

UNIVERSITY COURSES

Medical Sciences



FEBRUARY, 2020

SANDIE MCKOY

CATHOLIC COLLEGE WODONGA

OVERVIEW

This document has been developed to assist students and their families in researching medical science university courses at Victoria, Canberra, and NSW based universities.

Indicative ATAR = the lowest selection rank (ATAR plus adjustment factors such as academic and equity adjustments) for the 2020 January intake. Please only use indicative ATARs as a guide as they may change for the 2021 intake.

English prerequisite: EAL = English as an Additional Language. 'Any other English' includes English, English Language and Literature.

Note: Monash University has requested to not be included in this guide.

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Nuclear Medicine	Radiation Therapy
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Key Websites

Nuclear Medicine	https://bit.ly/2IFQxcc
Radiation Oncology	https://bit.ly/2IDEQHc
Medical Imaging	https://bit.ly/2J0TNT2
Defence (Pharm, Radiog.)	https://bit.ly/2DhKxMm
Laboratory Medicine	https://bit.ly/33KFx7x
Radiation Therapy	https://bit.ly/38ZvRc2
Sonography	https://bit.ly/2q84Xh4
Pharmacy	https://bit.ly/2q1sK1Y
My Health Career	https://bit.ly/1PU45CH
Job Outlook	https://joboutlook.gov.au/

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Disclaimer: universities featured in this guide reserve the right to change course information, admissions and entry requirements at any time and without notice. For up to date information, check the university websites when assessing course information.

COURSE SUMMARY

Note: ATAR not published = NP.

Nuclear Medicine

University	Course	Campus	Indicative ATAR
RMIT University	Bachelor of Applied Science (Medical Radiations) (Nuclear Medicine)	Bundoora	83.25
Charles Sturt University	Bachelor of Medical Radiation Science (Nuclear Medicine and Molecular Imaging)	Wagga Wagga Port Macquarie	65 65
University of Newcastle	Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine)	Newcastle - Callaghan	69.55

Radiation Therapy

University	Course	Campus	Indicative ATAR
RMIT University	Bachelor of Applied Science (Medical Radiations) (Radiation Therapy)	Bundoora	88.20
Charles Sturt University	Bachelor of Medical Radiation Science (Radiation Therapy)	Wagga Wagga Port Macquarie	65 65
University of Newcastle	Bachelor of Applied Science (Medical Radiations) (Radiation Therapy)	Newcastle - Callaghan	70.50

Medical Imaging

University	Course	Campus	Indicative ATAR
RMIT University	Bachelor of Applied Science (Medical Radiations) (Medical Imaging - Radiography)	Bundoora	94.45
Charles Sturt University	Bachelor of Medical Radiation Science (Diagnostic Radiography)	Wagga Wagga Port Macquarie	65 65
University of Newcastle	Bachelor of Applied Science (Medical Radiations) (Radiation Therapy)	Newcastle - Callaghan	83.10
Deakin University	Bachelor of Medical Imaging Bachelor of Medical Imaging (Regional Remote)	Geelong Waurn Ponds	88.45
University of Sydney	Bachelor of Applied Science (Honours) (Diagnostic Radiography)	Cumberland and Camperdown	95
University of Canberra	Bachelor of Medical Radiation Science (Medical Imaging)	Canberra Bruce	77.40

Medical Ultrasound

University	Course	Campus	Indicative ATAR
CQ University	Bachelor of Medical Sonography / Graduate Diploma of Medical Sonography	Melbourne - City	80.15
Charles Sturt University	Graduate Diploma of Medical Ultrasound	Online	Grad entry
University of Canberra	Graduate Diploma of Medical Ultrasound	Canberra Bruce	Grad entry

COURSE SUMMARY

Pharmacy

University	Course	Campus	Indicative ATAR
La Trobe University	Bachelor of Pharmacy (Honours)	Bendigo	87.30
RMIT University	Bachelor of Pharmacy (Honours)	Bundoora	78.80
University of Canberra	Bachelor of Pharmacy	Canberra Brue	74.15
University of Tasmania	Bachelor of Pharmacy with Applied Honours	Hobart	80

Biomedicine

University	Course	Campus	Indicative ATAR
Australian Catholic University	Bachelor of Biomedical Science	Melbourne	58.70
Deakin University	Bachelor of Biomedical Science	Melbourne Burwood	80.15
		Geelong Waurn Ponds	72.50
Federation University	Bachelor of Biomedical Science	Berwick	50.04
		Mount Helen - Ballarat	52.75
		Gippsland	NP
		Off-campus	NP
La Trobe University	Bachelor of Biomedical Science	Albury-Wodonga	66.20
		Bendigo	61.45
	Bachelor of Biomedical Science (Medical)	Albury-Wodonga	85+, RC
		Bendigo	85+, RC
	Bachelor of Biomedicine	Melbourne Bundoora	65.70
RMIT University	Bachelor of Biomedical Science	Bundoora	70.40
Swinburne University	Bachelor of Health Science (Biomedical Science)	Hawthorn	60
	Bachelor of Health Science (Biomedical Science) - Professional	Hawthorn	80
University of Melbourne	Bachelor of Biomedicine	Parkville	94
	Bachelor of Biomedicine (Chancellor's Scholars)	Parkville	99.90
Victoria University	Bachelor of Biomedicine	Footscray Park	82.55
		St Albans	NP
	Bachelor of Biomedical Science	St Albans	NP

Medical Laboratory Medicine

University	Course	Campus	Indicative ATAR
RMIT University	Bachelor of Biomedical Science (Laboratory Medicine)	Bundoora	75.25
University of Tasmania	Bachelor of Laboratory Medicine	Launceston	75



NUCLEAR MEDICINE

RMIT

Bachelor of Applied Science (Medical Radiations) (Nuclear Medicine)

3.5-years, Bundoora, <https://bit.ly/2ojmZZf>

Indicative ATAR: 83.25.

Prerequisites: minimum study scores of: 30 in English (EAL) or 25 in any other English; 20 in either Mathematical Methods or Specialist Mathematics; and 20 in Chemistry.

Course information: "Medical radiations is a rapidly advancing healthcare discipline involving the application of ionising and non-ionising radiation for the diagnosis and treatment of injury and disease.

Nuclear medicine uses very small amounts of radioactive materials to diagnose and treat disease. Common nuclear medicine applications include cardiac stress tests to analyse heart function, bone scans for orthopaedic injuries, and lung scans for blood clots.

You'll spend 42-44 weeks in supervised clinical practice equipping you with current, work-ready skills.

This clinical practice takes place in each year of the degree. You will gain experience in a range of clinical settings including large public teaching hospitals, small private practices, as well as metropolitan and rural centres".

Accreditation: currently seeking course accreditation with the Medical Radiation Practice Board of Australia.

Charles Sturt University

Bachelor of Medical Radiation Science (Nuclear Medicine and Molecular Imaging)

4-years, Wagga Wagga, Port Macquarie, <https://bit.ly/2G6pKZG>

Indicative ATAR: 65.00.

Assumed knowledge: Mathematics and Physics.

Course information: "The training undertaken in this course involves biological tracers (radiopharmaceuticals) used for the diagnosis and treatment of various diseases. This specialisation details the administration and imaging of these radiopharmaceuticals within the patient to detect physiological abnormalities and deliver appropriate treatment.

This specialisation requires formal training and education in clinical, instrumentation and computing aspects of single photon emission computed tomography (SPECT), PET, CT, MRI, ultrasound and newer hybrid systems (SPECT/CT and PET/CT).

Equipment used by medical radiation scientists has become increasingly sophisticated over the past decade and a detailed knowledge of equipment function, operation and computer interfacing is required.

With an emphasis on the techniques and equipment used in diagnostic radiography, nuclear medicine and radiation therapy including general radiography, screening, computed tomography (CT), magnetic resonance imaging (MRI), sonography, positron emission tomography (PET), this degree will provide you with a rewarding and fulfilling career."

Professional recognition: The extent of clinical experience in the course means graduates are not required to complete the traditional professional development year, and are eligible for national registration. Graduates will be eligible to register to practice in Australia with the Australian Health Practitioner Registration Agency.

Practical experience: 50 weeks of practical experience in clinical departments in country and metropolitan areas, including a fourth-year residency.

NUCLEAR MEDICINE

University of Newcastle

Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine)

4-years, Newcastle - Callaghan, <https://bit.ly/2LnYmF8>

Indicative ATAR: 69.55.

Special selection procedures apply for Aboriginal and Torres Strait Islander applicants.

For details call (02) 4921 6863

Assumed Knowledge: Any two units of English plus Mathematics or Physics.

Practical experience: Travel, accommodation and related expenses for professional placements are the responsibility of students.

What is nuclear medicine? Nuclear medicine students learn how to conduct nuclear medicine scans of a person's body using radioactive material called radioisotopes.

Radioisotopes are typically ingested or injected, travelling through the affected area to create images of the inside of your body. These images can diagnose life-threatening diseases such as cancer and help monitor a patient's health.

Why study with us?

Hands-on experience: Complete 42 weeks of clinical placements in public and private centres, preparing you for a successful career in nuclear medicine.

World leader in medical radiation science and nuclear medicine: You are taught by the best and brightest minds in their fields and get to celebrate, and possibly participate, in ground breaking research discoveries that define your practice.

World-class facilities: Hone your skills in our \$1.5 million on-campus radiopharmacy laboratory – the largest of its kind in the southern hemisphere.

Professional Accreditation: Tick the boxes for professional registration with the Australian Health Practitioner Regulation Agency.



RADIATION THERAPY

RMIT

Bachelor of Applied Science (Medical Radiations) (Radiation Therapy)

3.5-years, Bundoora, <https://bit.ly/2ojmZZf>

Indicative ATAR: 88.20.

Prerequisites: completion of Units 1-2 or Units 3-4 Biology or Chemistry; and minimum study scores of: 30 in English (EAL) or 25 in any other English; and 20 in Mathematical Methods or Specialist Mathematics.

Course information: "Medical radiations is a rapidly advancing healthcare discipline involving the application of ionising and non-ionising radiation for the diagnosis and treatment of injury and disease.

You will specialise in Radiation Therapy and undertake both common and stream-specific subjects.

Radiation therapy is one of the main treatment options for patients with cancer and contributes to the high cancer cure rates in Australia. Radiation therapists combine knowledge of the physical and biomedical sciences to design and verify appropriate treatment plans.

You'll spend 42-44 weeks in supervised clinical practice equipping you with current, work-ready skills.

This clinical practice takes place in each year of the degree. You will gain experience in a range of clinical settings including large public teaching hospitals, small private practices, as well as metropolitan and rural centres".

Accreditation: currently seeking course accreditation with the Medical Radiation Practice Board of Australia.

Charles Sturt University

Bachelor of Medical Radiation Science (Radiation Therapy)

4-years, Wagga Wagga, Port Macquarie, <https://bit.ly/2G6pKZG>

Indicative ATAR: 65.00.

Assumed knowledge: Mathematics and Physics.

"Explore a career as a radiation therapist in public hospitals or private radiation oncology practices in any state of Australia, as well as overseas. Career options may also include specialisation in areas such as tomotherapy and IMRT.

With an emphasis on the techniques and equipment used in diagnostic radiography, nuclear medicine and radiation therapy including general radiography, screening, computed tomography (CT), magnetic resonance imaging (MRI), sonography, positron emission tomography (PET), this degree will provide you with a rewarding and fulfilling career.

We are seeking course accreditation so graduates will be eligible to register with the Medical Radiation Practice Board of Australia".

Professional recognition: The extent of clinical experience in the course means graduates are not required to complete the traditional professional development year, and are eligible for national registration. Graduates will be eligible to register to practice in Australia with the Australian Health Practitioner Registration Agency.

Practical experience: 53 weeks of practical experience in clinical departments in country and metropolitan areas, including a fourth-year residency.

RADIATION THERAPY

University of Newcastle

Bachelor of Medical Radiation Science (Honours) (Radiation Therapy)

4-years, Newcastle - Callaghan, <https://bit.ly/2LmooJ2>

Indicative ATAR: 70.50.

Special selection procedures apply for Aboriginal and Torres Strait Islander applicants.

For details call (02) 4921 6863

Assumed Knowledge: Any two units of English plus Mathematics or Physics.

Practical experience: Travel, accommodation and related expenses for professional placements are the responsibility of students.

“The radiation therapy degree at the University of Newcastle is Australia’s leading study program in the discipline. Our graduates are sought after worldwide, working to eradicate cancer using superb medical competence and the world’s most advanced cancer treatment technology. As a radiation therapist, you can make a real difference in the lives of cancer patients and their families”.

Why study with us?

Our graduates get jobs: 94% employed within four months of graduating.

Hands-on experience: Complete 42 weeks of clinical placements in public and private cancer care hospitals and facilities.

Learn from research leaders: University of Newcastle is a global leader in medical and health science research, keeping you on the forefront of breaking research discoveries.

World-class facilities: Our 3D radiation therapy simulation lab is the first of its kind in Australia, featuring a virtual linear accelerator machine and radiation therapy planning room.

Tick the boxes for professional registration with the Australian Health Practitioner Regulation Agency.



MEDICAL IMAGING | RADIOGRAPHY

RMIT University

Bachelor of Applied Science (Medical Radiations) (Medical Imaging - Radiography)

3-years, Bundoora, <https://bit.ly/2ojmZZf>

Indicative ATAR: 94.45.

Prerequisites: completion of Units 1-2 or Units 3-4 Biology or Chemistry; and minimum study scores of: 30 in English (EAL) or 25 in any other English; and 20 in Mathematical Methods or Specialist Mathematics.

“Medical radiations is a rapidly advancing healthcare discipline involving the application of ionising and non-ionising radiation for the diagnosis and treatment of injury and disease.

You will specialise in Medical Imaging (Radiography) and undertake both common and stream-specific subjects.

Through medical images such as x-rays, MRI and ultrasound, radiographers assist in the diagnosis and care of patients. This course combines knowledge of physical and biomedical sciences with technical expertise and patient care.

You'll spend 42-44 weeks in supervised clinical practice to equip you with current, work-ready skills, and you will gain experience in a range of clinical settings including large public teaching hospitals, small private practices, as well as metropolitan and rural centres”.

Professional accreditation: being assessed for accreditation by the Medical Radiation Practice Board of Australia.

University of Newcastle

Bachelor of Medical Radiation Science (Honours) (Diagnostic Radiography)

4-years, Newcastle - Callaghan, <https://bit.ly/2l4rfDR>

Indicative ATAR: 83.10.

Assumed Knowledge: Any two units of English plus Mathematics or Physics.

“At the University of Newcastle we prepare diagnostic radiography students for a dynamic career using advanced imaging technology. Learn how create medical images to diagnose and manage patient health, combining sophisticated technology and medical expertise to save and improve lives.

Diagnostic radiography is an important first step to diagnosing, treating and managing injuries and disease. Along with pathology, diagnostic radiography is the largest diagnostic test performed. The medical images you will learn to produce will allow patients to be diagnosed accurately, and can directly impact a patient's treatment plan and overall recovery.”

Why study with us?

Our graduates get jobs: 89% employed within four months of graduating (2018 QILT).

Hands-on experience: Complete 42 weeks of clinical placements in public and private centres, preparing you for a successful career in diagnostic radiography.

World-class facilities: Hone your skills using advanced multimodality imaging and post-processing facilities, including CT, MRI, ultrasound, angiography and mammography facilities.

Learn from research leaders keeping you on the forefront of breaking research discoveries.

Tick the boxes for professional registration with the Australian Health Practitioner Regulation Agency.”

MEDICAL IMAGING | RADIOGRAPHY

Deakin University

Bachelor of Medical Imaging

4-years, Geelong Waurn Ponds, <https://bit.ly/2bH6CTJ>

Indicative ATAR: 88.45.

Bachelor of Medical Imaging (Regional Remote),

4-years, Geelong Waurn Ponds. For students from regional backgrounds, <https://bit.ly/32awtIV>

Prerequisites for both courses: minimum study scores of: 30 in English (EAL) or 25 in any other English; 25 in one of Biology, Chemistry or Physics; 22 in Mathematical Methods or Specialist Mathematics or 30 in Further Mathematics.

Course information: “Gain the knowledge and clinical expertise to launch your career as a registered diagnostic radiographer.

Using the latest equipment, you will learn basic x-ray techniques before advancing to more complex medical imaging procedures such as general radiography, digital vascular imaging, mammography, computed tomography (CT), general ultrasound (U/S) and magnetic resonance imaging (MRI).

Clinical placements will be a core part of your study and start in your first year. A clinical placement model has been designed specifically for the course in association with metropolitan, rural and regional hospitals, and medical imaging clinics throughout Australia. You will gain valuable clinical practice in clinical centres and hospitals, as well our state-of-the-art medical imaging training unit, giving you diverse experience and skills.

Take advantage of Deakin’s state-of-the-art facilities. Our medical imaging practical labs replicate real-world medical imaging clinics – two of the main X-ray examination rooms even include ceiling and floor-mounted imaging systems. The medical imaging labs are fully X-ray operational, so you will constantly be preparing yourself for your future with practical knowledge and skills”.

Charles Sturt University

Bachelor of Medical Radiation Science (Diagnostic Radiography)

4-years, Wagga Wagga, Port Macquarie, <https://bit.ly/2G6pKZG>

Indicative ATAR: 65.00.

Assumed knowledge: Physics, Mathematics.

“Become a diagnostic radiographer / medical imaging technologist either in public hospitals or private radiology practices in any state or territory of Australia. You could also apply to work in some overseas countries. Further study and training will set you up for a career in ultrasound or MRI.

With an emphasis on the techniques and equipment used in diagnostic radiography, nuclear medicine and radiation therapy including general radiography, screening, computed tomography (CT), magnetic resonance imaging (MRI), sonography, positron emission tomography (PET), this degree will provide you with a rewarding and fulfilling career.

We are seeking course accreditation so graduates will be eligible to register with the Medical Radiation Practice Board of Australia”.

Professional recognition: The extent of clinical experience in the course means graduates are not required to complete the traditional professional development year, and are eligible for national registration. Graduates will be eligible to register to practice in Australia with the Australian Health Practitioner Registration Agency.

Practical experience: 53 weeks of practical experience in clinical departments in country and metropolitan areas, including a fourth-year residency.

MEDICAL IMAGING | RADIOGRAPHY

University of Sydney

Bachelor of Applied Science (Honours) (Diagnostic Radiography)

4-years, Cumberland and Camperdown,
<https://bit.ly/2ISdvNI>

Indicative ATAR: 95.

Recommended Studies: Mathematical Methods plus one of Biology, Chemistry or Physics.

“Use technology to produce world-class medical imaging and provide excellent patient care. In the Bachelor of Applied Science (Diagnostic Radiography) you will learn to use high tech equipment ranging from small mobile X-ray machines to larger units; from MRI and CT scanners to sophisticated cardiac units, enabling timely and accurate patient diagnoses.

As a diagnostic radiography student, you will learn to work closely with other medical and allied health practitioners and to employ a range of technologies to produce medical images that will, help provide an accurate diagnosis and sound patient care.

Diagnostic radiographers work closely with cardiologists in imaging heart disease, with surgeons during a range of operations, and with emergency doctors in the emergency room.

During this four-year degree, you will develop a comprehensive understanding of radiography including imaging technology, radiographic science and radiographic evaluation.

An essential component of the course is the 48-week clinical education program commencing in the second year of your study, and continuing in the third and fourth year. You will undertake at least one rural or regional (non-metropolitan) clinical placement during the clinical program.”

Professional accreditation: accredited by the Medical Radiation Practice Board of Australia. The current registration conditions for this degree program do not require any period of supervised practice after graduation.

University of Canberra

Bachelor of Medical Radiation Science (Medical Imaging)

3.5-years, Canberra Bruce campus,
<https://bit.ly/33hP7z7>

Indicative ATAR: 77.40.

Assumed knowledge: Biology, Mathematics, Physics.

Other: may be required to participate in an interview.

“Diagnostic radiography is a growing field with a unique opportunity to mix technology and patient care in your daily professional activities. If your career goal is to become a qualified diagnostic radiographer, then this course – on successful accreditation by the Medical Radiation Practice Board of Australia (MRPBA) – will enable you to gain registration as one, for employment in both public hospitals and private radiology practices nationally and internationally.

Packed with Work Integrated Learning (WIL) opportunities, the course can include an embedded honours program, meaning you can choose to study the bachelor’s degree on its own for four years, or undertake a research project in your third and fourth year to graduate with Honours.

The Bachelor of Medical Radiation Science (Medical Imaging) is an accelerated four-year degree, completed in 3.5 years. The degree’s accelerated learning program sees classes taught in the winter term and allows you to graduate midway through the year, coming onto the job market earlier than most similar university courses and giving you a definite competitive advantage when it comes to future employment prospects.

Upon graduation, you’ll be able to apply for membership and a Statement of Compliance with the Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) and can explore career opportunities in areas such as general radiography, angiography, mammography, computed tomography (CT), magnetic resonance imaging (MRI) and medical ultrasound.”

Work experience: You’ll undertake two five-week clinical placements during the second year of your studies, and the same in your third year, plus some longer residences too. These will occur across a number of different local and/or national healthcare settings, including regional or rural, large teaching hospital and private practice placements.



MEDICAL ULTRASOUND

CQUniversity

Bachelor of Medical Sonography / Graduate Diploma of Medical Sonography

4-years, Melbourne, <https://bit.ly/2umNDkN>

Indicative ATAR: 80.15.

Prerequisite: Minimum study score of 25 in any English.

Recommended Studies: English, Mathematics Biology, Physics, Science.

“Enhance your employability by studying the Bachelor of Medical Sonography and Graduate Diploma of Medical Sonography – a course that is the first of its kind in Australia and allows you to enter a niche medical profession with no prior degree in health sciences.

Medical Sonographers take diagnostic images using ultrasonic equipment to create still, video or 3D studies of anatomy and diagnostic data. They scan, analyse and modify images to optimize the information and require highly developed patient care and communication skills.

You'll explore abdominal ultrasound, superficial parts, obstetrics and gynaecology, vascular studies, musculoskeletal ultrasound and paediatrics”.

Why choose Medical Sonography at CQUni?

- Australia's only four-year combined undergraduate/postgraduate course.
- Fully competent to perform all types of ultrasound (except echocardiography)
- Extensive clinical experience, placed by CQUniversity
- State of the art, purpose-built training environments for real-world simulation
- Australian Sonographer Accreditation Regulatory (ASAR) accredited.

Charles Sturt University

Graduate Diploma of Medical Ultrasound

1-year full time, online, <https://bit.ly/2IYwLMv>

Entry Requirements: Applicants will:

- hold a medical radiation science, allied health, nursing or medical degree.
- provide evidence that they have access to a clinical ultrasound department under the supervision of an ASAR (Australasian Sonographers Accreditation Registry) accredited sonographer for at least 3 days per week the duration of the course.

Why study at CSU?

Comprehensive program: Beginning with foundational studies in clinical sectional anatomy and the physics and instrumentation of modern ultrasound, you will progress to specialised subjects in abdominal and pelvic, musculo-skeletal, obstetric, vascular, and small parts and paediatric ultrasound.

Reputation for excellence: CSU is a leading provider of medical imaging practitioners in Australia, preparing sonographers, radiographers and nuclear medicine technologists through the School of Dentistry and Health Sciences. We maintain strong industry alliances to ensure you gain up-to-date knowledge and skills on which to build your career.

Supportive study environment: This degree combines the convenience of online study with the acquisition of professional practical skills. As well as having individual access to a range of online study materials and tools, you will experience the benefits of group-based learning and forge professional connections that will extend well beyond your studies.

Career opportunities: Charles Sturt University's Graduate Diploma of Medical Ultrasound prepares you to practise as a sonographer in hospitals, clinics and community healthcare settings. Your job prospects are excellent, as qualified sonographers are currently in high demand across Australia.

MEDICAL ULTRASOUND

University of Canberra

Graduate Diploma of Medical Ultrasound

2-years part-time, Canberra - Bruce,
<https://bit.ly/2s3ZBBq>

Entry requirements: Applicants must meet the following criteria:

- A completed bachelor degree in medical radiation science or a completed bachelor degree in any field and successful completion of at least two units of degree level anatomy and physiology.
- This course requires the completion of 2200 hours of supervised ultrasound experience under the supervision of an Australian Sonographer Accreditation Registry (ASAR) accredited sonographer. Applicants are responsible for organising their own training position, however for non-medical imaging applicant's early skill development will be provided to assist in finding a suitable training position.

“Use sound waves to penetrate soft tissue and learn how to diagnose a wide range of medical and health conditions with the 2-year, part-time Graduate Diploma in Medical Ultrasound course.

As one of only two courses of its type available in NSW and ACT, this course will teach you the principles of ultrasound technology and give you the skills to be proficient in a range of examination practices including abdominal, paediatric and musculoskeletal.

This course focuses heavily on interactive learning and offers a variety of study modes available to help prepare students (from both medical and non-medical backgrounds), for a career in a public or private hospital radiology practice; or in a community healthcare service.

Note: There is currently a severe shortage of trained and qualified Medical Ultrasound graduates and as such students should have no problems securing long-term work options on completion of this course”.



PHARMACY

La Trobe University

Bachelor of Pharmacy (Honours)

4-years, Bendigo, <https://bit.ly/2HrE7Zd>

Indicative ATAR: 87.30.

Prerequisites: minimum study scores of: 30 in English (EAL) or 25 in any other English; 25 in Chemistry; and 25 in any Mathematics.

Regional Benefits Program: guaranteed entry and a scholarship of up to \$5000 per year with an ATAR of 80 and above, (for regional students applying to study at a regional campus), <https://bit.ly/2IDU9h5>

“This degree develops your understanding of how medicines impact, improve and change people's lives. You'll gain knowledge of our healthcare system and how pharmacists support patient care.

Based in Bendigo, you'll have access to our on-campus training pharmacy, where you'll practise patient communication skills and learn how to work as the link between medical practitioners and the public.

In the first two years of your course you'll study science fundamentals along with introductory pharmacy practice subjects.

For the remaining two years, you'll focus on specific pharmacy subjects such as legislation and practice, therapeutics, complementary medicine and the quality use of medicines.

You'll also examine public health issues in rural and remote Australia, and graduate with an Honours level degree.

During your degree, you'll participate in a range of community and hospital placements where you'll develop practical pharmacy skills.

La Trobe University students have won the Victorian Pharmacy Student of the Year competition six times in the last seven years”.

RMIT University

Bachelor of Pharmacy (Honours)

4-years, Bundoora, <https://bit.ly/2uwtBpm>

Indicative ATAR: 78.80.

Prerequisites: minimum study scores of: 30 in English (EAL) or 25 in any other English; 25 in Chemistry; and 25 in any Mathematics.

“This four-year program is your first step to becoming a pharmacist. It prepares you for the one-year internship program that you need to successfully complete in order to gain Australia-wide registration.

Once you've successfully completed the program and the internship, you can practise in any area of pharmacy in Australia, including community or hospital pharmacy.

As an RMIT pharmacy student you'll benefit from a supportive academic community with diverse research strengths. You'll be able to gain real-world experience through work placements in both hospital and community pharmacies.

You'll develop a sound scientific base in studies that include biochemistry, biostatistics, human biology, genetics, microbiology, immunology and cell biology.

In-depth knowledge of pharmacology, pharmacy practice, pharmaceuticals and therapeutics is gained along with an understanding of drug development, clinical trials, regulatory affairs and pharmacovigilance.

Clinical placement is a key focus throughout this program. Teaching labs are equipped with the latest pharmacy facilities.

You'll begin to develop the skills of a pharmacy practitioner in the purpose-built model pharmacy, together with practical work experience in hospital, community and specialist work-integrated learning environments.

The program is taught by experienced professionals skilled in cutting-edge research and sessional staff with current industry experience”.

PHARMACY

University of Canberra

Entry point 1: undergraduate pathway

Bachelor of Pharmacy: 4-years, Canberra, <https://bit.ly/32l5dl2>

Indicative ATAR: 74.15.

Assumed Knowledge: any Mathematics, Chemistry, Health and Human Development, Biology, Physics.

“This four-year undergraduate degree incorporates lectures, practicals, tutorials, and Pharmacy-specific work experience placements. These placements will include a range of practice settings in public hospitals and community pharmacies in the ACT and region, around Australia, or in our own Faculty of Health student-led clinics.

Students will acquire foundation knowledge and skills in basic and life sciences and learn how to apply this to the clinical reasoning, treatment and evaluation skills required by a pharmacist. The curriculum is evidence based and research led.

The University of Canberra provides a contemporary pharmacy program with smaller class sizes to facilitate individual learning and relevant professional experiences. Academics provide supportive academic leadership informed by their currency of clinical practice.”

Entry point 2: graduate pathway

Master of Pharmacy, 2-years, Canberra, <https://bit.ly/2B7ub1q>

Selection criteria: for detailed information on entry requirements, see the link above.

University of Tasmania

Bachelor of Pharmacy with Applied Honours

4-years, Hobart, <https://bit.ly/2o6qHJC>

Indicative ATAR: 80.

Prerequisites: Chemistry, Mathematics (any).
Recommended: Mathematical Methods, Biology.

Note: students starting the course in semester 2 will be required to have completed Unit 3-4 Biology.

“The pharmacy degree at the University of Tasmania is a professionally accredited program, providing you with specialist skills and expertise in the basic and clinical pharmaceutical sciences.

This is complemented by hands-on experience through professional experience placements, which help you gain the skills and attitudes required to become a registered pharmacist in Australia.

Pharmacists play a central part in primary health care teams. Working alongside doctors, nurses and other healthcare professionals, they're essential in helping people manage their health.

As a pharmacy student you will study various topics influencing human health such as:

- the role of a pharmacist
- how medications and their dosages are made
- how medications work in the human body
- using medications and other means to prevent and manage medical conditions.”

Scholarship: A \$6000 relocation bursary may available to students relocating to UTAS, <https://bit.ly/33z3kY1>

Graduate employment: 100% of Bachelor of Pharmacy students from the University of Tasmania gained full-time employment within four months of graduating. Source: Good Universities Guide 2008.



BIOMEDICINE

Australia Catholic University

Bachelor of Biomedical Science

3-years, Melbourne, <https://bit.ly/2J39XN9>

Indicative ATAR: 58.70.

Prerequisites: minimum study scores of: 30 in English (EAL) or 25 in any other English; and 25 in any Mathematics.

Combined degree options: applicants can apply to combine the Bachelor of Biomedicine with one of the following degrees:

- Bachelor of Applied Public Health
- Bachelor of Business Administration
- Bachelor of Laws

Course options: “The Bachelor of Biomedical Science is a professional degree in a discipline at the forefront of research into human health, disease and drug development.

Bachelor of Biomedical Science graduates need to demonstrate a well-developed understanding of the biomedical science sub-disciplines to enable them to undertake values driven problem solving.

Application of their knowledge, understanding and skills to local and global issues must attend to both First Peoples and Western perspectives, and these aspects are embedded within specified biomedical science units in all years.

Employers are seeking students with recognised transferable skills (e.g. team work, communication skills, problem-solving ability, and care for others) and the Biomedical Science degree at ACU integrates development of these skills into its units, driving the development of graduates with a high emotional intelligence, adaptability and resilience.

Students undertake specified units in years 1 and 2 of the degree, year 3 of the program provides some flexibility in terms of industry-based placements and elective units.”

Deakin University

Bachelor of Biomedical Science

3-years, <https://bit.ly/2W49c9m>

Indicative ATARs: Melbourne Burwood – 80.15, Geelong Waurn Ponds – 72.50.

Prerequisites: minimum study score of 25 in English (EAL) or 20 in any other English.

Specialisations: students can choose from the following major options:

- Environmental Health
- Infection and Immunity
- Medical Biotechnology
- Medical Genomics
- Molecular Life Sciences
- Pharmaceutical Science

Course information: “Expertise in biology and the science behind disease puts you in a position to make a real difference in people’s lives. Explore early diagnosis, the development of products that treat disease or play a role in policy that improves public health.

Through your specialisation and work placement you will learn more about the biomedical science topics that matter to you, get more out of your qualification and enhance your employability once you graduate.

Everything you learn through this course is supported by practical and authentic experiences.

Work experience: You will obtain crucial industry experience through 80 to 160 hours of work placement.

Careers: Graduates can confidently enter a range of health-related areas including:

- medical research
- genetic engineering
- the pharmaceutical industry
- pharmaceutical/medical sales
- laboratory technology.

You can also advance to honours or postgraduate studies, either in more specialised areas of biomedical science, or in other disciplines including medicine.

BIOMEDICINE

Federation University

Bachelor of Biomedical Science

3-years, <https://bit.ly/2BnSPuK>

Indicative ATARs: Berwick – 50.04, Gippsland – NP, Mount Helen (Ballarat) – 52.75, off-campus – NP.

Guaranteed entry: Applicants who achieve an ATAR of 60+ and meet entry requirements will be guaranteed a place in this course.

Prerequisites: minimum study scores of: 20 in any English and 20 in any mathematics or any science.

High Achievers Scholarship: Earn an ATAR of 80+ and you will be eligible for a FedUni High Achievers Scholarship, <https://bit.ly/2CtBONy>

Course information: “Biomedicine is an exciting area that plays a major role in helping people lead healthier lives. It’s an industry that is constantly evolving.

You’ll learn about anatomy, pathophysiology, genetic sciences and can go on to work in areas like genome biology, genetic mapping, stem cell research and biological pharmaceuticals. Studies range from lifespan nutrition, to food microbiology, metabolism to applied biochemistry.”

Industry experience: Domestic students may apply for the Industry Placement Program which offers up to 26 weeks of industry-based experience. IPP students receive a scholarship payment of up to \$15,000.

Careers: When you graduate, you’ll be prepared for a career in biomedical research or one of many positions in a range of health-related industries such as laboratory technology, medical sales, research and pharmaceuticals.

This degree has been used as a pathway to postgraduate studies in medicine, physiotherapy, dentistry, pharmacy and other allied health programs, as well as veterinary science.

La Trobe University

All courses listed below:

Course information, <https://bit.ly/2GJrYJN>

Prerequisites: minimum study score of 30 in English (EAL) or 25 in any other English.

Bachelor of Biomedical Science, 3-years. Indicative ATARs, Albury-Wodonga – 66.20 and Bendigo – 61.45.

Regional Benefits Program: guaranteed entry and a scholarship of up to \$5000 per year with an ATAR of 80 and above, (for regional students applying to study at a regional campus), <https://bit.ly/2IDU9h5>

Bachelor of Biomedical Science (Medical), 3-years. Minimum ATAR requirement – 85+. Albury-Wodonga and Bendigo. Range of selection criteria for entry. This course provides a pathway to graduate medicine at The University of Melbourne for eligible students.

Bachelor of Biomedicine, 3-years. Indicative ATAR, Melbourne Bundoora – 65.70.

Combined degree options: applicants can apply to combine the Bachelor of Biomedicine with one of the following degrees:

- Bachelor of Commerce
- Bachelor of Law
- Bachelor of Biomedicine/Master of Clinical Audiology (course package)

Careers: once you graduate you'll be well prepared for diverse roles around the world in areas including education, medical sales, administration and media and communications, in biomedical, biotechnology and pharmaceutical industries, as well as in hospitals and government departments.

If you choose to pursue further study, you may find employment in fields including: data science, dietetics, orthoptics, physiotherapy and speech pathology.

This degree can also lead you into postgraduate research and postgraduate studies in dentistry and medicine.

BIOMEDICINE

RMIT University

Bachelor of Biomedical Science

3-years, Bundoora, <https://bit.ly/2Ggz4Wp>

Indicative ATAR: 70.40.

Prerequisites: minimum study scores of 30 in English (EAL) or 25 in any other English; 20 in Chemistry; and 20 in Physics or any Mathematics.

Students can apply to combine this degree with the Bachelor of Science (Biotechnology).

Course information: In this flexible program, you'll develop a broad understanding of human anatomy, physiology and pathology from cellular to systems level. Biomedical science forms the basis of our understanding of how human and animal bodies function, and the responses of the body to various diseases, exercise, diet, internal disturbances and environmental influences.

Specialisations and electives: You'll be able to choose electives to suit your interests. In year two, depending on your area of specialisation, you may choose electives in microbiology or histology. In year three, you have a choice of studying molecular biology, biochemistry, cell biology, anatomy, advanced physiology, pathology or microbiology.

Work experience: During third year you'll gain experience in a university research laboratory or a professional organisation. With associated coursework, this runs for 120 hours. You'll work in research and analytical laboratories in universities, hospitals and industry.

Careers: This degree can lead you to work in leading fields like genetic engineering, cancer research, neuroscience, DNA profile and stem cell research. Graduates can work in:

- research in universities, hospitals and biomedical research institutes
- medical and pharmaceutical research
- public and private diagnostic centres
- therapeutic research laboratories
- applied health areas like health promotion and administration.

The program is an ideal preparation for graduate entry into health sciences programs such as medicine, physiotherapy, and dentistry.

Swinburne University

Bachelor of Health Science (major in Biomedical Science)

3-years, Hawthorn, <https://bit.ly/2BDsusR>

Indicative ATAR: 60.00.

Prerequisites: minimum study score of 30 in English (EAL) or 25 in any other English.

Explore biology, medicine, disease, chemistry and physiology to form a comprehensive understanding of the health of humans. You will learn skills to investigate and understand human biology, and gain the ability to critically analyse and interpret biomedical and scientific data.

Combined degrees: Students can apply to combine the Bachelor of Health Science with one of the following degrees: Arts, Business, Media Communication or Science.

Specialisations: Students can apply to study a second major from the following list:

- Clinical Technologies
- Digital Health and Informatics
- Health Promotion
- Neuroscience
- Nutrition

Alternatively, they can also choose from 1 of 24 co-majors including Biotechnology and Psychology.

Bachelor of Health Science (Professional) (major in Biomedicine)

4-years, Hawthorn, <https://bit.ly/2nJIMtj>

Indicative ATAR: 80.00+

Same course as above, but students will undertake 12-months of paid industry experience.

Students won't be able to access a second major, but will be able to access one minor from the following list: Biotechnology, Chemistry, Digital Health and Informatics, Global Studies, Neuroscience, Health Statistics, Indigenous Studies, Innovation, Nutrition.

BIOMEDICINE

The University of Melbourne

Bachelor of Biomedicine

3-years, Parkville, <https://bit.ly/2H5BKZU>

Minimum ATAR: general entry – 94. Chancellor’s Scholars – 99.90. Access Melbourne Guaranteed Entry – 2021 information is yet to be released.

Prerequisites: minimum study scores of: 30 in English (EAL) or 25 in any other English; 25 in Chemistry; and 25 in Mathematical Methods or Specialist Mathematics.

Specialisations: The following majors are offered in the Bachelor of Biomedicine:

- Biochemistry and Molecular Biology
- Bioengineering Systems
- Biotechnology
- Cell and Developmental Biology
- Genetics
- Human Nutrition
- Human Structure and Function
- Immunology
- Microbiology and Immunology
- Neuroscience
- Pathology
- Physiology
- Psychology

Course information: Are you interested in discovering the next generation of treatments to help improve the health of your community?

Does the science behind what creates, sustains and threatens people’s lives intrigue you? Can you see yourself studying and working in the largest biomedical precinct in the southern hemisphere?

Whether you want to pursue a career in medicine, professional health, biomedical research or another pursuit – a Bachelor of Biomedicine can take you there.

Biomedicine precinct: Imagine studying or working in the largest biomedical precinct in the southern hemisphere. More than 40 hospitals, research, teaching and biotechnology organisations surround the School of Biomedical Sciences – making it a highly sought-after base for global biomedical leaders.

The School is actively engaged with industry in a variety of ways and has its own Industry Advisory Board.

Victoria University

Bachelor of Biomedicine

3-years, Footscray Park, St Albans, <https://bit.ly/2etdwdZ>

Indicative ATARs: Footscray Park - 82.55, St Albans – NP.

Prerequisites: minimum study scores of: 30 in English (EAL) or 25 in any other English; and 25 in two of the following – Biology, Chemistry, Physics or any Mathematics.

Specialisations: The following minors are offered in the Bachelor of Biomedicine:

- Health and Nutrition
- Integrative Physiology
- Immunopharmacology
- The Entrepreneurial Mindset.

Bachelor of Biomedical Science

3-years, St Albans, <https://bit.ly/2ptNYBM>

Indicative ATAR: NP.

Prerequisites: minimum study scores of: 25 in English (EAL) or 20 in any other English; and 20 in one of the following – Biology, Chemistry, Health & Human Development, Physical Education or any Mathematics.

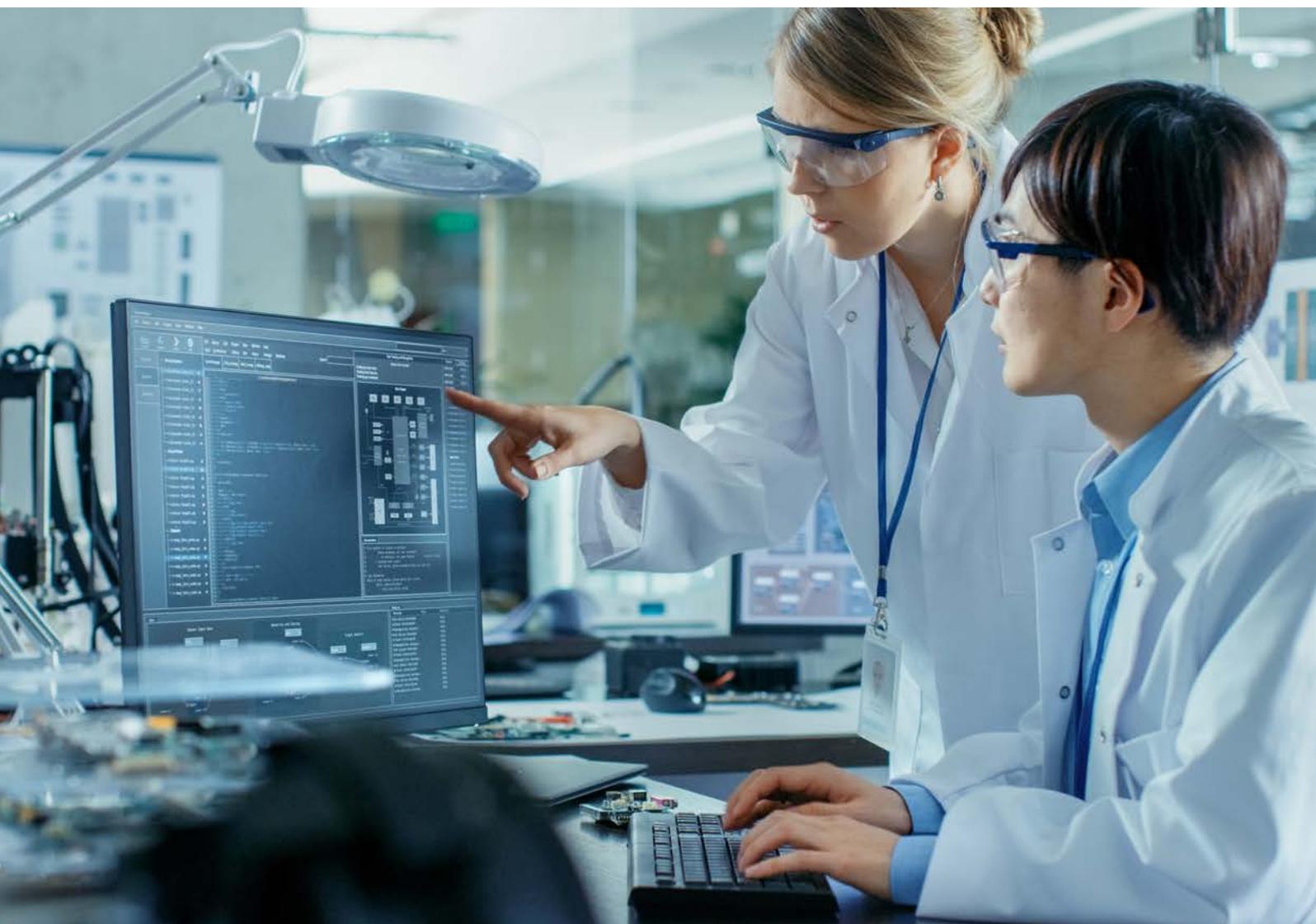
Specialisations: The following majors are offered in the Bachelor of Biomedical Science:

- Human Physiology
- Molecular Cell Biology

And the following minors:

- Anatomy and Integrated Physiology
- Molecular Cell Biology
- Applied Research

VU Block Learning Model: learn about the unique way students learn at Victoria University, <https://bit.ly/2lrgld>



MEDICAL LABORATORY MEDICINE

RMIT University

Bachelor of Biomedical Science (Laboratory Medicine)

4-years, Bundoora, <https://bit.ly/2Ggz4Wp>

Indicative ATAR: 75.25.

Prerequisites: minimum study scores of 30 in English (EAL) or 25 in any other English; 20 in either Chemistry or Biology; and 20 in Physics or any Mathematics.

Course information: Medical laboratory scientists play a critical role in the diagnosis and treatment of disease, working as part of a team with doctors, pathologists, scientists, technicians and laboratory assistants.

The Bachelor of Biomedical Science (Laboratory Medicine) is a four-year program with a clinical placement providing you with work-ready skills and experience in diagnostic pathology.

RMIT is the only Victorian university to offer all of the following majors including haematology, transfusions and transplantation science, anatomical pathology, medical microbiology and clinical biochemistry.

You'll have flexibility in choosing your major disciplines and will also complete a major clinical placement, providing you with work-ready skills and practical experience.

In your final year, you'll have the opportunity to study a discipline-focused laboratory medicine project to develop your research skills. Graduates are qualified as medical scientists and play a vital role in the healthcare system.

Work experience: You'll undertake two semesters of supervised professional practice clinical placement across your third and fourth years to give you work-ready skills and experience in a diagnostic pathway. You may have the opportunity to travel overseas and undertake 10 to 13 weeks of professional practice in an approved laboratory. Destination countries include the UK, the US, Ireland, Singapore, Korea and Sweden.

Professional accreditation: only degree in Victoria that is professionally accredited by the Australian Institute of Medical Scientists (AIMS). You'll be eligible for membership of the New Zealand Institute of Medical Laboratory Science and the American Society for Clinical Laboratory Science.

University of Tasmania

Bachelor of Laboratory Medicine

3.5-years, Launceston, <https://bit.ly/2pE51Fa>

Indicative ATAR: 75.00.

Prerequisites: any Mathematics and Chemistry (bridging courses available).

The Bachelor of Laboratory Medicine is the perfect degree for anyone looking to work in specialised medical or pathology laboratories.

The three and half year course consists of six semesters of on-campus study, plus a seventh semester of clinical placement in an accredited lab in Australia.

This program is structured to build your knowledge in chemistry, anatomy, physiology, histology, immunology, cell and molecular biology, biochemistry, haematology, clinical biochemistry and medical microbiology.

With this knowledge, you'll be ready to work in diagnostic pathology or medical research laboratories, and start making your own contributions to the medical science field.

On graduation you will be ready to undertake an exciting career at the forefront of laboratory medicine. The opportunities are broad, including roles with diagnostic pathology labs – both public and private facilities, or within the medical research field.

This degree can also be used to launch a career in medical research, veterinary laboratories, diagnostic and pharmaceutical companies or health management.

Work experience: During the final semester of this course, you will participate in a Professional Experience Placement (PEP). This clinical placement is undertaken off campus in an accredited diagnostic pathology laboratory, where you will develop practical laboratory skills and contribute to patient healthcare via diagnostic techniques within the laboratory.

Professional accreditation: this course is accredited by the Australian Institute of Medical Scientists (AIMS).