

RADIATION THERAPY

University courses - Victoria & NSW

CAREERS DEPARTMENT, MAY 2024



Catholic College
Wodonga *Life in Jesus*



Introduction

This document has been developed to assist domestic Year 12 students and their families in researching radiation therapy courses in Victoria and New South Wales. Information is relevant for the 2025 intake. Please use entry requirements and indicative selection ranks listed in this document as a guide only and check university websites for up-to-date information.

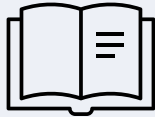
Disclaimer: Information has been taken from university websites. Universities featured in this guide reserve the right to change course information, admissions, and entry requirements at any time and without notice. Note: photos in this document are stock images and aren't representative of students at the universities.

Written by Sandie McKoy, May 2024



Selection Ranks

Please use indicative ATARs and Selection Ranks as a guide as they may change for future intakes.



English prerequisite

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



Undergraduate

This is usually your first course at university. For example - bachelor's degree.



Graduate

This is study you do once you have graduated from a bachelor's degree. For example - master's degree.

Course Summary

VICTORIA

University	Course	Campus	Lowest 2024 Selection Rank
RMIT University	Bachelor of Applied Science (Medical Radiations) (Radiation Therapy)	Bundoora	76.30
Monash University	Master of Radiation Therapy	Off campus	N/A

NEW SOUTH WALES

University	Course	Campus	Selection Rank
Charles Sturt University	Bachelor of Medical Radiation Science	Wagga Wagga Port Macquarie	65.00
University of Newcastle	Bachelor of Medical Radiation Science (Honours) (Radiation Therapy)	Newcastle - Callaghan	71.00

This information is for courses in Victoria and New South Wales.

HOW TO BECOME A RADIATION THERAPIST

STEP 1: Secondary school studies

Study subjects such as physics, biology, advanced mathematics, and chemistry. Achieve a competitive ATAR.

STEP 2: complete an accredited undergraduate or graduate entry degree at one of the following universities:

Victoria

RMIT University
Monash University

New South Wales

Charles Sturt University
University of Newcastle

You will need to meet English language requirements, inherent requirements (e.g., communication skills), and academic entry requirements for course admission.

You may also be required to get or prove you have certain immunisations, and get a Police Record Check and Working with Children Check.

STEP 3: Registration

Apply to register with the Medical Radiation Practice Board of Australia (MRPBA) in the Radiation Therapy division of practice, www.medicalradiationpracticeboard.gov.au

STEP 4: Employment

Use job search websites to find employment. You can work anywhere in Australia.

STEP 5: Renew your registration each year

Renew your registration each year and ensure you meet the registration standards (i.e., continuing professional development hours, professional indemnity insurance).



IS RADIATION THERAPY FOR YOU?

Are you a tech-savvy individual with a heart of gold and a passion for making a difference in people's lives? Do you enjoy paying attention to detail, communicating with others, and handling unexpected challenges with ease? If so, you might be a perfect fit for the world of radiation therapy!

As a radiation therapist, you'll be working with cutting-edge medical equipment, delivering precise doses of radiation to target cancerous tumours and other medical conditions. You'll need to have sharp technical skills and the ability to adapt to new situations quickly, as every patient and every case is unique.

But that's not all – you'll also need to have a compassionate and caring nature, as you'll be working with patients who are going through a difficult time in their lives. Your excellent communication skills and emotional resilience will come in handy as you help patients understand their treatment plan and support them through the ups and downs of their cancer journey.

IMPORTANT THINGS TO CONSIDER

Like any profession, being a radiation therapist has its challenges and downsides. Here are some potential downsides to consider:

Emotional toll: Radiation therapy can be emotionally taxing, as you may be working with patients who are undergoing treatment for cancer or other serious medical conditions. Seeing patients struggle or suffer can be difficult for some individuals.

Physical demands: Radiation therapists may be required to stand for long periods of time and lift heavy equipment, which can be physically demanding.

Exposure to radiation: Radiation therapists may be exposed to radiation during treatment delivery, which requires strict adherence to safety protocols and protective equipment.

Work hours: Radiation therapists may be required to work irregular hours, including evenings, weekends, and holidays, to accommodate patients' treatment schedules.

Burnout: Like many healthcare professions, radiation therapy can be demanding and stressful, which can lead to burnout and job dissatisfaction.

It's important to weigh the potential downsides against the benefits of working in this field and decide if radiation therapy is the right career choice for you. Speaking with practicing radiation therapists and doing some research can help you get a better understanding of what the job entails and if it's the right fit for you.

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

RMIT is the only Victorian university offering a multidisciplinary approach to medical radiations, with the option to study all medical radiations disciplines at degree level. 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.

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

They use highly sophisticated equipment to determine treatment plans and deliver radiation to the target, whilst minimising dose to the surrounding healthy tissue and organs.

Clinical practice

Clinical practice is a major focus of this degree. You'll undertake work placement in each year of the degree, spending a total of 49 weeks over the 3.5 years.

You'll gain experience in a range of clinical settings including large public teaching hospitals, small private practices, as well as metropolitan and rural centres.

You'll gain experience in a range of clinical settings including large public teaching hospitals, small private practices, as well as metropolitan and rural centres.

You'll study in facilities with the latest medical radiations and IT equipment. This includes a VERT - Virtual Environment of Radiation Treatment Room. Through captivating 3D views and life-size visualisations, VERT offers radiation therapy students a unique platform in which to learn.

Professional accreditation

This program has been accredited with conditions by the Medical Radiation Practice Accreditation Committee (MRPAC). From 2023, graduates of the program are eligible to apply for general registration as a medical radiation practitioner with the Medical Radiations Practice Board of Australia

Selection Rank Adjustments

If eligible, RMIT will add adjustment factors to your VCE aggregate to recalculate your ATAR and boost your [selection rank](#) for entry into their courses. Adjustment factors are calculated from [initiatives](#) such as the following:

- subject bonus points
- regional adjustments, and
- educational disadvantage.

Read about the above programs via this [link](#).

Note - if you're eligible for multiple initiatives, the maximum aggregate adjustments you can be awarded is 28.

First year subjects

The following are the first-year subjects for the 2024 intake and may change for future intakes:

Semester 1

- Medical Radiations Physics 1
- Foundations of Professional Practice
- Introduction to Human Biosciences
- Radiation Therapy 1.

Semester 2

- Medical Radiations Physics 2
- Systems Physiology
- Radiation Therapy 2
- Research in Health Science.

How to apply

Apply via the [Victorian Tertiary Admissions Centre](#). Applications will open for Year 12 students on 29 July 2024.

Indigenous Access Program

If you identify as Aboriginal and/or Torres Strait Islander through VTAC, you will be invited by the Ngarara Willim Centre at RMIT to take part in an interview. You may receive an offer based on your potential to succeed. Click [here](#).

Course information

Click [here](#).

Course	Prerequisites	Campus
Bachelor of Applied Science (Medical Radiations) (Radiation Therapy) 3.5-years (FT or PT equivalent)	Units 3+4: minimum study score of 30 in English (EAL) or 25 in any other English. Units 3+4: minimum study score of 20 in Mathematical Methods or Specialist Mathematics. Completion of Units 1 and 2 or Units 3 and 4 Biology or Chemistry.	Bundoora

Master of Radiation Therapy

Monash offers an accredited graduate entry radiation therapy degree at the master's level. The entry requirements are listed below:

Entry requirements

Complete an Australian bachelor degree (or equivalent) in science or health science including study of human anatomy and physiology with an average WAM of 65%.

Applicants must also have passed Year 12 Physics or higher or an equivalent bridging course.

Undertake a Mandatory Clinical Visit to a Radiation Therapy Centre or Participate in a Radiation Therapy Webinar and virtual tour organised by Monash University or a Radiation Oncology Centre.

Information on the Master of Radiation Therapy

The Master of Radiation Therapy is designed for those with a degree in science or a related health discipline wishing to become a registered Radiation Therapist.

You will gain knowledge and understanding of the scientific concepts and principles underpinning medical radiations science practice including optimisation of equipment, quality assurance and the biological consequences of ionising and non-ionising medical radiations. This is the only distance learning graduate entry radiation therapy program offered in Australia.

Clinical experience

Continuous clinical attachments are a key feature of the course and as such your clinical hours will be greater compared to other entry to practice Radiation Therapy courses. Placements are available to you in large teaching hospitals and private practices to ensure you gain the best opportunities. Placements are also available in rural settings and interstate.

Professional accreditation

The Master of Radiation Therapy is accredited by the Medical Radiation Practice Board of Australia (Australian Health Practitioners Regulation Agency (AHPRA)). Upon successful completion of the program, graduates are eligible to apply for general (full) registration as a radiation therapist from the Medical Radiation Practice Board of Australia (subject to English language requirements).

Suggested undergraduate course

Bachelor of Radiation Sciences

Applicants who complete the 3-year Bachelor of Radiation Sciences with a specialisation in Radiation Sciences will be able to transition Master of Radiation Therapy with 4 units of credit. This will reduce the length of the course from 2-years to 1.5-years..

How to apply

Apply for the Bachelor degree via the [Victorian Tertiary Admissions Centre](#). Applications will open for Year 12 students on 29 July 2024.

Course information

Click [here](#).

Course	Prerequisites	Campus
Master of Radiation Therapy 2-years (FT or PT equivalent)	Selection criteria .	Off campus
Bachelor of Radiation Sciences 3-years (FT or PT equivalent)	Units 3+4: minimum study score of 27 in English (EAL) or 25 in any other English. Units 3+4: minimum study score of 25 in Mathematical Methods or Specialist Mathematics.	Clayton
Bachelor of Radiation Sciences (Indigenous Entry) 3-years (FT or PT equivalent)	As above	Clayton

Bachelor of Medical Radiation Science

Explore a career as a radiation therapist in public hospitals or private radiation oncology practices in any state of Australia, as well as overseas.

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.

In this specialisation, you'll use advanced computer software to design treatments for cancer patients. Then you'll engage advanced technologies to implement treatment plans. With further studies, you can branch out and specialise in areas such as tomotherapy and IMRT.

Clinical experience

Students will undertake practical experience in clinical departments in country and metropolitan areas, including a fourth-year residency.

Professional accreditation

This course is accredited with the Medical Radiation Practice Board of Australia.

Course	Assumed knowledge	Campus
Bachelor of Medical Radiation Science	Advanced Mathematics Physics.	Wagga Wagga Port Macquarie

Admission programs

Includes information on pathway programs such as the Charles Sturt University Preparation Certificate. Click [here](#).

Early entry programs

Charles Sturt Advantage.
Schools Recommendation Scheme.

Pathway option

The following is an example of a pathway into the Bachelor of Medical Radiation Science (Radiation Therapy).

STEP 1

Complete the Charles Sturt [Undergraduate Certificate in University Preparation](#). You will complete four online university subjects either full time over one semester or part time over a year.

STEP 2

Apply for the Bachelor of Medical Radiation Science. You will be guaranteed entry into the course provided you meet English language requirements.

First Year Subjects

The following are the first-year subjects for the 2024 intake and may change for future intakes:

Semester 1

Professional Fundamentals
Indigenous Australian Health
General Physics
Human Bioscience 1

Semester 2

Introductory Medical Radiation Science
Health Psychology
Physics for Medical Radiation Science
Human Bioscience 2.

How to apply

Step 1: apply direct to the University via the [Charles Sturt Advantage \(Early Offer\)](#) program. Applications close 31 August. Selection is based on Year 11 results and your answers to a soft skills assessment.

Step 2: apply for the course via the [Universities Admissions Centre \(UAC\)](#). Applications open for Victorian students in August. Selection is based on your Year 12 results.

Step 3: submit an application for the [Schools Recommendation Scheme](#) via UAC. Selection is based on Year 11 results and your school's ratings of your aptitudes. Applications open for Victorian students in August.

Course information

Click [here](#).

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

This is Australia's leading study program in Medical Radiation Science (Radiation Therapy). You'll be 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.

You'll use sophisticated radiation technology to treat cancer cells and treat tumours – allowing cancer to be managed and cured. Our leading experts will teach you about using radiation therapy as the primary treatment or alongside surgery or chemotherapy.

During your degree you will have access to the latest technologies through placement opportunities and on campus in our world-class, purpose-built, Global Centre of Research and Training in Radiation Oncology (GC-RTRO).

This teaching space is the first of its kind in Australia. You'll train alongside clinical experts, advanced practice clinicians, industry partners and providers, and leading researchers in the field. We are a global leader in medical and health science research, keeping students at the forefront of breaking research discoveries.

Clinical experience

You will complete over 40 weeks of clinical placements in public and private cancer care hospitals and facilities.

Professional Accreditation

Once you graduate, you are eligible to apply for registration with the Medical Radiation Practice Board of Australia under the Australian Health Practitioner Regulation Agency.

Career opportunities

You will be qualified to register and work as a radiation therapist and health care professional who use anatomical and functional imaging studies to design courses of treatment for patients with malignant disease. Radiation therapists also use their training and expertise to diversify their career pathways.

Early entry program

Schools Recommendation Scheme. Applications open in August for Victorian students.

Course information

Click [here](#).

First Year Subjects

The following are the first-year subjects for the 2024 intake and may change for future intakes:

Semester 1

Transition to Health Sciences Education and Practice.
Musculoskeletal Anatomy.
Human Bioscience.
Medical Radiation Science 1A.

Semester 2

Neural and Visceral Anatomy.
Basic Radiation Therapy Methods 1B.
Radiation Therapy Professional Practice 1B.
MRS Physics and Radiation Protection.

How to apply

Step 1: apply for the course via the [Universities Admissions Centre \(UAC\)](#). Applications open for Victorian students in August. Selection is based on your Year 12 results.

Step 2: submit an application for the [Schools Recommendation Scheme](#) via UAC. Selection is based on Year 11 results and your school's ratings of your aptitudes. Applications open for Victorian students in August.

Course	Assumed knowledge	Campus
Bachelor of Medical Radiation Science (Honours) (Radiation Therapy)	Advanced Mathematics Physics	Newcastle - Callaghan