1517) | 3 credit points — Level 1

Human Biochemistry (6518) | 3 credit points — Level 2

Biochemistry (6530) | 3 credit points — Level 2

Minor in Ecology (MN0028) | 12 credit points

Required - Must pass 12 credit points as follows

Concepts in Biology (483) | 3 credit points — Level 1

Plants and Animals (623) | 3 credit points — Level 1

Note:

- 10235 Tackling Environmental Challenges replaces 6916 Ecology and Biodiversity from 2017. Students who have previously completed 6916 may still count it towards course completion.

Major in Biology 1 (MJ0132) | 18 credit points

Required - Must pass 6 credit points as follows

Concepts in Biology (483) | 3 credit points — Level 1

Plants and Animals (623) | 3 credit points — Level 1

Restricted Choice - Must pass 12 credit points as follows

Part A - May do up to 3 credit points from the following

Chemistry 1a (1516) | 3 credit points — Level 1

Chemistry 1b (1517) | 3 credit points — Level 1

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Earth System Science (8101) | 3 credit points — Level 1

Part B - May do up to 6 credit points from the following

Introduction to Microbiology (6510) | 3 credit points — Level 2

Human Biochemistry (6518) | 3 credit points — Level 2

Biochemistry (6530) | 3 credit points — Level 2

Regional Anatomy and Physiology (6534) | 3 credit points — Level 2

Ecochemistry (6915) | 3 credit points — Level 2

Molecular and Cellular Biology (8375) | 3 credit points — Level 2

Genetics and Genomics (10223) | 3 credit points — Level 2

Note:

- 10235 Tackling Environmental Challenges replaces 6916 Ecology and Biodiversity from 2017. Students who have previously completed 6916 may still count it towards course completion

Part C - Must do at least 3 credit points from the following

Immunology (6512) | 3 credit points — Level 3

Human Physiology and the Lifecycle (6532) | 3 credit points — Level 3

Advanced Physiology (8373) | 3 credit points — Level 3

Population Genetics (8675) | 3 credit points — Level 3

Pathobiology (8797) | 3 credit points — Level 3

Biostatistics (10222) | 3 credit points — Level 2

Note:

- 10226 Freshwater Biology replaces 6912 Australian Waterways from 2017. Students who have previously completed 6912 may still count it towards course completion.

Minor in Biology 2 (MN0010) | 12 credit points

Required - Must pass 3 credit points as follows

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Restricted Choice - 9 credit points as follows

Part A - Must pass 6 credit points from the following

Concepts in Biology (483) | 3 credit points — Level 1

Plants and Animals (623) | 3 credit points — Level 1

Introduction to Microbiology (6510) | 3 credit points — Level 2

Immunology (6512) | 3 credit points — Level 3

Human Biochemistry (6518) | 3 credit points — Level 2

Biochemistry (6530) | 3 credit points — Level 2

Human Physiology and the Lifecycle (6532) | 3 credit points — Level 3

Ecochemistry (6915) | 3 credit points — Level 2

Clinical Microbiology (8027) | 3 credit points — Level 3

Earth System Science (8101) | 3 credit points — Level 1

Advanced Physiology (8373) | 3 credit points — Level 3

Molecular and Cellular Biology (8375) | 3 credit points — Level 2

Population Genetics (8675) | 3 credit points — Level 3

Pathobiology (8797) | 3 credit points — Level 3

Biostatistics (10222) | 3 credit points — Level 2

Genetics and Genomics (10223) | 3 credit points — Level 2

Note:

- 10226 Freshwater Biology replaces 6912 Australian Waterways from 2017. Students who have previously completed 6912 may still count it towards course completion
- 10235 Tackling Environmental Challenges replaces 6916 Ecology and Biodiversity from 2017. Students who have previously completed 6916 may still count it towards course completion

Part B - Must pass 3 credit points from the following

Regional Anatomy and Physiology (6534) | 3 credit points — Level 2

Regional Anatomy and Physiology (9808) | 3 credit points — Level 1

Minor in Chemistry (MN0017) | 12 credit points

Required - Must pass 9 credit points as follows

Chemistry 1a (1516) | 3 credit points — Level 1

Chemistry 1b (1517) | 3 credit points — Level 1

Analytical Chemistry (8043) | 3 credit points — Level 2

Restricted Choice - Must pass 3 credit points from the following

Biochemistry (6530) | 3 credit points — Level 2

Ecochemistry (6915) | 3 credit points — Level 2

Minor in Biology 1 (MN0009) | 12 credit points

Required - Must pass 6 credit points as follows

Concepts in Biology (483) | 3 credit points — Level 1

Plants and Animals (623) | 3 credit points — Level 1

Restricted Choice - Must pass 6 credit points from the following

Introduction to Microbiology (6510) | 3 credit points — Level 2

Immunology (6512) | 3 credit points — Level 3

Human Biochemistry (6518) | 3 credit points — Level 2

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Biochemistry (6530) | 3 credit points — Level 2

Human Physiology and the Lifecycle (6532) | 3 credit points — Level 3

Regional Anatomy and Physiology (6534) | 3 credit points — Level 2

Ecochemistry (6915) | 3 credit points — Level 2

Analytical Chemistry (8043) | 3 credit points — Level 2

Earth System Science (8101) | 3 credit points — Level 1

Advanced Physiology (8373) | 3 credit points — Level 3

Molecular and Cellular Biology (8375) | 3 credit points — Level 2

Population Genetics (8675) | 3 credit points — Level 3

Pathobiology (8797) | 3 credit points — Level 3

Regional Anatomy and Physiology (9808) | 3 credit points — Level 1

Biostatistics (10222) | 3 credit points — Level 2

Genetics and Genomics (10223) | 3 credit points — Level 2

Note:

- 10226 Freshwater Biology replaces 6912 Australian Waterways from 2017. Students who have previously completed 6912 may still count it towards course completion
- 10235 Tackling Environmental Challenges replaces 6916 Ecology and Biodiversity from 2017. Students who have previously completed 6916 may still count it towards course completion.

Major in Chemistry (MJ0136) | 18 credit points

Required - Must pass 12 credit points as follows

Chemistry 1a (1516) | 3 credit points — Level 1

Chemistry 1b (1517) | 3 credit points — Level 1

Biochemistry (6530) | 3 credit points — Level 2

Analytical Chemistry (8043) | 3 credit points — Level 2

Restricted Choice - Must pass 6 credit points from the following

Human Biochemistry (6518) | 3 credit points — Level 2

Ecochemistry (6915) | 3 credit points — Level 2

Clinical Chemistry 1 (8071) | 3 credit points — Level 3

Clinical Chemistry 2 (8072) | 3 credit points — Level 3

Applied Geochemistry (8100) | 3 credit points — Level 3

Environmental Forensic Science (8248) | 3 credit points — Level 3

Forensic Chemistry (8376) | 3 credit points — Level 3

Minor in Human Biology (MN0042) | 12 credit points

Required - Must pass 9 credit points as follows

Concepts in Biology (483) | 3 credit points — Level 1

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Pathobiology (8797) | 3 credit points — Level 3

Restricted Choice - Must pass 3 credit points from the following

Regional Anatomy and Physiology (6534) | 3 credit points — Level 2

Regional Anatomy and Physiology (9808) | 3 credit points — Level 1

Major in Human Biology: Chemical & Molecular Principles (MJ0053) | 18 credit points

Required - Must pass 12 credit points as follows

Chemistry 1a (1516) | 3 credit points — Level 1

Data Analysis in Science (1809) | 3 credit points — Level 1

Introduction to Microbiology (6510) | 3 credit points — Level 2

Biochemistry (6530) | 3 credit points — Level 2

Restricted Choice - 6 credit points as follows

Part A - Must pass 3 credit points from the following

Nutritional Science 1 (6507) | 3 credit points — Level 3

Integrated Studies of Disease (6517) | 3 credit points — Level 3

Part B - Must pass 3 credit points from the following

Genetics and Genomics (10223) | 3 credit points — Level 2

Major in Human Biology: From Cells to Organism (MJ0050) | 18 credit points

Required - Must pass 15 credit points as follows

Concepts in Biology (483) | 3 credit points — Level 1

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Human Physiology and the Lifecycle (6532) | 3 credit points — Level 3

Advanced Physiology (8373) | 3 credit points — Level 3

Pathobiology (8797) | 3 credit points — Level 3

Restricted Choice - Must pass 3 credit points from the following

Regional Anatomy and Physiology (6534) | 3 credit points — Level 2

Regional Anatomy and Physiology (9808) | 3 credit points — Level 1

Note:

- The unit code for Regional Anatomy and Physiology changed in 2015 and only the newer code is available for enrolment.

Major in Applied Ecology (MJ0008) | 18 credit points

Required - Must pass 18 credit points as follows

Plants and Animals (623) | 3 credit points — Level 1

Integrated Catchment Science (10224) | 3 credit points — Level 2

Landscape Processes (10225) | 3 credit points — Level 2

Freshwater Biology (10226) | 3 credit points — Level 2

Ecology (10231) | 3 credit points — Level 2

Conservation Ecology (10234) | 3 credit points — Level 3

Major in Secondary Graphics and Multi-Media Technology Teaching (MJ0306) | 18 credit points

Required - Must pass 3 credit points from the following

Media Worlds (11130) | 3 credit points — Level 1

Restricted Choice - 15 credit points as follows

Part A - Must pass 3 credit points from the following

Pixels and Polygons (11013) | 3 credit points — Level 1

Visual Representation Techniques (11041) | 3 credit points — Level 1

Visual Communication Theory and Principles (11062) | 3 credit points — Level 1

Principles of Typography and Layout (11063) | 3 credit points — Level 1

Part B - Must pass 12 credit points from the following

Front-end Web Design (11056) | 3 credit points — Level 2

Back-end Web Development (11058) | 3 credit points — Level 2

Space, Time and Form (11131) | 3 credit points — Level 2

Engineering Reality (11132) | 3 credit points — Level 2

Character Design and Animation (11133) | 3 credit points — Level 2

Sound Design (11134) | 3 credit points — Level 2

Real Time Environments (11135) | 3 credit points — Level 3

Illuminated Bits (11136) | 3 credit points — Level 3

- From 2022 these majors and minors have been revised or replaced. Students who commenced before 2022 should seek course advice.

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)

Ways of Knowing, Being and Doing in Education (10450)

Two Science Units

Semester 2

Context of the Education Profession (9862)

Three Science Units

Year 2

Semester 1

Curriculum - Assessment, Planning and Reporting (10425)

Engaging with LANTITE (10453)

Science Unit

Core Mathematics (9864)

Human Development and Learning (9874)

Semester 2

Two Science Units

Classroom Climate and Organisation (9860)

Designing Learning for Diversity and Inclusion (9869)

Year 3

Semester 1

Two Science Units

Discipline A PCK Unit 1

Using Design Principles and Technologies in Education (10451)

Semester 2

Two Science Units

Discipline A PCK Unit 2

Using Data to Improve Learning (10354)

Year 4

Semester 1

Two Science Units

Philosophy of Education (9892)

Discipline B PCK Unit 1

Semester 2

Discipline B PCK Unit 2

Two Science Units

Addressing Challenges in Educational Environments (9857)

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
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 areas of Science, Technology and Mathematics; Develop and implement effective assessment strategies and carry out evaluation of teaching programs, resources and their own teaching.	1.1 employ up to date and relevant knowledge and skills; 1.2 communicate effectively; 1.4 work collaboratively as part of a team, 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;
Knowledge: Demonstrate specialised knowledge and skills in two disciplines of Science 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.
Application of Skills and Knowledge: Apply the requisite content knowledge for their selected Science discipline 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; Reflect effectively on their practice and on their experiences within their profession and use that reflection to engage in a process of continual improvement.	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

Engage professionally with colleagues, parents/carers and the community including through professional learning.	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.

Placements requirements

All students enrolled in programs of initial teacher education are required to complete the statutory checks for working in the school environment that exist in any state or territory where they undertake school based activity. Please note that all students commencing or continuing an initial teacher education course are required to successfully complete both components of the Literacy and Numeracy Test for Initial Education Students (LANTITE) during their degree. More information about the LANTITE can be found at: https://teacheredtest.acer.edu.au/ All students enrolled in an initial teacher education course are also required to successfully complete all components of a Teacher Performance Assessment (TPA) tool integrated into final-level school-based placements and associated units of study.

Majors

- Major in Secondary Educational Studies (MJ0281)
- Major in Human Biology: Chemical & Molecular Principles (MJ0053)
- Minor in Ecology (MN0028)
- Major in Applied Ecology (MJ0008)
- Major in Secondary Graphics and Multi-Media Technology Teaching (MJ0306)
- Major in Biology 1 (MJ0132)
- Major in Human Biology: From Cells to Organism (MJ0050)
- Minor in Biological Chemistry (MN0008)
- Major in Chemistry (MJ0136)
- Minor in Chemistry (MN0017)
- Minor in Environmental Management (MN0037)
- Minor in Biology 2 (MN0010)
- Minor in Biology 1 (MN0009)
- Minor in Human Biology (MN0042)
- Breadth Major in Earth & Environmental Science for Secondary Teaching (BM0050)
- Breadth Minor in Chemistry for Secondary Teaching (BN0004)
- Major in Secondary Graphics and Multi-Media Technology Teaching (MJ0306)
- Major in Secondary Industrial Technology (Construction) Teaching (MJ0307)
- Minor in Information Systems (MN0045)
- Major in Food Technology Teaching (Restricted) (MJ0203)
- Breadth Major in Biology for Secondary Teaching (BM0049)
- Breadth Minor in Earth & Environmental Science for Secondary Teaching (BN0006)
- Breadth Minor in Biology for Secondary Teaching (BN0005)
- Major in Mathematics (MJ0148)
- Minor in Mathematical Structures and Computation (MN0072)
- Minor in Software Engineering (MN0109)
- Breadth Major in Chemistry for Secondary Teaching (BM0048)
- Major in Design and Technology Teaching (MJ0199)
- Major in Information Systems (MJ0059)

Awards

Award	Official abbreviation
Bachelor of Science	BSc
Bachelor of Secondary Education	B Sec Ed

Honours

None.

Alternative exits

EDS001 Undergraduate Certificate in Education

205JA 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 estem-courseadvice@canberra.edu.au or Phone 1300 301 727

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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.