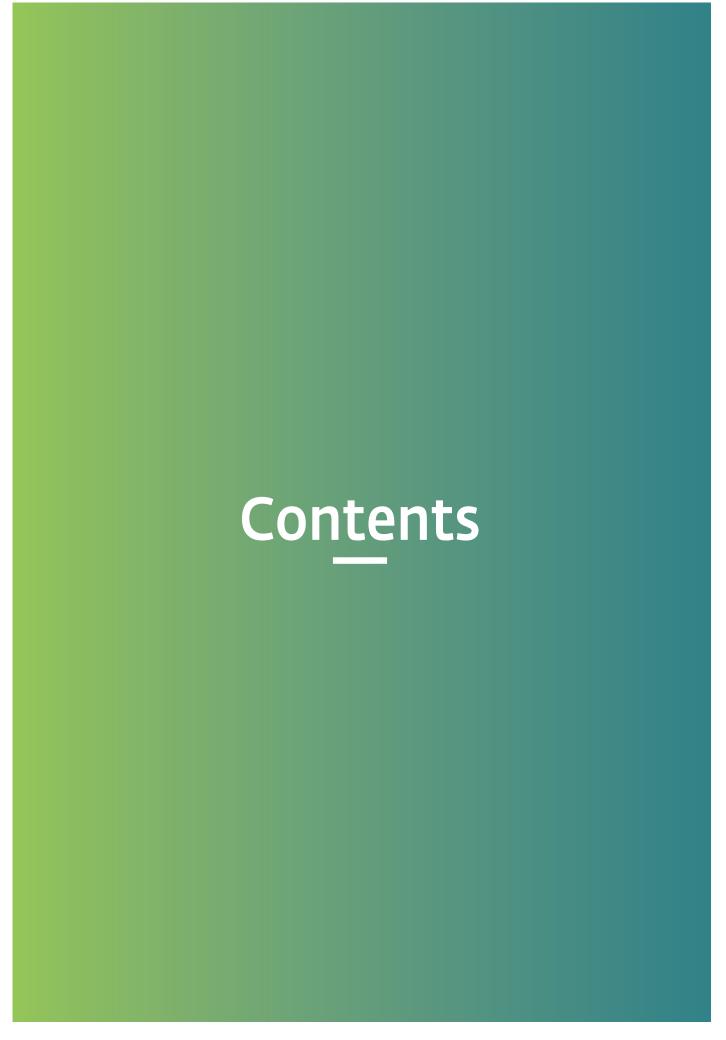


# Science and Technology Programs for International Students

University of New England Armidale, Australia







04	Why Study at UNE Location Awards, Results and Ratings
07	Bachelor of Biomedical Science Bachelor of Clinical Exercise Physiology Bachelor of Computer Science Bachelor of Exercise and Sports Science Bachelor of Pharmacy with Honours Bachelor of Science
19	Graduate Certificate in Data Science Graduate Certificate in Science Graduate Diploma in Data Science Graduate Diploma in Science
22	Master of Computer Science Master of Data Science Master of Information Technology Master of Information Technology (Business) Master of Scientific Studies Master of Science
29	Doctor of Philosophy (Innovation) PhD.I Doctor of Philosophy (Science)
30	Admission and Tuition
33	Health Cover and Visas
35	Campus Life

# UNIVERSITY OF NEW ENGLAND (UNE)

### Why study at UNE?

UNE has over 22,000 enrolled students with the majority studying their course online. There are over 4,500 students that study on the University's traditional Armidale campus, including over 1,300 international students from over 70 different countries. Visit **my.une.edu.au/courses** for specific course information.

### Location

UNE is located in Armidale on the Northern Tablelands of New South Wales, Australia. Armidale is a small, cosmopolitan city located in a picturesque rural setting surrounded by spectacular waterfalls, gorges, world-heritage national parks, cool-climate vineyards and diverse cultural heritage.



9	****		
WELL AB	OVE WORLD STANDARD		
Animal Pr	oduction		
Agricultur	Agriculture, Land and Farm Management		
Agriculture and Veterinary Sciences			
Ecology			
Geology			
Human Movement and Sport Science			
Other Medical and Health Science			
Soil Sciences			
Zoology			

### 2018 International Student Barometer Results

The International Student Barometer results for 2018 show that UNE has achieved an overall satisfaction in:

Learning	91.3%	#1 in the Australian ISB
Living	86.0%	#5 in the Australian ISB
Support	93.7%	#2 in the Australian ISB
Arrival	85.6%	#5 in the Australian ISB



Standout results are in the categories of **technology**, **expert teachers**, **social facilities**, **the on arrival welcome**, **sporting facilities**, **the library**, **and research**. UNE is ranked either **1 or 2 in Australia** in these areas and many others.

### 2019 Good Universities Guide

For the 13th year in a row, the University of New England (UNE) has earned the top five-star rating from the Good Universities Guide for the quality of our student experience. In related rankings, GUG ranked UNE as the State's top university for Student Support and Teaching Quality. UNE's graduates also have the State's highest starting salary upon entering the workforce, and the University has the highest proportion of "first in family" commencements.



### **Online University Rankings List**

Online Study Australia has ranked UNE number one in their national list of Australia's best online universities.

UNE also ranked in the top three for our Arts, Business, Education, Law, and Science courses specifically.

### **Excellence in Research for Australia (ERA)**

ERA is a comprehensive evaluation of all research produced in Australian universities. It is administered by the Australian Research Council (ARC) approximately every three years. ERA rankings are informed by a range of quality indicators, such as citation impact and expert peer review.



A complete list of UNE's results is available from the ARC website. http://www.arc.gov.au/era-outcomes#Institution/UNE



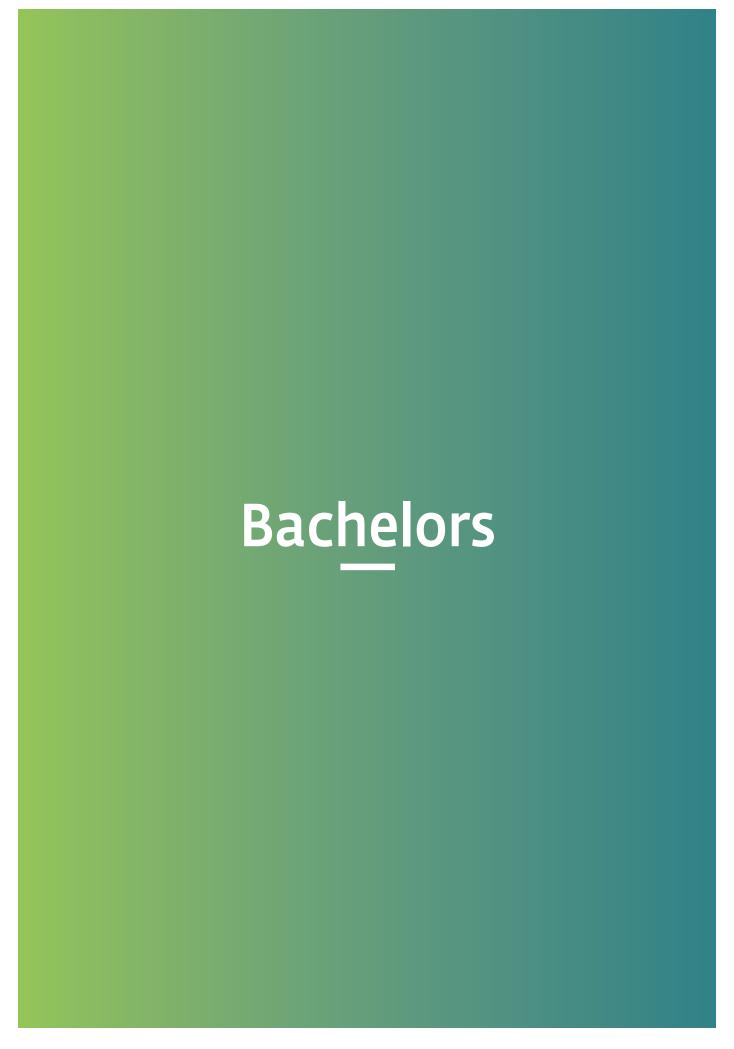






Visit **whystudyhere.com/une** to hear what students have to say about UNE

<sup>\*</sup>Percentage indicated is the overall average score, rankings are from the Regional Universities Network (RUN).



### **Bachelor of Biomedical Science**

CRICOS	o61315J
Duration	3 years
Commencement	February
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### Overview

This course is designed for students who want to study a science-based program that is focused towards career opportunities in the medical, paramedical and forensic fields. The areas of study include: basic science, human physiology, genetics, nutrition, biochemistry, microbiology and the integration and application of disciplines such as anatomy, biochemistry, biophysics, chemistry, genetics, microbiology, pharmacology and human physiology into biomedical science. Career options include areas of the biomedical industry, medical laboratories, hospitals and medical supply companies, and research and development.

### **Minimum Entry Requirements**

Candidates must have successfully completed an Australian Year 12 qualification or an overseas equivalent including Mathematics and either Biology and/or Chemistry and/or Physics. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Complete the following Core Units (102cps):

Introductory Molecular Biology and Biochemistry I, Introductory Biochemistry II, Clinical Biochemistry and Cell Biology, Biology I, Chemistry I, Chemistry II, Introductory Genetics, Introductory Microbiology, Clinical Microbiology and Virology, Quantitative Skills with Applications or Calculus and Linear Algebra 1, Quantitative Skills with Applications, Pharmacology for Research, Introductory Human Physiology 1, Introductory Human Physiology 2, Integrated Physiology, Pathophysiology, Immunology and Haematology, Introduction to Statistical Modelling.

# Complete 3-4 of the following Listed Units (18-24cps):

Neurobiology I, Neuroanatomy, Endocrinology and Reproductive Physiology, Cardiovascular and Respiratory Physiology, Human Nutrition and Metabolism, Science Report.

Complete 3-4 of the following Listed Units with not more than 18 credit points at 100-level (18-24cps): Proteins - The Machines of Life, Medical and Clinical Biotechnology, Biotechnology and Advanced Molecu-

lar Biology, Biological and Organic Chemistry, Chemical Reactivity, Medicinal Chemistry, Introduction to Human Development, Professional Communication Practice, Issues in Human Nutrition, Pharmacology II, Bioethics, Applied Physics I, Applied Physics II, Introductory Psychology II, Introductory Psychology II, Sociology of Health and Illness, Work Integrated Learning - Professional Skills Development.

Or 12 credit points from any other unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

# Bachelor of Clinical Exercise Physiology

CRICOS	o69336F
Duration	4 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### Overview

This course is a multidisciplinary program that develops students' comprehensive understanding of the scientific and applied aspects of sport, exercise and health. The course includes core studies in human structure, function and behaviour before further study on the acute and chronic physiological and psychological responses to exercise in healthy individuals and those with chronic and complex health conditions. In the first three years of study, analytical, technical and professional skills are developed in the areas of movement analysis, health and fitness assessment and exercise training for health and performance. The final year of study provides advanced training in chronic disease management, functional conditioning and clinical practice. Students complete 500 hours of workplace experience to practice exercise-based management of neurological, musculoskeletal, cardiopulmonary, metabolic and other health conditions. Graduates are recognised for their expertise in the clinical application of exercise-based rehabilitation.

### **Minimum Entry Requirements**

Candidates must have successfully completed an Australian Year 12 qualification or an overseas equivalent which included Mathematics and Biology and/or Chemistry. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Complete the following Core Units (186cps):

Introduction to Human Anatomy, Functional Muscoloskeletal Anatomy, Monitoring Health and Sports Performance, Introductory Biomechanics, Introductory Exercise Physiology, Physical Activity and Health, Motor Skill Acquisition and Performance, Testing and Training for Physical Fitness, Advanced Biomechanics, Practicum in Exercise and Sport, Motor Control and Human Development, Advanced Exercise Physiology, Clinical Exercise Physiology I, Clinical Exercise Physiology II, Clinical Exercise Physiology III, Exercise and Health Assessment, Exercise Prescription and Programming, Clinical Exercise Physiology Practice I, Clinical Exercise Physiology Practice II, Clinical Exercise Physiology Practice III, Clinical Exercise Physiology Practice IV, Practicum with Clinical Populations, Issues in Human Nutrition, Introductory Human Physiology 1, Introductory Human Physiology 2, Introductory Psychology I, Sport and Exercise Psychology, Science in Practice, Introduction to Statistical Modelling

### Complete 1 of the following Listed Units (6cps):

Introduction to Management Accounting, Small Business Management, Sociocultural Foundations of Health and Physical Education, Professional Communication Practice, Health Promotion in Practice, Law, Ethics, Advocacy and Health Care, Sports Law, Communication for Business, Fundamentals of Marketing A Walk Through the Brain, Understanding and Changing Human Behaviour.

# Practical, Clinical or Work Experience

To attain Exercise Physiology accreditation with Exercise and Sports Science Australia (ESSA), students must complete 500 hours of practicum experience which must be structured in the following manner: a) a minimum of 140 hours in exercise service delivery for the apparently healthy; b) a minimum of 140 clinical hours of neurological/neuromuscular or musculoskeletal practicum; c) a minimum of 140 clinical hours of cardiorespiratory or metabolic practicum. Any remaining hours may be completed as health related activities: a) provision of exercise delivery for pathologies related to cancers, mental health, renal, or other pathologies; b) provision of further exercise delivery for neurological/neuromuscular/musculoskeletal/ cardiopulmonary and metabolic and pathologies; c) diagnostic investigations or procedures (eq. cardiac, pulmonary or other clinical investigations or procedures); d) Health Checks (eq. point of care testing); e) case management; f) health promotion, health education or workplace health programs; g) other related activities as outlined in the Accredited Exercise Physiologist (AEP) evidence-based criteria.

The clinical placement officer will assist students in identifying suitable practicum sites/supervisors, and facilitate the practicum placement process. Students are responsibile for approaching practicum sites/supervisors to arrange the terms of their placement under the guidance of the clinical placement officer. International placements can be proposed for consideration

### **Bachelor of Computer Science**

CRICOS	005909C
Duration	3 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### Overview

In this course students complete a number of core computing units as well as the prescribed units from one of the approved majors. Alternatively, students' may complete a 'general' Bachelor of Computer Science comprising the core computing units and units chosen from the approved majors.

Each major includes a sequence of study in computer sciences, based on the study of Java in first year. Topics covered in the course include software design, databases, networks, interface design, software engineering, data structures, operating systems, game programming, architecture and assembler, data mining and software project management. Students are able to complete a number of elective units selected from any units offered by the University. The major completed will appear on the academic record and testamur.

### **Minimum Entry Requirements**

Candidates must have successfully completed an Australian Year 12 qualification or an overseas equivalent which included Mathematics. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Complete the following Core Units (72cps):

Discrete Mathematics, Software Development Studio 1, Introduction to Programming and the UNIX Environment, Object Oriented Programming, Database Management Systems, Software Development Studio 2, Data Structures and Algorithms, Operating Systems, Software Project Management, Information Technology Project, Calculus and Linear Algebra 1.

### Complete 1 of the following Units (6cps):

Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

Students must complete either 1 Major totalling 30 credit points or complete 2 Majors totalling 60 credit points.

# **MAJORS**

### **Data Science**

# Complete 5 of the following Prescribed Units (30cps):

Programming Paradigms, Parallel and Distributed Computing, Artificial Intelligence, Algorithms in Machine Learning, Statistical Modelling and Experimental Design, Statistical Learning.

### Course Requirements

To achieve an overall total of 144 credit points candidates must complete a further 42 credit points by either: Completing a second Major and Elective Units or Completing the Listed Units for this Major and Elective Units.

Listed Units for candidates undertaking this Major Candidates may select units from a single discipline or from across a number of disciplines. Candidates completing TWO Majors complete o credit points from the Listed Units for this Major or the Listed Units for the Software Development Major.

Candidates completing ONE Major must complete 30 credit points with at least 6 credit points from 300-level COSC units from the following units:

### Biology and Genetics

Biology I, Biology II, Introductory Genetics, Introduction to Breeding and Genetics, Genetics in Populations, Genomic Analysis and Bioinformatics.

### Business and Professional Skills

Communication for Business, Managing People and Organisations, Business Ethics, Work Integrated Learning - Professional Skills Development.

### Chemistry

Chemistry I, Chemistry II, Biological and Organic Chemistry, Quantum and Thermochemical Structure, Chemical Reactivity, Analytical Chemistry, Organic Structure and Reactivity, Medicinal Chemistry, Applied Physical Chemistry.

### Communication Skills

Speaking in Public, The Craft of Academic Writing.

### Computer Science

Web Programming, Special Topic in Computing, Computer Networks and Information Security, Advanced Web Programming, User Experience and Interaction Design, Management Information Systems.

### Geographic Information Systems

Spatial Analysis and Modelling, Introduction to GIS and Spatial Thinking, Remote Sensing and Image Analysis, Geophysics and Applied GIS for Earth Sciences, Our Blue Planet, Dynamic Earth.

### **Linguistics**

Introduction to Linguistics, Foundations of Linguistics, Phonetics and Phonology, Morphology and Syntax

### **Mathematics**

Introduction to Programming in The Sciences, Quantitative Skills with Applications, Multivariable Calculus, Linear Algebra, Introduction to Topology, Abstract Algebra, Complex Analysis, Number Theory, Differential Equations.

### Physics and Electronics

Applied Physics I, Applied Physics II, Electromagnetism 1, Fluid Mechanics, Introduction to Electronics, Microscopic to Macroscopic Physics and Chemistry, Digital Electronic Systems, Applied Photonics.

### Psvchology

Introductory Psychology I, Introductory Psychology II, Cognitive Psychology.

### Science and Technology

Introduction to Scientific Programming.

### Sociology

Introduction to Sociology, Foundations of Society, Social Policy, Mixed Methods in Social Research.

### **Statistics**

Probability and Simulation, Inference, Advanced Statistical Modelling.

### **Elective Units**

Complete 12 credit points.

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### **Software Development Major**

# Complete 5 of the following Prescribed Units (30cps):

Programming Paradigms, Web Programming, Parallel and Distributed Computing, Computer Networks and Information Security, Artificial Intelligence, Advanced Web Programming, User Experience and Interaction Design.

### **Course Requirements**

To achieve an overall total of 144 credit points candidates must complete a further 42 credit points by either: Completing a second Major and Elective Units or Completing the Listed Units for this Major and Elective Units.

**Listed Units for candidates** undertaking this Major Candidates may select units from a single discipline or from across a number of disciplines. Candidates completing TWO Majors complete o credit points from the Listed Units for this Major or the Listed Units for the Data Science Major. Candidates completing ONE Major must complete 30 credit points from the following units:

### Accounting and Financial Management

Introduction to Financial Accounting, Introduction to Management Accounting, Intermediate Financial Accounting, Corporate Finance, Financial Instruments and Markets, Advanced Financial Accounting, Auditing, Small Business Finance.

### Biology and Genetics

Biology I, Biology II, Introductory Genetics, Introduction to Breeding and Genetics, Genetics of Populations, Genomic Analysis and Bioinformatics.

### Chemistry

Chemistry I, Chemistry II, Biological and Organic Chemistry, Quantum and Thermal Structure, Chemical Reactivity, Analytical Chemistry, Organic Structure and Reactivity, Medicinal Chemistry, Applied Physical Chemistry.

### Communication Skills

Speaking in Public, The Craft of Academic Writing.

### Computer Science

Special Topic in Computing, Management Information Systems, Algorithms in Machine Learning.

### **Economics**

Introductory Microeconomics, Introductory Macroeconomics, Intermediate Microeconomics, Intermediate Macroeconomics, Banking and Finance, Contemporary Macroeconomic Issues, Microeconomic Policy Evaluation, Efficiency and Production Analysis.

### Linguistics

Introduction to Linguistics, Foundations of Linguistics, Phonetics and Phonology, Australia's Indigenous Languages.

### Mathematics

Introduction to Programming in The Sciences, Quantitative Skills with Applications, Multivariable Calculus, Linear Algebra, Introduction to Topology, Abstract Algebra, Complex Analysis, Number Theory, Differential Equations.

### Physics and Electronics

Applied Physics I, Applied Physics II, Electromagnetism 1, Fluid Mechanics, Introduction to Electronics, Microscopic to Macroscopic Physics and Chemistry, Digital Electronic Systems, Applied Photonics.

### Psychology

Introductory Psychology I, Introductory Psychology II, Cognitive Psychology.

### Science and Technology

Introduction to Scientific Programming.

### Sociology

Introduction to Sociology, Foundations of Society, Social Policy, Mixed Methods in Social Research.

### Statistics

Probability and Simulation, Statistical Modelling and Experimental Design, Inference, Advanced Statistical Modelling, Statistical Learning.

### **Elective Units**

Complete 12 credit points.

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### Accreditation

The Bachelor of Computer Science has been granted Professional Level accreditation by the Australian Computer Society.

### Combined Degree

UNE also offers a combined degree with the Bachelor of Laws.

Combined Degrees	Du- ra- tion	CRICOS	2019 Fees
B. Computer Science/ B. Laws	5 years	016024E	\$29,400
			2020 Fees
			\$31,600

# Bachelor of Exercise and Sports Science

CRICOS	o69337E
Duration	3 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### **Overview**

This course is a multidisciplinary program that develops students' comprehensive understanding of the scientific and applied aspects of sport, exercise and health. The course includes core studies in human structure, function and behaviour before further study on the acute and chronic physiological and psychological responses to exercise. Analytical, technical and professional skills are developed in the areas of movement analysis, health and fitness assessment and exercise training for health and performance Students complete 140 hours of workplace experience in their final trimester of study to practice these skills. Graduates are recognised for their expertise in the design and implementation of exercise interventions to prevent disease and improve athletic performance.

Graduates from this course can be employed in a range of fields including health and physical activity promotion, sports science, health and fitness (personal trainer, strength and conditioning coach, health consultant/educator), and clinical measurements (cardiac/respiratory/sleep technician).

### **Minimum Entry Requirements**

Candidates must have successfully completed an Australian Year 12 qualification or an overseas equivalent which included Mathematics and Biology and/or Chemistry to a senior standard. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Complete the following Core Units (126cps):

Introduction to Human Anatomy, Functional Musculoskeletal Anatomy, Monitoring Health and Sports Performance, Introductory Biomechanics, Introductory Exercise Physiology, Physical Activity and Health, Motor Skill Acquisition and Performance, Testing and Training for Physical Fitness, Advanced Biomechanics, Practicum in Exercise and Sport, Motor Control and Human Development, Advanced Exercise Physiology, Clinical Exercise Testing I, Exercise Prescription and Programming, Issues in Human Nutrition, Introductory Human Physiology 2, Introductory Psychology I, Sport and Exercise Psychology, Science in Practice, Introduction to Statistical Modelling.

### Complete 3 of the following Listed Units (18cps):

Introduction to Management Accounting, Sociocultural Foundations of Health and Physical Education, Exercise, Professional Communication Practice, Health Promotion in Practice, Law, Ethics, Advocacy and Health Care, Sports Law, Communication for Business, Fundamentals of Marketing, A Walk Through the Brain, Understanding and Changing Human Behaviour, Clinical Exercise Physiology II, Clinical Exercise Physiology III.

# Practical, Clinical or Work Experience

To attain full membership with Exercise and Sports Science Australia (ESSA), as an accredited sports scientist, students must complete 140 hours of practicum experience. Practicum may be completed in hospital/clinical services, occupational rehabilitation, exercise delivery for apparently healthy clients, sports science/performance, exercise & sports science research and/or workplace health. These hours are to be completed under the supervision of: a) an Accredited Exercise Physiologist b) an exercise professional with, or capable of, attaining full membership of ESSA; c) a university-trained allied health professional with experience in exercise delivery, and/or d) a certificate IV in fitness trained individual with at least 10 years FTE experience within the exercise & sports science industry.

The clinical placement officer will assist students in identifying suitable practicum sites/supervisors, and facilitate the practicum placement process. It is the student's responsibility to approach practicum sites/supervisors and arrange the terms of their placement under the guidance of the clinical placement officer. International placements can be proposed for consideration.

# Bachelor of Pharmacy with Honours

CRICOS	084829D
Duration	4 years
Commencement	February
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### **Overview**

This course will develop a strong foundation in basic and pharmaceutical sciences core skills which will be integrated with contemporary knowledge and application of pharmaceutics and pharmacy practice. Prior to the commencement of the third year, students are required to complete 100 hours of practical experience work in a pharmacy which will be integrated into their course work. In the fourth or final year of the degree students will be required to undertake approximately 200 hours of clinical placements in community and hospital pharmacies of which some placements will be outside normal university trimester times. Students will be encouraged to take these placements in rural and regional areas.

### **Minimum Entry Requirements**

Candidates must have successfully completed an Australian Year 12 qualification or an overseas equivalent that included Mathematics and Biology and/or Chemistry depending on the UNE major selected. Candidates must also meet the University's English Language Requirements for Admission

### **Course Outline**

### Complete all of the following Core Units (192cps):

Introductory Molecular Biology and Biochemistry I. Chemistry I. Chemistry II. Analytical Chemistry. Introductory Microbiology, Introduction to Pharmacy, Pharmaceutical Science I, Pharmaceutical Science II, Pharmacy Practice I, Pharmacology I, Pharmacy Practice II, Pharmacy Practice III, Pharmacology II, Pharmacokinetics, Applied Pharmacotherapeutics I, Applied Pharmacotherapeutics II, Molecular Basis of Therapeutics, Pharmacy Practice IV, Pharmacy Practice V, Applied Pharmacotherapeutics III, Pharmacy Practicum, Rural and Remote Pharmacy Practice, Introductory Human Physiology 1, Introductory Human Physiology 2, Pathophysiology, Human Nutrition and Metabolism, Quantitative Skills with Applications, Molecular Basis of Therapeutics, Research Project in Pharmacy 1, Research Project in Pharmacy 2, Introductory Psychology II.

### **Bachelor of Science**

CRICOS	000468G
Duration	3 years
Commencement	February
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### **Overview**

This course is designed to provide students with the skills and techniques necessary for solving problems associated with a broad range of issues. The extensive range of majors available in established and emerging, generalist and specialist sciences, are all underpinned by cutting edge research. In first year students are encouraged to establish a broad science base which allows for flexibility in choosing an appropriate major or majors. The major completed will appear on the student's academic record and testamur.

Career opportunities for Science graduates include positions in computing, consulting, botanical and zoological gardens, museums, manufacturing, electronics, mining and oil, as well as in biochemical, chemical, clinical, engineering, forensic, medical, microbiological, physiological and physics laboratories.

### **Minimum Entry Requirements**

Candidates must have successfully completed an Australian Year 12 qualification or an overseas equivalent that included Mathematics and Biology and/or Chemistry and/or Physics depending on the UNE major selected. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Students must complete either:

Core Units + one Major + Elective Units; Or Core Units + two Majors (double Major) + Elective Units; Or Core Units + one Combined Major + Elective Units.

# **MAJORS**

### Animal Science and Veterinary Studies

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications or Calculus and Linear Algebra 1, Introduction to Statistical Modelling.

# Complete all of the following Core Units (24cps): Biology I, Biology II, Chemistry I, Chemistry II.

# Complete all of the following Prescribed Units (48cps):

Animal Function: Health and Welfare, Disease and its Control in Animals, Animal Structure and Function, Animal Nutrition, Introductory Molecular Biology and Biochemistry I, Introductory Biochemistry II, Introductory Microbiology, Endocrinology and Reproductive Physiology.

Complete an additional 10 units (60cps) by either completing a second Major and Elective Units or completing Elective Units to the value of 60 credit points.

### Applied Physics

### Complete all of the following Core Units (24cps):

Calculus and Linear Algebra 1 or Calculus and Linear Algebra 2, Applied Physics I, Applied Physics II.

### Complete 2 of the following Core Units (12cps):

Discrete Mathematics, Biology I, Chemistry I, Chemistry II, Introduction to Programming and the UNIX Environment, Object Oriented Programming, Our Blue Planet.

# Complete 8 of the following Prescribed Units (48cps):

Mathematical Methods in the Sciences I, Physics of Materials, Electromagnetism 1, Introduction to Electronics, Microscopic to Macroscopic Physics and Chemistry, Digital Electronic Systems, Applied Photonics, Multivariable Calculus.

Complete an additional 10 units (60cps) by either completing a second Major and Elective Units or completing Elective Units to the value of 60 credit points.

### Archaeology

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications or Calculus and Linear Algebra 1, Introduction to Statistical Modelling.

### Complete the following Core Units (3ocps):

Archaeology: Principles and Practices, Chemistry I, Chemistry II, Our Blue Planet, Dynamic Earth.

### Complete 1 of the following Units (6cps):

Great Excavations: Key Discoveries in Archaeology, Bones and Stones: Archaeology and Human Evolution.

### Complete the following Prescribed Units (24cps):

Debates in Archaeology, Archaeology in the Field, Archaeology in the Laboratory, Remote Sensing and Surveying.

# Complete 3 of the following Prescribed Units (18cps):

Maritime Archaeology , Aboriginal Archaeology, Archaeologies of the Modern World, Experimental Archaeology, Zooarchaeology, Advanced Analytic and Interpretative Methods, Forensic Archaeology, Stone Tools: Analysis and Interpretation.

To achieve an overall total of 144 credit points candidates must complete a further 9 units (54cps) by either completing a second Major and Elective Units or completing the Listed Units for this Major and Elective Units.

### Biochemistry/Biotechnology

# Complete 2 of the following Core Units (12cps): Quantitative Skills with Applications, Calculus and Linear Algebra 1. Calculus and Linear Algebra 2. Intro-

Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

# Complete all of the following Core Units (24cps): Biology I, Biology II, Chemistry I, Chemistry II.

## Complete all of the following Prescribed Units

Introductory Molecular Biology and Biochemistry I, Introductory Biochemistry II, Proteins – The Machines of Life, Clinical Biochemistry and Cell Biology, Biotechnology and Advanced Molecular Biology, Biological and Organic Chemistry, Introductory Microbiology.

# Complete 1 of the following Prescribed Units (6cps):

Clinical Microbiology and Virology, Immunology and Haematology

Complete an additional 10 units (60cps) by either completing a second Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### **Biodiversity**

(42cps):

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications or Calculus and Linear Algebra 1, Introduction to Statistical Modelling.

### Complete all of the following Units (24cps):

Biology I, Biology II, Chemistry I, Chemistry II.

### Complete the following Prescribed Units (24cps):

Plant Diversity, Ecology - Populations to Ecosystems, Evolution and Biogeography, Vertebrate Zoology -Evolution and Diversity

# Complete 4 of the following Prescribed Units (24cps):

Ecology of Plant Populations, Molecular Ecology, Wildlife Ecology and Management, Conservation Biology, Applied Research Skills in Environmental and Rural Science, Biological Systematics, Environmental Biogeography

### **Botany**

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Introduction to Statistical Modelling.

### Complete all of the following Core Units (24cps):

Biology I, Biology II, Chemistry I, Chemistry II.

# Complete the 3 following Prescribed Units (18cps):

Plant Physiology and Anatomy, Plant Diversity, Ecology - Populations to Ecosystems

### Complete 4 of the following Units (24cps):

Plant Function and Environment, Mycology and Plant Pathology, Field Botany, Ecology of Plant Populations, Ecology of Australian Vegetation, Molecular Ecology, Biological Systematics

### Chemistry

### Complete 2 of the following Core Units (12cps):

Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling, Quantitative Skills and Applications.

### Complete all of the following Core Units (12cps):

Chemistry I, Chemistry II.

### Complete 2 of the following Core Units (12cps):

Biology I, Biology II, Applied Physics I, Applied Physics II, Our Blue Planet, Dynamic Earth.

### Complete 3 of the following Units (18cps):

Biological and Organic Chemistry, Quantum and Thermal Structure, Chemical Reactivity, Analytical Chemistry

### Complete 4 of the following Units (24cps):

Organic Structure and Reactivity, Medicinal Chemistry, Applied Physical Chemistry, Materials Chemistry, Forensic Chemistry, Microscopic to Macroscopic Physics and Chemistry.

Complete an additional 10 units (60cps) by either completing a second Major and Elective Units or completing Elective Units to the value of 60 credit points.

### Computational Science

### Complete 4 of the following Core Units (24cps):

Introduction to Programming and the UNIX Environment, Object Oriented Programming, Calculus and Linear Algebra 1, Introduction to Statistical Modelling, Our Blue Planet, Dynamic Earth.

### Complete 3 of the following Core Units (18cps):

Discrete Mathematics, Biology I, Biology II, Chemistry I, Chemistry II, Applied Physics I, Applied Physics II.

# Complete all of the following Prescribed Units (42cps):

User Experience and Interaction Design, Introduction to Scientific Programming, Statistical Modelling and Experimental Design, Advanced Statistical Modelling, Statistical Learning, Software Development Studio 2, Algorithms in Machine Learning.

Complete an additional 10 units (60cps) by either completing a second Major and Elective Units or completing Elective Units to the value of 60 credit points.

### Forensic Science

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Introduction to Statistical Modelling.

### Complete all of the following Units (24cps):

Biology I, Biology II, Chemistry I, Chemistry II.

## Complete all of the following Prescribed Units (42cps):

Introductory Molecular Biology and Biochemistry I, Biotechnology and Advanced Molecular Biology, Analytical Chemistry, Forensic Science and Criminal Justice, Forensic Chemistry, Introductory Microbiology, Immunology and Haematology.

Complete an additional 11 units (66cps) by either completing a second Major and Elective Units or by completing Elective Units to the value of 66 credit points.

### Genetics

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete all of the following Core Units (24cps):

Biology I, Biology II, Chemistry I, Chemistry II.

# Complete all of the following Prescribed Units (48cps):

Introductory Molecular Biology and Biochemistry I, Introduction to Biochemistry II, Clinical Biochemistry and Cell Biology, Biotechnology and Advanced Molecular Biology, Introductory Genetics, Genetics of Populations, Genomic Analysis and Bioinformatics, Introductory Microbiology. Complete an additional 10 units (60cps) by either completing a second Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### Geography

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete the following Unit (6cps)

Where in the World? Australia's Human Geography

### Complete 1 of the following Units (6cps):

Earth Surface Systems, Earth in Crisis?

### Complete 4 of the following Core Units (24cps):

Biology I, Biology II, Chemistry I, Chemistry II, Applied Physics I, Applied Physics II, Our Blue Planet, Dynamic Earth.

# Complete all of the following Prescribed Units (42cps):

Climate Change and Future Planning, Natural Hazards, Catchment to Coast, Cradle to Grave: Population Geography, Understanding Research, Environmental Biogeography, Remote Sensing and Surveying.

Complete an additional 9 units (54cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 54 credit points.

### Geoscience

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete all of the following Core Units (24cps):

Chemistry I, Chemistry II, Our Blue Planet, Dynamic Earth.

# Complete all of the following Prescribed Units (48cps):

Introduction to GIS and Spatial Thinking, Field Mapping and Sedimentology, Resource Geology and Environmental Issues, Structural and Metamorphic Geology, Environmental and Exploration Geochemistry, Ore Deposit Geology, Geophysics and Applied GIS for Earth Sciences, Mineralogy, Petrology and Geochemistry.

Complete an additional 10 units (60cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### **Mathematics**

### Complete all of the following Core Units (18cps):

Discrete Mathematics, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2.

### Complete 3 of the following Units (18cps):

Biology I, Biology II, Chemistry I, Chemistry II, Introduction to Programming and the UNIX Environment, Object Oriented Programming, Applied Physics I, Applied Physics II, Our Bue Planet, Dynamic Earth.

# Complete 6 of the following Prescribed Units (36cps):

Multivariable Calculus, Linear Algebra, Introduction to Topology, Abstract Algebra, Complex Analysis, Differential Equations.

### Complete 2 of the following Units (12cps):

Mathematical Methods in The Sciences, Introduction to Programming in The Sciences, Probability and Simulation.

Complete an additional 10 units (60cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### Medicinal Chemistry

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete all of the following Core Units (24cps):

Biology I, Chemistry I, Chemistry II, Pharmaceutical Science I.

# Complete all of the following Prescribed Units (42cps):

Introductory Molecular Biology and Biochemistry I, Biological and Organic Chemistry, Organic Structure and Reactivity, Medicinal Chemistry, Pharmacology II, Human and Mammalian Physiology, Pharmacology for Research.

### Complete 1 of the following Units (6cps):

Proteins - The Machines of Life, Materials Chemistry, Pharmacokinetics, New Drug Technologies and New Drug Therapies.

Complete an additional 10 units (60cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### Microbiology

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

# Complete all of the following Core Units (24cps): Biology I, Biology II, Chemistry I, Chemistry II.

# Complete all of the following Prescribed Units (48cps):

Introductory Molecular Biology and Biochemistry I, Biotechnology and Advanced Molecular Biology, Introductory Genetics, Introduction to Breeding and Genetics, Introductory Microbiology, Clinical Microbiology and Virology, Immunology and Haematology, Science Report.

Complete an additional 10 units (60cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### Neuroscience

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete all of the following Core Units (24cps):

Chemistry I, Chemistry II, Introductory Human Physiology 1, Introductory Human Physiology 2.

# Complete all of the following Prescribed Units (36cps):

Introduction to Human Development, Neurobiology I, Neurobiology II, Neuroanatomy, Neurobiology of Developmental, Cognitive and Affective Disorders, Clinical Neuroscience.

### Complete 1 of the following Units (6cps):

Clinical and Neurobiological Issues in Disability Management, Integrated Physiology, Pathophysiology.

Complete an additional 11 units (66cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 66 credit points.

### Palaeobiology

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete the following 2 Units (12cps):

Biology I, Biology II

### Complete 4 of the following Units (24cps):

Chemistry I, Chemistry II, Evolution in the Fossil Record, Our Blue Planet, Dynamic Earth

### Complete all of the following Units (36cps):

Biology I, Biology II, Chemistry I, Chemistry II, Our Blue Planet, Dynamic Earth.

# Complete all of the following Prescribed Units (48cps):

Introduction to GIS and Spatial Thinking, Evolution and Biogeography, Biological Systematics, Introductory Palaeontology, Palaeontology and Stratigraphy, Vertebrate Palaeontology, Vertebrate Zoology - Evolution and Diversity, Invertebrate Zoology.

Complete an additional 8 units (48cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 48 credit points.

### Physiology

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete all of the following Core Units (24cps):

Chemistry I, Chemistry II, Introductory Human Physiology 1, Introductory Human Physiology 2.

# Complete all of the following Prescribed Units (18cps):

Introductory Molecular Biology and Biochemistry 1, Integrated Physiology, Pathophysiology.

### Complete 4 of the following Units (24cps):

Neurobiology I, Endocrinology and Reproductive Physiology, Cardiovascular and Respiratory Physiology, Human Nutrition and Metabolism, Immunology and Haematology.

Complete an additional 11 units (66cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 66 credit points.

### Psychology

### Complete 2 of the following Core Units (12cps):

Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

### Complete the 2 following Units (12cps):

Introductory Psychology I, Introductory Psychology II.

### Complete 2 of the following Units (12cps):

Biology I, Biology II, Chemistry I, Chemistry II, Applied Physics I, Applied Physics II, Our Blue Planet, Dynamic Farth.

# Complete all of the following Prescribed Units (42cps):

Social Psychology, Research Methods and Statistics, Cognitive Psychology, Lifespan Developmental Psychology, Psychological Testing, Advanced Research Methods and Statistics, Biopsychology.

### Complete 1 of the following Units (6cps):

Health Psychology, Motivation and Emotion, Sport and Exercise Psychology, Cognitive Affective and Social Neuroscience, Behaviour Modification, Psychology of Perception, Abnormal Psychology, Special Topics in Psychological Research, Organisational Psychology, Environmental Psychology: How to Tame an Ecological Serial Killer.

Complete an additional 10 units (60cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 60 credit points.

### Zoology

Complete 2 of the following Core Units (12cps): Quantitative Skills with Applications, Calculus and Linear Algebra 1, Calculus and Linear Algebra 2, Introduction to Statistical Modelling.

Complete all of the following Core Units (24cps): Biology I, Biology II, Chemistry II.

# Complete all of the following Prescribed Units (42cps):

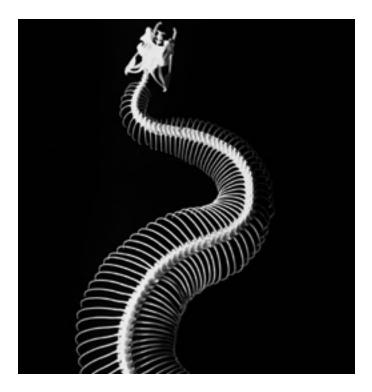
Wildlife Ecology and Management, Vertebrate Zoology - Evolution and Diversity, Invertebrate Zoology, Entomology, Animal Behaviour, Ecological and Comparative Physiology, Evolutionary Parasitology. Complete an additional 11 units (66cps) by completing a second Major and Elective Units or by completing a Combined Major and Elective Units or by completing Elective Units to the value of 66 credit points. The following Combined Majors are also available within the Bachelor of Science. For further information about these Combined Majors, please visit www.une.edu.au/courses.

Animal Science and Veterinary Studies, Applied/Environmental Genetics, Archaeology and Palaeoanthropology, Biochemistry/Microbiology, Biochemistry/Physiology, Biodiversity/Ecology, Biotechnology/Molecular Genetics, Cognitive/Biological Psychology, Crop/Animal Sciences, Geology/Environmental Geosciences, Mathematics/Statistics, Palaeobiology, Scientific Computing.

### Combined Degrees

UNE also offers a number of combined degrees with the Bachelor of Science.









# Graduate Certificate in Data Science

CRICOS	096382J
Duration	o.5 year
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### **Overview**

This course provides the basis for sensible, evidence-based decision making, and the ability to manage and make sense of data is a key skill in the modern workplace. In the last decade, streams of data of various types have grown in volume and velocity such that they require specialist skills in order to get the most value from them. Data scientists are responsible for building intelligent systems, mastering intuitive processes and bringing structure to the vast quantities of data to unlock the potential for improvement and competitive advantage.

Potential positions include: Data Scientist, business intelligence analyst, data engineer, data architect, data strategist, healthcare data managers, bioinformatics analyst, computational scientist and research scientist.

### **Minimum Entry Requirements**

A candidate shall hold an AQF Level 7 Bachelor degree or overseas equivalent in a relevant discipline. Candidates must meet the University's English Language Requirements for admission.

### **Course Outline**

# Complete 24 credit points with 18 credit points at 400-level from the following Listed Units (24 cps):

Introduction to Programming in The Sciences, Database Management Systems, Data Structures and Algorithms, Operating Systems, Programming Paradigms, Web Programming, Management Information Systems, Software Project Management, Parallel and Distributed Computing, Computer Network and Information Security, Artificial Intelligence, Advanced Web Programming, User Experience and Interaction Design, Algorithms in Machine Learning, Introductory Econometrics, Econometric Analysis on Financial Markets, Genomic Analysis and Bioinformatics, Spatial Analysis and Modelling, Introduction to GIS and Spatial Thinking, Remote Sensing and Image Analysis, Information and Knowledge Management in Healthcare, Precision Agriculture, Introduction to Scientific

Programming, Statistical Modelling and Experimental Design, Advanced Statistical Modelling, Statistical Learning.

### **Graduate Certificate in Science**

CRICOS	o65083K
Duration	o.5 year
Commencement	February, June
2019 Annual Fee	\$31,500
2020 Annual Fee	\$33, 856

### **Overview**

This flexible course is designed for students who wish to expand on their undergraduate program or students who wish to change the direction of their academic focus. This course can lead to further study at Graduate Diploma then Master (Coursework) level, providing the opportunity to qualify for research Master or PhD candidature.

### **Minimum Entry Requirements**

A candidate shall hold an AQF Level 7 Bachelor degree or overseas equivalent in a relevant discipline. Candidates must meet the University's English Language Requirements for admission.

### **Course Outline**

# Complete ONE Approved Major totalling 24 credit points from the following:

Biochemistry, Biodiversity Science, Biomedical Science, Chemistry, Genetics, Mathematics, Physical Sciences, Research Methods, Regulatory Science, Statistics, Zoology.

### **Graduate Diploma in Data Science**

CRICOS	096383G	
Duration	ı year	
<b>Commencement</b> Febuary, June & October		
2019 Annual Fee	\$29,400	
2020 Annual Fee	\$31,600	

### Overview

This course provides the basis for sensible, evidence-based decision making, and the ability to manage and make sense of data is a key skill in the modern workplace. In the last decade, streams of data of various types have grown in volume and velocity such that they require specialist skills in order to get the most value from them. Data scientists are responsible

for building intelligent systems, mastering intuitive processes and bringing structure to the vast quantities of data to unlock the potential for improvement and competitive advantage.

### **Minimum Entry Requirements**

A candidate shall hold an AQF Level 7 Bachelor degree. Candidates must meet the University's English Language Requirements for admission.

### **Course Outline**

### Complete the following Core Units (24cps):

Introduction to Programming and the UNIX Environment, Database Management Systems, Introduction to Statistical Modelling, Statistical Modelling and Experimental Design.

### Complete the following Listed Units (24cps):

Introduction to Programming in The Sciences, Data Structures and Algorithms, Operating Systems, Programming Paradigms, Web Programming, Management Information Systems, Software Project Management, Parallel and Distributed Computing, Computer Network and Information Security, Artificial Intelligence, Advanced Web Programming, User Experience and Interaction Design, Algorithms in Machine Learning, Econometric Analysis on Financial Markets, Genomic Analysis and Bioinformatics, Spatial Analysis and Modelling, Introduction to GIS and Spatial Thinking, Remote Sensing and Image Analysis, Information and Knowledge Management in Healthcare, Precision Agriculture, Introduction to Scientific Programming, Science Research Project, Advanced Statistical Modelling, Statistical Learning.

### **Graduate Diploma in Science**

CRICOS	000452E
Duration	ı year
Commencement	February, June
2019 Annual Fee	\$31,500
2020 Annual Fee	\$33,856

### Overview

This course provides an opportunity for graduates to upgrade or extend their qualifications in a field of study not covered in-depth in their undergraduate studies. Study programs are designed to meet the candidate's interests and academic background and involve a combination of coursework selected from a chosen field of study.

On completion of the Graduate Diploma, students are able to apply to transfer to the Master of Scientific

Studies with 4 Units (24cps) of Advanced Standing for completed Graduate Diploma Units.

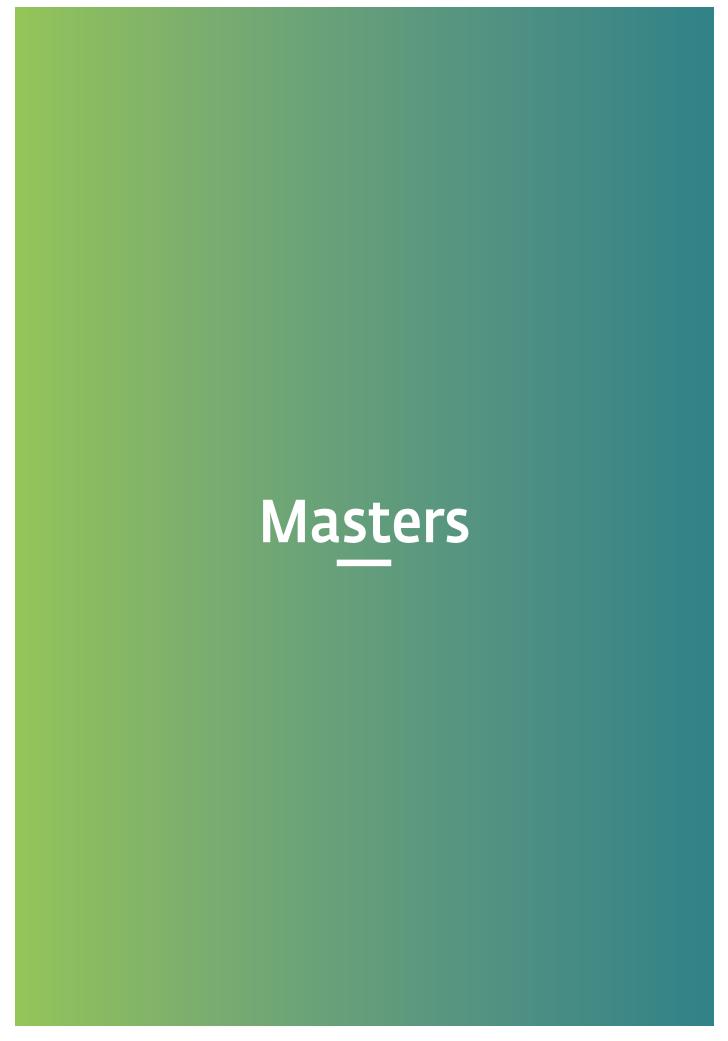
### **Minimum Entry Requirements**

A candidate shall hold an AQF Level 7 Bachelor degree or overseas equivalent in a relevant discipline\*, including Biochemistry, Biology, Botany, Chemistry, Genetics, Geology, Mathematics, Microbiology, Physics, Physiology, Statistics and Zoology. Applicants who have other qualifications and relevant experience may also be considered. Candidates must also meet the University's English Language Requirements for Admission.

### Course Outline

### Complete 1 Approved Major (48cps):

Applied Statistics, Biochemistry, Biodiversity Science, Biomedical Science, Chemistry, Computational Data Science, Genetics, Health, Mathematics, Medicinal Chemistry, Physical Sciences, Quantitative Ecology, Regulatory Science, Zoology.



### **Master of Computer Science**

CRICOS	096384G
Duration	2 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### Overview

This course focuses upon the structured design of algorithms for computer-based implementations of real-life tasks. The expression of algorithms in a programming language Java and the interactive execution, analysis and use of programs are also discussed. Practical elements of basic hardware components are introduced. The course also includes study of advanced algorithmic designs and programming techniques; informal notions of program specification and verification; a high-level description of the abstract architecture of the von Neumann machine; numerical and non-numerical applications; and social issues. Graduates are qualified for consulting and management positions in business, internet and networking specialists, software solution designers and game programming.

### **Minimum Entry Requirements**

A candidate shall hold an AQF Level 7 Bachelor qualification in a relevant discipline or AQF Level 8 Graduate Certificate or Graduate Diploma or Bachelor with Honours qualification in a relevant discipline.

### **Course Outline**

### Complete the following Core Units (42cps):

Software Project Management, Parallel and Distributed Computing, Computer Networks and Information Security, Artificial Intelligence, Advanced Web Programming, User Experience and Interaction Design, Algorithms in Machine Learning.

# Research/Capstone Experience Complete 1 of the following Units (24cps):

Master of Information Technology Project\* (24cps), Computing Science/IT Thesis\* (24cps). \*COSC510 must be completed before enrolling in COSC592.

\*\*COSC593 is available only to students who have achieved a grade point average of at least 5 for 500-level units to the value of 18 credit points.

# Complete 0-2 of the following Listed Units (0-12cps):

Database Management Systems, Software Development Studio 2, Data Structures and Algorithms,

Operating Systems, Programming Paradigms, Web Programming.

# Complete 3-5 of the following Listed Units (18-30cps):

Spatial Analysis and Modelling, Introduction to GIS and Spatial Thinking, Remote Sensing and Image Analysis, Genomic Analysis and Bioinformatics, Probability and Simulation, Digital Electronic Systems, Multivariable Calculus, Linear Algebra, Introduction to Topology, Abstract Algebra, Complex Analysis, Differential Equations, Special Topics in Science A, Special Topics in Science B, Statistical Modelling and Experimental Design, Advanced Statistical Modelling, Statistical Learning, Inference.

OR 6 credit points at 500-level may be selected from any unit offered by the University subject to meeting overall course requirements and prerequisite and timetabling requirements for individual units and approval of the course coordinator.

### **Master of Data Science**

CRICOS	096381K
Duration	2 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### Overview

This course provides students with the required knowledge and practical skills to analyse and manage data. They will learn how to deal with large and diverse data sets and apply a variety of technologies to extract meaning from them. This course will prepare students to solve complex and challenging problems in science, health, business and beyond, through a combination of engaging coursework subjects and a comprehensive capstone project experience.

The Master of Data Science is an entry-level postgraduate course that complements any existing skill set and provides opportunity to up-skill for positions that have a rigorous quantitative aspect. Graduates from this program will be well-equipped to tackle complex data science challenges and play a leading role in the future development of data science solutions globally.

The Master of Data Science has been granted Professional Level accreditation by the Australian Computer Society and, through the Seoul Accord, is recognised in other countries.

### **Minimum Entry Requirements**

A candidate shall hold an AQF Level 7 Bachelor degree or overseas equivalent in a relevant discipline. Candi-

dates must meet the University's English Language Requirements for admission.

### **Course Outline**

### Complete the following Core Units (66cps):

Introduction to Programming and the UNIX Environment, Data Management Systems, Management Information Systems, Software Project Management, Artificial Intelligence, Algorithms in Machine Learning, Calculus and Linear Algebra 1, Introduction to Scientific Programming, Introduction to Statistical Modelling, Statistical Modelling and Experimental Design, Statistical Learning.

### Complete the following Units (12cps):

Information Technology Project, Special Topics in Science A.

# Complete 18 credit points with 12 credit points at 500-level from the following Listed Units (18cps):

Introduction to Programming in The Sciences, Data Structures and Algorithms, Operating Systems, Programming Paradigms, Web Programming, Parallel and Distributed Computing, Computer Networks and Information Security, Advanced Web Programming, User Experience and Interaction Design, Introductory Econometrics, Econometric Analysis on Financial Markets, Spatial Analysis and Modelling, Introduction to GIS and Spatial Thinking, Remote Sensing and Image Analysis, Genomic Analysis and Bioinformatics, Information and Knowledge Management in Healthcare, Precision Agriculture, Advanced Statistical Modelling.

### **Master of Information Technology**

CRICOS	O47297A
Duration	1.5 - 2 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### **Overview**

This course provides an opportunity for those who are looking for a change of direction in their career or for those who want to enhance their Information Technology (IT) qualifications. Those seeking a change of direction are able to study the course (for two years) without any background in IT and graduate with a sound knowledge and understanding of IT qualifying them for employment in a broad range of positions in private industry, government agencies, or research organisations which have an IT requirement. Similarly, the course provides candidates who have an IT background with the opportunity to update their qualifications by 1.5 years of study.

The course offers considerable flexibility in that students are able to complete special topic units in addition to a research project which requires submission of a thesis. For these, students are able to choose topics which are of particular interest to them. This gives students the opportunity to combine their information technology skills with another discipline, for example, mathematics or physics or agriculture or music or education.

### **Minimum Entry Requirements**

A candidate shall hold: (a) an AQF Level 7 Bachelor qualification or overseas equivalent; or (b) an AQF Level 7 Bachelor qualification or overseas equivalent with a major in a relevant discipline\*; or (c) an AQF Level 8 Graduate Certificate, Graduate Diploma or Bachelor with Honours qualification in a relevant discipline\*.

\*Relevant disciplines - include but are not limited to the following: Computer Science, information Systems, Information Technology. Candidates must also meet the University's English Language Requirements for Admission.

### **Advanced Standing**

Candidates admitted under Rule (b) shall be granted a maximum of 24 credit points of Block Advanced Standing making the course 1.5 years in length.

Candidates admitted under Rule (c) shall be granted a maximum of 48 credit points of Block Advanced Standing making the course 1 year in length.

### **Course Outline**

### Candidates without any computing/IT background (admitted under Rule a) must complete all of the following Core Units (54cps) over two years of study:

Software Development Studio 1, Introduction to Programming and the UNIX Environment, Object Oriented Programming, Database Management Systems, Software Development Studio 2, Web Programming, Software Project Management, Advanced Web Programming, User Experience and Interaction Design.

# Research/Capstone Experience Complete the following Unit (24cps):

Masters Information Technology Project\*
\*COSC510 must be completed before enrolling in COSC592.

# Complete 18 credit points with at least 12 credit points at 500-level from the following Listed Units:

Parallel and Distributed Computing, Computer Net-

works and Information Security, Artificial Intelligence, Management Information Systems, Processes of Management.

# Master of Information Technology (Business)

CRICOS	074875C
Duration	1.5 - 2 years
Commencement	February, June
2019 Annual Fee	\$29,400
2020 Annual Fee	\$31,600

### Overview

The Master of Information Technology (Business) is a conversion course that will enable students to gain professional qualifications in Information Technology. It is a coursework only degree designed for students who do not have a computing background and who are seeking to achieve qualifications in Information Technology as well as an understanding of the fundamental principles of Business.

Graduates of the degree will have skills in design and development of software systems; systems analysis; database programming; IT project management; and programming of financial systems.

### **Minimum Entry Requirements**

A candidate shall hold: (a) an AQF Level 7 Bachelor qualification or overseas equivalent; or (b) an AQF Level 7 Bachelor qualification or overseas equivalent with a major in a relevant discipline\*; or (c) an AQF Level 8 Graduate Certificate, Graduate Diploma or Bachelor with Honours qualification in a relevant discipline\*.

\*Relevant disciplines - include but are not limited to the following: Computer Science, information Systems, Information Technology. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Complete the following Core Units (96cps):

Introductory Accounting, Entrepreneurship, Software Development Studio 1, Introduction to Programming and the UNIX Environment, Object Oriented Programming, Database Management Systems, Software Development Studio 2, Web Programming, Management Information Systems, Software Project Management, Computer Networks and Information Security, Advanced Web Programming, Information

Technology Project, Introduction to Business Law, Marketing Management, Processes of Management.

### **Master of Scientific Studies**

CRICOS	000441G
Duration	2 years
Commencement	February, June
2019 Annual Fee	\$31,500
2020 Annual Fee	\$33,856

### **Overview**

The Master of Scientific Studies is a course work plus research degree designed to provide specialised training in a specific field of study. The degree involves advanced level course work study and students must complete one of the following majors: Biomedical Science, Biodiversity, Biotechnology/Molecular Genetics, Chemistry, Genetics, Mathematics, Zoology. Students also complete either a thesis embodying the results of a research project or two mini research projects. The research is completed under the supervision of a member of academic staff in an area relevant to the Major being completed. Graduates are qualified for employment in research organisations, universities, environmental protection agencies, and scientific research laboratories.

Graduates who have included the Master of Scientific Studies Thesis (SCI599) in their program of study are eligible for admission to candidature for the degree of Doctor of Philosophy (PhD).

### **Minimum Entry Requirements**

A candidate shall: (a) have fulfilled all of the requirements for admission to an AQF Level 7 or overseas equivalent Bachelor of Science at a University; or (b) have fulfilled all of the requirements for admission to a degree or other qualification acceptable to the School as sufficient qualification for admission to candidature. Candidates must also meet the University's English Language Requirements for Admission.

### **Course Outline**

### Complete the following Core Unit (6cps):

Research Methods in The Sciences. Research/Capstone Experience

# Complete 12 or 24 credit points from the following Units:

Master of Scientific Studies Thesis (SCI599)\*.
\*SCI599 is available only to students who have achieved 48 credit points (including SCI500) with a

grade point average of 5 and permission of head of school.

OR

Special Topics in Science A (6cps), Special Topics in Science B (6cps)

# Complete 1 Approved Major from the following (54-78cps):

# **MAJORS**

### **Biochemistry**

# Complete 7-8 of the following Listed Units (42-48cps):

Introductory Biochemistry II, Clinical Biochemistry and Cell Biology, Proteins - The Machines of Life, Medical and Clinical Biotechnology, Biotechnology and Advanced Molecular Biology, Organic Structure and Reactivity, Biological and Organic Chemistry, Clinical Microbiology and Virology.

# Complete 1-6 of the following Listed Units (6-36cps):

Introductory Molecular Biology and Biochemistry I, Plant Physiology and Anatomy, Plant Function and Environment, Medicinal Chemistry, Applied Physical Chemistry, Materials Chemistry, Forensic Chemistry, Introductory Genetics, Genomic Analysis and Bioinformatics, Introductory Microbiology, Drug Technologies and New Drug Therapies, Human and Mammalian Physiology, Immunology and Haematology, Endocrinology and Reproductive Physiology, Introduction to Scientific Programming, Work Integrated Learning - Professional Skills Development, Evolutionary Parasitology.

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### Biodiversity Science

# Complete 7-13 of the following Listed Units (42-78cps) with at least 18 credit points at 500-level:

Integrated Weed Management, Plant Biosecurity, Plant Physiology and Anatomy, Plant Diversity, Plant Function and Environment, Wild Dog Ecology, Aquatic Ecology, Ecology - Populations to Ecosystems, Ecological Methods, Ecology of Plant Populations, Ecology of Australian Vegetation, Wildlife Ecology and Management, Introduction to GIS and Spatial Thinking, Conservation Biology, Biological Systematics, Advanced Horticulture, Insect-Plant Interactions, Evolutionary Parasitology, Evolution and Biogeography, Statistical Modelling and Experimental Design, Invertebrate Zoology, Entomology Animal Behaviour.

# Complete o-6 of the following Listed Units (o-36cps):

Introductory Molecular Biology and Biochemistry I, Introductory Biochemistry II, Clinical Biochemistry and Cell Biology, Proteins - The Machines of Life, Mycology and Plant Pathology, Field Botany, Biotechnology and Advanced Molecular Biology, Molecular Ecology, Applied Skills in Environmental and Rural Science, Introductory Genetics, Genomic Analysis and Bioinformatics, Horticultural Science, Advanced Statistical Modelling, Work Integrated Learning - Professional Skills Development, Ecological and Comparative Physiology, Remote Sensing and Image Analysis.

### Biomedical Science

# Complete 7-8 of the following Listed Units (42-48cps):

Introductory Molecular Biology and Biochemistry I, Introductory Biochemistry II, Clinical Biochemistry and Cell Biology, Medicinal Chemistry, Clinical Microbiology and Virology, Human and Mammalian Physiology, Immunology and Haematology, Endocrinology and Reproductive Physiology.

# Complete 1-6 of the following Listed Units (6-36cps):

Proteins - The Machines of Life, Medical and Clinical Biotechnology, Biotechnology and Advanced Molecular Biology, Biological and Organic Chemistry, Organic Structure and Reactivity, Applied Physical Chemistry, Forensic Chemistry, Introductory Genetics, Genomic Analysis and Bioinformatics, Introduction to Human Development, Neurobiology I, Neuroanatomy, Neurobiology II, Neurobiology of Developmental, Cognitive and Affective Disorders, Clinical Neuroscience, Molecular Basis of Therapeutics, Drug Technologies and New Drug Therapies, Human Nutrition and Metabolism, Introduction to Scientific Programming, Work Integrated Learning - Professional Skills Development.

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### Chemistry

### Complete 6 from the following Units (36cps):

Medicinal Chemistry, Organic Structure and Reactivity, Applied Physical Chemistry, Materials Chemistry, Forensic Chemistry, Microscopic to Macroscopic Physics and Chemistry.

### Complete 1-6 of the following Units (6-36cps):

Introductory Biochemistry II, Introductory Molecular Biology and Biochemistry I, Proteins - The Machines of Life, Clinical Biochemistry and Cell Biology, Electromagnetism I, Digital Electronic Systems.

### Complete o-6 of the following Units (o-36cps):

Introduction to Programming in The Sciences, Medical and Clinical Biotechnology, Biotechnology and

Advanced Molecular Biology, Quantum and Thermal Structure, Chemical Reactivity, Analytical Chemistry, Biological and Organic Chemistry, Algorithms in Machine Learning, Introductory Genetics, Molecular Basis of Therapeutics, Multivariable Calculus, Linear Algebra, Differential Equations, Introduction to Scientific Programming, Statistical Modelling and Experimental Design, Work Integrated Learning - Professional Skills Development.

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### Genetics

# Complete 7-8 of the following Listed Units (42-48cps):

Introductory Molecular Biology and Biochemistry I, Clinical Biochemistry and Cell Biology, Evolution and Biogeography, Biological Systematics, Introductory Genetics, Genetic Evaluation and Breeding Program Design, Special Reading Unit, Genomic Analysis and Bioinformatics.

# Complete 1-6 of the following Listed Units (6-36cps):

Introductory Biochemistry II, Proteins - The Machines of Life, Plant Diversity, Biotechnology and Advanced Molecular Biology, Molecular Ecology, Ecological Methods, Ecology of Plant Populations, Forensic Chemistry, Genetics of Populations, Introduction to Breeding and Genetics, Environmental Biogeography, Clinical Microbiology and Virology, Human and Mammalian Physiology, Immunology and Haematology, Introduction to Scientific Programming, Statistical Modelling and Experimental Design, Statistical Learning, Work Integrated Learning - Professional Skills Development, Evolutionary Parasitology.

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### **Mathematics**

# Complete 7-13 of the following Listed Units with at least 18 credit points at 500-level (42-78cps):

Advanced Topics in Geometry, Advanced Topics in Analysis, Advanced Topics in Mathematics, Advanced Topics in Algebra, Multivariable Calculus, Linear Algebra, Introduction to Topology, Abstract Algebra, Complex Analysis, Differential Equations.

# Complete o-6 of the following Listed Units (o-36cps):

Algorithms in Machine Learning, Parallel and Distributed Computing, Artificial Intelligence, Probability and Simulation, Electromagnetism I, Microscopic to Macroscopic Physics and Chemistry, Number Theory,

Introduction to Scientific Programming, Statistical Modelling and Experimental Design, Advanced Statistical Modelling, Statistical Learning, Inference, Work Integrated Learning - Professional Skills Development

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### **Ouantitive Ecology**

# Complete 4-9 of the following Listed Units (24-54cps):

Ecological Methods, Molecular Ecology, Spatial Analysis and Modelling, Introduction to GIS and Spatial Thinking, Remote Sensing and Image Analysis, Conservation Biology, Applied Research Skills in Environmental and Rural Science, Research Synthesis in Environmental and Rural Science, Remote Sensing and Surveying, Precision Agriculture.

# Complete 4-6 of the following Listed Units (24-36cps):

Genomic Analysis and Bioinformatics, Probability and Simulation, Statistical Modelling and Experimental Design, Advanced Statistical Modelling, Statistical Learning, Inference.

# Complete o-5 of the following Listed Units (30cps):

Plant Diversity, Ecology: Concepts and Applications, Aquatic Ecology, Ecology - Populations to Ecosystems, Environmental Impact Assessment, Evolution and Biogeography, Introductory Genetics, Uncertainty, Science and Policy-Making, Calculus and Linear Algebra 2, Natural Resource Policy and the Community, Multivariable Calculus, Linear Algebra, Sustaining Our Rural Environment II, Introduction to Scientific Programming.

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### Zoology

# Complete 7-13 of the following Listed Units with at least 18 credit points at 500-level (42-78cps):

Disease and its Control in Animals, Wild Dog Ecology, Ecology - Populations to Ecosystems, Ecological Methods, Remote Sensing and Image Analysis, Wildlife Ecology and Management, Introduction to GIS and Spatial Thinking, Conservation Biology, Evolution and Biogeography, Invertebrate Zoology, Entomology, Animal Behaviour, Insect-Plant Interactions, Evolutionary Parasitology.

# Complete o-6 of the following Listed Units (o-36cps):

Animal Biosecurity, Applied Animal Nutrition, Ani-

mal Nutrition, Introductory Molecular Biology and Biochemistry I, Introductory Biochemistry II, Clinical Biochemistry and Cell Biology, Medical and Clinical Biotechnology, Biotechnology and Advanced Molecular Biology, Working Canines, Molecular Ecology, Aquatic Ecology, Remote Sensing and Image Analysis, Biological Systematics, Genetics of Populations, Overseas Study Experience, Endocrinology and Reproductive Physiology, Introduction to Scientific Programming, Statistical Modelling and Experimental Design, Advanced Statistical Modelling, Statistical Learning, Work Integrated Learning - Professional Skills Development, Ecological and Comparative Physiology.

### Complete o-2 Elective Units (o-12cps):

Elective Units can be selected from any unit offered by the University subject to candidates meeting overall course requirements and prerequisite and timetabling requirements for individual units.

### **Master of Science**

CRICOS	000477G
Duration	2 years
Commencement	February, June
2019 Annual Fee	\$31,500
2020 Annual Fee	\$33,856

### **Overview**

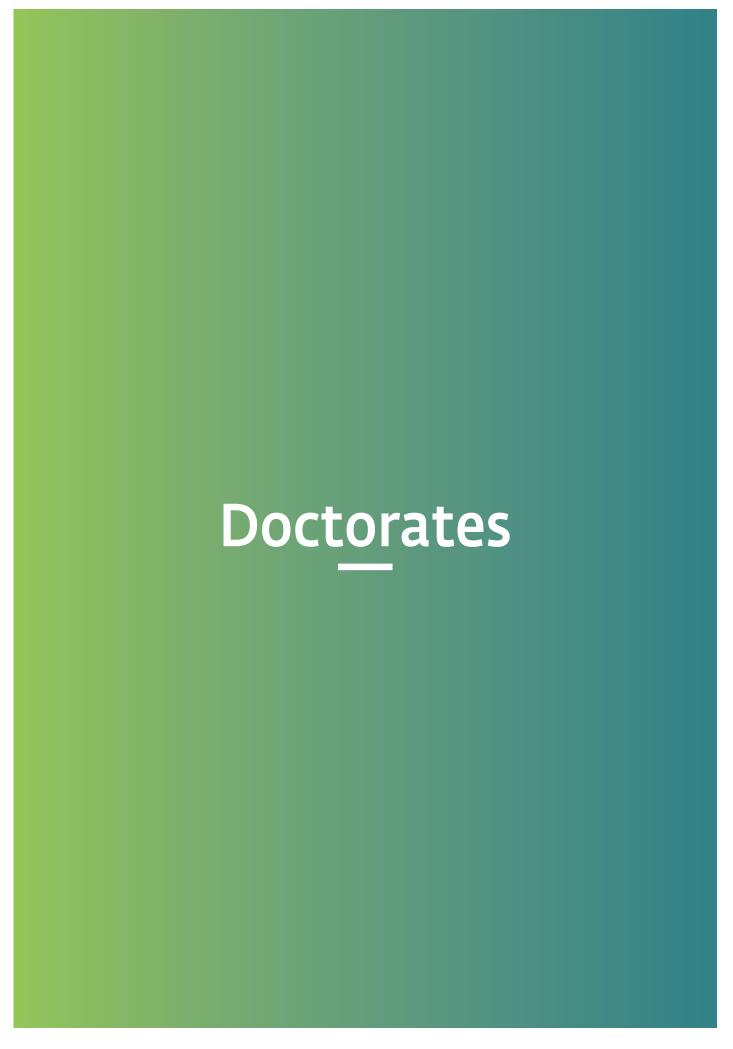
This course is an advanced research degree undertaken by thesis only and is suited to candidates wishing to pursue a particular research topic related to science with the objective of entering a research-based rather than a management-based career. Graduates are qualified for employment in research organisations such as CSIRO and ANSTO, universities, environmental protection agencies, and scientific research laboratories.

### **Minimum Entry Requirements**

A candidate shall (a) hold an AQF Level 7 Bachelor degree or overseas equivalent in a cognate discipline with a grade point average (GPA) of 5 or above; or (b) hold an AQF Level 7 Bachelor degree or overseas equivalent and have adequate relevant preparation since graduation. Adequate relevant preparation may be gained by an approved academic course, professional training during an occupation or through peer review publications. Candidates must also meet the University's English Language Admission Requirements for Higher Degrees by Research.

### **Course Outline**

Research/Thesis Only Students must complete a thesis without any coursework units (96cps).



# Doctor of Philosophy (Innovation) PhD.I

Duration	CRICOS	2019 Fee
3 Years (only on campus for 1 year)	084916E	\$29,400

### **Overview**

This course is a unique, project-based, higher research degree. The PhD.I cuts across all schools and disciplines, linking professional and industry expertise with academic theory in creating innovation.

It involves contextual research on a project that identifies one or more tangible or process-based innovations that have identifiable impacts when implemented.

This doctorate suits anyone wishing to carry out project-based research on an innovation within their field of expertise. It currently attracts candidates from Australia and internationally who want to research a chosen field of expertise and develop innovation through research.

To read more about UNE's current and completed PHDI research project visit une.edu.au/research/hdr/doctor-philosophy-innovation-practice-professional#examples.

### Commencement

Studying for the PhD.I is broken up into two parts, or phases.

Students undertaking a PhD may commence at any time during the year subject to supervisor and resource availability.

### **Applications**

Applications for PhD candidature must include a completed International HDR Student and Scholarship Application Form and all supporting documentation as required by this form; evidence of research; a proposed program of research; and a research proposal. For more information and to apply visit: une.edu.au/research/hdr/how-to-apply-for-postgraduate-research-courses

### Scholarships

UNE has a range of scholarships available for specific projects and research areas; for information on current opportunities visit:

une.edu.au/research/hdr/hdr-scholarships

Any applicant for admission to PhD candidature must: (a) have an AQF Level 9 Master degree or overseas equivalent with at least a 25% research component undertaken at a sufficiently high standard; or (b) have an AQF Level 8 Bachelors Honours degree with at least second class honours; or (c) have an AQF Level 8 or 9 Bachelor degree and have adequate research preparation since graduation. Adequate preparation may be gained by an approved academic course, professional training during an occupation, or through peer reviewed publications; or (d) have previously undertaken work of sufficiently high standard towards a higher degree by research (AQF Level 9) but have not submitted it for any degree; and (e) have produced documented evidence of capacity to undertake work at the PhD level; and (f) have completed and had approved by the relevant Committee, a PhD research proposal.

### **Doctor of Philosophy (Science)**

CRICOS	000431K
Duration	4 years
Commencement	February, June
2019 Annual Fee	\$29,400

### **Overview**

This course is the highest research degree for which a student can enrol. UNE offers PhD enrolment to those applicants who meet the demanding admission standards and who demonstrate the necessary commitment to undertake advanced research. Research topics cover all academic fields offered at UNE, and are a reflection of the comprehensive research interests of UNE's academic staff. Candidates must complete a thesis without any coursework units.

UNE also has designated a range of Targeted Research Areas which are a priority in terms of existing, emerging and developing research. The latest information on these Research Areas can be found online at: http://www.une.edu.au/research/une-research-priorities

### Commencement

Students undertaking a PhD may commence at any time during the year subject to supervisor and resource availability.

### **Applications**

Applications for PhD candidature must include a completed International HDR Student and Scholarship Application Form and all supporting documentation as required by this form; evidence of research; a proposed program of research; and a research proposal. For more information and to apply visit: http://www.une.edu.au/research/res-services/hdr/hdrformsandpolicies

### **Scholarships**

UNE has a range of scholarships available for specific projects and research areas; for information on current opportunities visit:

http://www.une.edu.au/research/res-services/hdr/hdr-scholarships

### **Minimum Entry Requirements**

Any applicant for admission to PhD candidature must: (a) have an AQF Level 9 Master degree or overseas equivalent with at least a 25% research component undertaken at a sufficiently high standard; or (b) have an AOF Level 8 Bachelors Honours degree with at least second class honours; or (c) have an AQF Level 8 or 9 Bachelor degree and have adequate research preparation since graduation. Adequate preparation may be gained by an approved academic course, professional training during an occupation, or through peer reviewed publications; or (d) have previously undertaken work of sufficiently high standard towards a higher degree by research (AQF Level 9) but have not submitted it for any degree; and (e) have produced documented evidence of capacity to undertake work at the PhD level; and (f) have completed and had approved by the relevant Committee, a PhD research proposal.

### **Admission**

Admission to UNE involves a number of steps as set out below. These steps assist applicants through the various stages of the admission process. If applicants have any questions at any stage during the process they should contact UNE International for assistance. All international students applying to study a coursework program at UNE must complete the online International Student Admission Application.

www.une.edu.au/study/international/applying

All International students applying to study a Higher Degree by Research, such as a PhD, must complete the International HDR Candidature Application Form. The form is available online at: http://www.une.edu.au/research/research-services/hdr/how-to-apply-for-postgraduate-research-courses

# Admission and tuition

### **Admission Steps**

01

Applicants who wish to apply through one of UNE's authorised agents can locate their nearest agent at:

# http://www.une.edu.au/study/international/agents/our-agents

Applicants should ensure that they submit certified copies of transcripts of all relevant previous studies including proof of completion; photo page from passport or other birth record; and evidence of English language proficiency and any other documentation requested in the application.

If documents are in a language other than English, an officially certified English translation of each document must be provided together with certified copies of the original documents.

UNE will assess the completed application. If the application is academically successful, a conditional or unconditional Offer of Admission will be issued together with an International Offer Guide, which contains all information relevant to an applicant accepting their offer.

If the applicant is from a country deemed to be high risk from an immigration perspective, then they must undergo additional assessment to determine they meet Genuine Student (GS), Genuine Temporary Entrant (GTE) and financial evidence requirements. Their Offer of Admission will be conditional upon successfully completing the GTE assessment and they must complete an additional International Student Application for GTE and submit further documentation required by this form.

02

UNE will notify applicants if they have met the GTE condition or not. Applicants must not pay any tuition fees prior to receiving formal, written advice that they have successfully passed the GTE assessment.

The University will advise students in writing if their application is unsuccessful.

03

When UNE International receives the completed offer acceptance documents and the required tuition fees from students intending to study on campus, it will process the payment and issue the Confirmation of Enrolment (COE). The COE is the form required to apply for a student visa from an Australian Embassy, High Commission or the Department of Immigration and Border Protection (DIBP) as appropriate. Students must obtain a student visa before they come to study full-time in Australia.

Information on obtaining a student visa is available online at: **www.bor-der.gov.au** 

For students intending to study by distance education, UNE International will, upon receiving the completed Offer Acceptance Form and the required tuition fees, process the payment and issue information about online enrolment in UNE units.

04

Upon being granted their student visa, students intending to study on-campus should make travel arrangements including applying on-line for accommodation at: www.une.edu.au/campus-life/une-ac-

### une.edu.au/campus-life/une-accommodation

Students should advise UNE International of their travel arrangements and request airport or railway station reception as instructed in the International Offer Guide.

05

After arriving in Armidale, on-campus students should arrive and attend the International Student Orientation and Enrolment after which they will commence their formal course at UNE.

### **English Language Requirements**

Students applying for admission to UNE must check the published English Language requirement for their nominated course and provide evidence in their admission application that they have met the requirements.

http://www.une.edu.au/study/international/eligibility/english-language-requirements

### **Tuition Fees**

Annual course fees only cover the cost of tuition. They do not include other expenses associated with university study such as books, accommodation and living expenses. For students successful in gaining admission to study at UNE, the Offer of Admission will list the exact tuition fees a student is required to pay to accept the offer. The Offer of Admission will also list other fees payable including compulsory Overseas Student Health Cover for on campus students.

### **Tuition Protection Service (TPS)**

The Tuition Protection Service (TPS) is an Australian Government initiative to assist international students whose education providers are unable to fully deliver their course of study. The aim of this protection is to ensure that students receive the tuition they have paid for or, as a last resort, a refund of unspent tuition fees.

The legislation sets out what happens when an education provider or an international student defaults (i.e., when a provider fails to start or finish providing a course to a student, or a student fails to start or finish a course with a provider). The TPS provides a flexible and streamlined approach to student placement and refund arrangements in the event a defaulting provider does not meet its refund obligations under the ESOS Act. Students will be given an active role in selecting a suitable placement options through an online information service. Where a student does not access a placement through the placement facility provided by the TPS Director, the student may be eligible for a refund of their unspent tuition fees from the TPS Director. Students will be eligible for a refund of the unused portion of any prepaid tuition fees (i.e. tuition for which you have paid but which has not yet been delivered) rather than a full refund, in recognition of the fact that you may obtain credit for the study already completed.

International students should be familiar with the UNE Refund of Tuition Fees Policy at http://www.une.edu.au/study/international/applying/admissions-information#refund of tuition fees policy

Further information about the TPS can be obtained from the Australian Government Department of Education and Training https://internationaleducation.gov.au/

### **Refund of Tuition Fees**

The University of New England's Refund of Tuition Fees Policy is based upon, and is in accordance with, the National Code of Practice for Registered Authorities and Providers of Education and Training to Overseas Students (the National Code), the Education Services for Overseas Students Act 2000 (ESOS Act 2000) and Education Services for Overseas Student Regulations 2001 (ESOS Regulations 2001). This policy applies to all International Students studying on-campus or by distance regardless of the person actually paying the fees. The policy is located at: http://www.une.edu.au/study/international/applying/admissions-information

# Health cover and visas

# Overseas Student Health Cover (OSHC)

International Students and their dependents are required to purchase private health insurance, Overseas Student Health Cover (OSHC) as a condition of their student visa. UNE currently has a Preferred Provider Agreement with Bupa Australia OSHC, to facilitate the provision of OSHC for International Students.

Bupa Australia OSHC pays the cost of most medical and hospital treatment students may require while studying in Australia. The current cost of Overseas Student Health Cover and further information about what is covered is available online at: http://www.bupa.com.au/health-insurance/cover/oshc

Cover for the student and all dependents for the entire length of the student visa must be arranged prior to the student visa being granted. Students should note that it is a condition of their student visa to maintain the currency of their OSHC for the duration of their visa.

### Obtaining a Student Visa

International Students intending to study full-time on-campus at UNE will need to obtain a student visa. The Australian Department of Imigration and Border Protection (DIBP) website **www.border.gov.au** has comprehensive information on applying for a student visa to study in Australia, including application forms. Please note that student visas granted to International Students for their study in Australia have conditions attached. These are outlined in detail on the DIBP website and students' obligations are also outlined in the International Offer Guide issued with the Offer of Admission.

Students should regularly check the DIBP website for updated information and changes to legislation and processing arrangements affecting their intention to study in Australia on a student visa.

# Simplified Student Visa Framework (SSVF)

The Australian Government's SSVF is designed to make the process of applying for a Student visa simpler for genuine students. Under the SSVF, each education provider registered with the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) is allocated an immigration risk rating by the Department of Immigration and Border Protection. This risk rating is based on the immigration risk outcomes of the provider's international students over a twelve month period. Likewise, an immigration risk rating is allocated to each country. The combination of these two risk ratings is used to guide the level of financial capacity and English language proficiency and related documentation that students will need to provide with their Student visa application.

### **ESOS Framework**

International Students who are intending to study on-campus in Australia should be aware that Australia's laws promote quality education and consumer protection. These laws are known as the ESOS Framework and they include the Education Services for Overseas Students (ESOS) Act 2000 and the National Code.

For further information about the ESOS Framework, students should refer to the following Australian Government website: https://internationaleducation.gov.au/Regulatory-Information/Pages/Regulatoryinformation.aspx



### **Campus Life**

UNE is proud that students from more than 80 nations study on campus, creating a multicultural atmosphere. The campus is well equipped with first rate sporting facilities, shops, restaurant, cafe', medical centre, childcare, a post office and ATM facilities. In addition to excellent study facilities, UNE provides an environment that encourages the creation of lifelong friendships. Also, living costs in Armidale are comparatively lower than in metropolitan cities, and students can immerse themselves in the 'real' Australian academic experience.

# On Campus College Accommodation

UNE remains one of the few universities to provide the complete on-campus experience combining affordability, student support and social life. Our graduates consistently rate living at UNE as being 'an affordable lifestyle, priceless experience'. Our residential system gives you the benefit of academic, social and personal support networks and a rich tradition of vibrant inter-college competitions in sporting and cultural activities. UNE's residential accommodation consists of nine colleges, including seven traditional college residences, a village of self-contained units and the recently opened modern studio apartments at Wright College, complete with your own private kitchen and bathroom.

If you need further assistance with accommodation options, please contact UNE International.

The weekly fee for college accommodation ranges from \$180 to \$470 depending on the college, your length of stay and catering options. For more information about fees for individual colleges, see http://www.une.edu.au/campus-life/une-accommodation/fee-information/2016-comprehensive-contract-and-fee-details

Additional information on each college can be found on the university website: http://www.une.edu.au/campus-life/une-accommodation/colleges

'Whatever your lifestyle choice and budget, UNE has an accommodation style to suit you'.

### **Off Campus Accommodation**

On campus college accommodation may not suit everyone. If you would prefer to live off-campus, most students studying at UNE choose to live in share houses or apartments. Shared housing is a great way to meet new friends and be a part of a learning and social environment off campus. In considering off-campus living you should take into account the

terms of tenancy agreements including costs such as rental bonds (in Australia usually four weeks rent), furniture, power/electricity connection and ongoing costs, water and communications (phone, internet connections and ongoing costs) as well as transport arrangements to and from campus – expenses which are included in the on campus college accommodation costs.

When choosing to live off campus, you need to be aware that during the four to six weeks before trimester starts, there is a much higher demand for off campus housing and it may take longer to find suitable accommodation.

Properties for rent can be located through Armidale real estate agent listings at http://www.realestate.com.au/rent/in-armidale%2c+nsw+2350/list-1

Uni4me can also assist in finding your residential property **https://www.uni4me.com.au/** 

### **About Living Costs**

Living costs in Australia sourced from: **www.studyinaustralia.gov.au** 

Migration regulations in Australia require international students to show evidence that they can cover their cost of living and studying in Australia. This helps to ensure students are better able to make the most of their studies and have a safe and enjoyable experience in Australia.

While international students may be able to supplement their income with money earned through part-time work in Australia, the 'living costs' requirement helps to support the success of students in their studies by ensuring that they don't have to rely on such work to meet all their expenses.

Prospective student visa applicants and their family members must have access to the following funds to meet living costs requirements:

- A\$20,290 a year for the main student;
- A\$7,100 a year for the student's partner;
- A\$3,040 a year for each child;

Students must demonstrate that the funds they are relying upon to meet the costs of studying in Australia will be genuinely available to them during their stay in Australia.

The figures above are indicative only and costs can vary significantly depending on your situation. You should be prepared in case your living costs are greater than the indicated figures.

For more information visit www.border.gov.au

University of New England 35







UNE International University of New England Armidale NSW 2351 Australia

Phone: +61 2 6773 2135

Enquiries: http://www.une.edu.au/askune

Web: www.une.edu.au

University of New England CRICOS Provider Number 00003G

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