Bachelor of Applied Science (Medical Radiations)-medical imaging stream

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.

RMIT has a multidisciplinary approach to medical radiations, providing an opportunity to study all medical radiations disciplines at degree level while allowing you to specialise in one area.

This program allows you specialise in medical imaging. Through medical images such as X-rays, MRI, and ultrasound, radiographers assist in the diagnosis and care of patients. This program combines knowledge of physical and biomedical sciences with technical expertise and patient care.

Clinical practice is a major focus of this program. You’ll undertake work placement in each year of the degree, spending a total of 22 weeks of the three-year degree in supervised clinical practice, making you work ready upon graduation.

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. The program is taught by professionals with current research and industry experience.

Career outlook
Medical radiations graduates work as skilled practitioners in the healthcare sector. You’ll specialise as a diagnostic radiographer.

Radiography or medical imaging includes X-rays, CT scans, digital subtraction angiography, MRI and ultrasound.

Graduates are employed in either the public or private healthcare sectors as diagnostic radiographers.

Graduates can undertake further study in the specialist fields of MRI, CT, ultrasound, position emission topography (PET), and specialist areas in medical imaging.

Industry connections
Industry is involved in the delivery and direction of this program through participation in the program advisory group.

Professional recognition
To practise in Victoria, you must fulfil the criteria for registration by the Medical Radiation Practice Board of Australia (MRPBA).

All program participants will be registered as students with the Australian Health Practitioner Regulation Agency (AHPRA) during the program.

Upon successful completion of this program, you will be eligible to apply for provisional registration through the MRPBA.

You will also be eligible to apply for the Supervised Practice Program that is overseen by the MRPBA. Completion of the Supervised Practice Program is required before you can apply for full accreditation through the MRPBA.

Contact
Info Corner
330 Swanston Street
(cnr La Trobe Street)
Melbourne VIC 3000
Tel. +61 3 9925 2260

rmit.edu.au/programs/bp148
### Program structure

**Year 1**
You’ll study a general introduction to the practice and physical principles of clinical nuclear medicine, radiation therapy and medical imaging. Common courses include anatomy, physiology and the technology and physics of medical radiations. Introduction to research and to the professional streams of medical radiations practice are also taught.

The second semester courses focus on your area of specialisation and you undertake your first clinical placement.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to</strong></td>
<td><strong>Medical Imaging</strong></td>
<td><strong>Medical Imaging</strong></td>
</tr>
<tr>
<td>Medical Radiations</td>
<td>Methods 1</td>
<td>Methods 3</td>
</tr>
<tr>
<td>Technology 1</td>
<td>Practice 1</td>
<td>Technology 3</td>
</tr>
<tr>
<td>Human Structure</td>
<td>Medical Imaging</td>
<td>Medical Imaging</td>
</tr>
<tr>
<td>and Function 1</td>
<td>Technology 2</td>
<td>Technology 2</td>
</tr>
<tr>
<td>University</td>
<td>Introduction to</td>
<td>Imaging Anatomy</td>
</tr>
<tr>
<td>elective</td>
<td>Pathology</td>
<td>and Pathology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Please note:** This is an example of the program structure. Courses may change and may not be available each semester.

### Entrance requirements

Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

**Prerequisites**
Current Year 12 prerequisites units 1 and 2 or units 3 and 4 – Biology or Chemistry, and units 3 and 4 – and a study score of at least 20 in one of Mathematical Methods (CAS) or Specialist Mathematics; and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

**Additional information**

**Working With Children Check:** Students must hold a valid Working With Children Check prior to undertaking the clinical components of this program.

**Police Check:** Students must present evidence of a successful National Police Records Check prior to undertaking the clinical components of this program.

**Inherent requirements:** This program has inherent requirements. These are non-academic abilities you’ll need to complete this program that relate to your physical capacity and behavioural stability. Check the website for a full list of the Bachelor of Applied Science (Medical Radiations) inherent requirements.

---

This information is designed for Australian and New Zealand citizens and permanent residents of Australia.

Disclaimer: Every effort has been made to ensure the information contained in this publication is accurate and current at the date of printing.

For the most up-to-date information, please refer to the RMIT University website before lodging your application. Visit [www.rmit.edu.au](http://www.rmit.edu.au).

Bachelor of Applied Science (Medical Radiations) – nuclear medicine stream

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

RMIT has a multidisciplinary approach to medical radiations, providing an opportunity to study all medical radiations disciplines at degree level while allowing you to specialise in one area.

This program allows you to specialise in nuclear medicine. 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.

Clinical practice is a major focus of this program. You’ll undertake work placement in each year of the degree, spending a total of 22 weeks of the three-year degree in supervised clinical practice, making you work ready upon graduation.

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. The program is taught by professionals with current research and industry experience.

Career outlook
Medical radiations graduates work as skilled practitioners in the healthcare sector. You’ll specialise as a nuclear medicine technologist.

Nuclear medicine technologists work closely with patients and other health professionals in the treatment of disease. They carry out tests, which may include cardiac stress tests to analyse heart function, bone scans for orthopaedic injuries and lung scans for blood clots.

Graduates are employed in either the public or private healthcare sectors as nuclear medicine technologists.

Graduates can undertake further study in the specialist fields of MRI, CT, ultrasound, position emission topography (PET), and specialist areas in nuclear medicine.

Industry connections
Industry is involved in the delivery and direction of this program through participation in the program advisory group.

Professional recognition
To practise in Victoria, you must fulfil the criteria for registration by the Medical Radiation Practice Board of Australia (MRPBA).

All program participants will be registered as students with the Australian Health Practitioner Regulation Agency (AHPRA) during the program.

Upon successful completion of this program, you will be eligible to apply for provisional registration through the MRPBA.

You will also be eligible to apply for the Supervised Practice Program that is overseen by the MRPBA. Completion of the Supervised Practice Program is required before you can apply for full accreditation through the MRPBA.

Program snapshot
- Program code: BP148
- Duration
  - Full-time: 3 years
- Location
  - Bundoora campus
- Selection mode
  - ATAR – Not Published
- How to apply
  - Semester 1: VTAC vatc.edu.au
  - Semester 2: Direct to RMIT rmit.edu.au/programs/apply/direct
- Fees
  - For local fee information: rmit.edu.au/programs/fees
- Contact
  - Info Corner
    - 330 Swanston Street (cnr La Trobe Street)
    - Melbourne VIC 3000
    - Tel. +61 3 9925 2260
  - rmit.edu.au/programs/bp148
### Program structure

**Year 1**
You’ll study a general introduction to the practice and physical principles of clinical nuclear medicine, radiation therapy and medical imaging. Common courses include anatomy, physiology and the technology and physics of medical radiations. Introduction to research and to the professional streams of medical radiations practice are also taught.

The second semester courses focus on your area of specialisation and you undertake your first clinical placement.

<table>
<thead>
<tr>
<th>Year</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>University electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Introduction to Medical Radiations</td>
<td>Medical Radiations Technology 1</td>
<td>Human Structure and Function 1</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Nuclear Medicine Methods 1</td>
<td>Nuclear Medicine Practice 1</td>
<td>Nuclear Medicine Technology 1</td>
<td>Introduction to Pathology</td>
</tr>
<tr>
<td>Year 3</td>
<td>Nuclear Medicine Methods 2</td>
<td>Nuclear Medicine Practice 2</td>
<td>Nuclear Terminology Technology 2</td>
<td>Imaging Anatomy and Pathology</td>
</tr>
</tbody>
</table>

Please note: This is an example of the program structure. Courses may change and may not be available each semester.

### Entrance requirements
Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

### Prerequisites
Current Year 12 prerequisites units 3 and 4 – a study score of at least 20 in one of Mathematical Methods (CAS) or Specialist Mathematics, and Chemistry; and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

### Additional information
**Working With Children Check:** Students must hold a valid Working With Children Check prior to undertaking the clinical components of this program.

**Police Check:** Students must present evidence of a successful National Police Records Check prior to undertaking the clinical components of this program.

**Inherent requirements:** This program has inherent requirements. These are non-academic abilities you’ll need to complete this program that relate to your physical capacity and behavioural stability. Check the website for a full list of the Bachelor of Applied Science (Medical Radiations) inherent requirements.
Bachelor of Applied Science (Medical Radiations) – radiation therapy stream

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

RMIT has a multidisciplinary approach to medical radiations, providing an opportunity to study all medical radiations disciplines at degree level while allowing you to specialise in one area.

This program allows you to specialise in radiation therapy. 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 combine knowledge of the physical and biomedical sciences in order to design and verify appropriate treatment plans, as well as conduct research.

Clinical practice is a major focus of this program. You’ll undertake work placement in each year of the degree, spending a total of 22 weeks of the three-year degree in supervised clinical practice, making you work ready upon graduation.

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 Virtual Environment of Radiation Treatment Room (VERT). Through captivating 3D views and life-size visualisations, VERT offers radiation therapy students a unique platform in which to learn.

The program is taught by professionals with current research and industry experience.

Career outlook
Medical radiations graduates work as skilled practitioners in the healthcare sector. You’ll specialise as a radiation therapist.

Radiation therapy is one of the main treatment options for patients diagnosed with cancer.

Radiation therapists work closely with doctors to design, plan and administer radiation treatment for cancer patients. They use highly sophisticated equipment to work out the dose required for each patient and then deliver the treatment to their patients.

Graduates are employed in either the public or private healthcare sectors as radiation therapists.

Graduates can undertake further study in the specialist fields of MRI, CT, ultrasound, position emission tomography (PET), and specialist areas in radiation therapy.

Industry connections
Industry is involved in the delivery and direction of this program through participation in the program advisory group.

Professional recognition
To practise in Victoria, you must fulfil the criteria for registration by the Medical Radiation Practice Board of Australia (MRPBA).

All program participants will be registered as students with the Australian Health Practitioner Regulation Agency (AHPRA) during the program.

Upon successful completion of this program, you will be eligible to apply for provisional registration through the MRPBA.

You will also be eligible to apply for the Supervised Practice Program that is overseen by the MRPBA. Completion of the Supervised Practice Program is required before you can apply for full accreditation through the MRPBA.
## Program structure

### Year 1
You’ll study a general introduction to the practice and physical principles of clinical nuclear medicine, radiation therapy and medical imaging. Common courses include anatomy, physiology and the technology and physics of medical radiations. Introduction to research and to the professional streams of medical radiations practice are also taught.

The second semester courses focus on your area of specialisation and you undertake your first clinical placement.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Medical Radiations Technology 1</th>
<th>Human Structure and Function 1</th>
<th>University elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Medical Radiations</td>
<td>Medical Radiations Technology 1</td>
<td>Human Structure and Function 1</td>
<td>University elective</td>
</tr>
</tbody>
</table>

### Year 2 and 3
You’ll specialise in radiation therapy.
Common learning modules are also studied and these include imaging anatomy, pathology, hospital law and ethics, psychology and advanced medical physics, and instrumentation.

The third year is designed to explore the complementary nature of the medical radiations disciplines.

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Medical Radiations Technology 1</th>
<th>Human Structure and Function 1</th>
<th>University elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiation Therapy Methods 1</td>
<td>Medical Radiations Technology 1</td>
<td>Human Structure and Function 1</td>
<td>University elective</td>
</tr>
<tr>
<td>Radiation Therapy Methods 2</td>
<td>Medical Radiations Technology 1</td>
<td>Human Structure and Function 1</td>
<td>University elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Medical Radiations Technology 1</th>
<th>Human Structure and Function 1</th>
<th>University elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiation Therapy 3</td>
<td>Medical Radiations Technology 1</td>
<td>Human Structure and Function 1</td>
<td>University elective</td>
</tr>
<tr>
<td>Radiation Therapy 4</td>
<td>Medical Radiations Technology 1</td>
<td>Human Structure and Function 1</td>
<td>University elective</td>
</tr>
</tbody>
</table>

Please note: This is an example of the program structure. Courses may change and may not be available each semester.

### Entrance requirements
Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

### Prerequisites
Current Year 12 prerequisites units 3 and 4 – a study score of at least 20 in one of Mathematical Methods (CAS) or Specialist Mathematics, and Chemistry; and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

### Additional information
**Working With Children Check:** Students must hold a valid Working With Children Check prior to undertaking the clinical components of this program.

**Police Check:** Students must present evidence of a successful National Police Records Check prior to undertaking the clinical components of this program.

**Inherent requirements:** This program has inherent requirements. These are non-academic abilities you’ll need to complete this program that relate to your physical capacity and behavioural stability. Check the website for a full list of the Bachelor of Applied Science (Medical Radiations) inherent requirements.