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 48 weeks of the program 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 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

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

The Accreditation Committee of the Medical Radiation Practice Board of Australia (MRPBA) has advised that it will assess this new program for accreditation during 2020, when the first student cohort is in second year.

Graduates of MRPBA-accredited programs are eligible to apply for registration through the MRPBA – further details on this are available from the MRPBA and AHPRA websites.

Program code: BP321

Duration

Full-time: 4 Years (Delivered in 3.5)

Location

Bundoora campus

Selection mode

ATAR (2018: 91.05)

How to apply

Semester 1: VTAC
vtac.edu.au

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/bp321
Program structure

Year 1
You will study a number of common courses with the other two streams of medical radiations including anatomy, medical radiations physics, foundations of professional practice and research in health science. Specialisation in each stream will start in semester 1.

The second semester stream specific course includes your first clinical placement.

Years 2 and 3
Years 2 and 3 are designed to further develop your specialised knowledge in radiation therapy and include a clinical placement block each semester. You will develop the ability to be a self-directed, reflective learner as you progress through the program.

Year 4
Year 4 commences at the end of year 3 (no break) and is designed to consolidate your knowledge and skills and prepare you for your transition of clinical practice.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Course 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medical Radiations Physics 1</td>
<td>Foundations of Professional Practice</td>
<td>Introduction to Human Biosciences</td>
<td>Radiation Therapy 1</td>
</tr>
<tr>
<td></td>
<td>Medical Radiations Physics 2</td>
<td>Research in Health Sciences</td>
<td>Systems Physiology</td>
<td>Radiation Therapy 2</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to Pathology</td>
<td>Communications Skills for Health Professionals</td>
<td>Radiation Therapy Practice 1</td>
<td>Radiation Therapy 3</td>
</tr>
<tr>
<td></td>
<td>Cross Sectional Anatomy</td>
<td>Introduction to Cross Sectional Imaging Applications</td>
<td>Radiation Therapy Practice 2</td>
<td>Radiation Therapy 4</td>
</tr>
<tr>
<td>3</td>
<td>Health Psychology</td>
<td>Specialised Radiation Therapy 1</td>
<td>Radiation Therapy Practice 3</td>
<td>Radiation Therapy 5</td>
</tr>
<tr>
<td></td>
<td>Preparation for Professional Practice</td>
<td>Specialised Radiation Therapy 2</td>
<td>Radiation Therapy Practice 4</td>
<td>Elective</td>
</tr>
<tr>
<td>4</td>
<td>Project</td>
<td>RT Supervised Clinical Practice</td>
<td>Transitioning to RT Clinical Practice</td>
<td></td>
</tr>
</tbody>
</table>

Compulsory courses University electives

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.

Immunisations: Some specific immunisations are required to protect both yourself and members of the public.

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) –
medical imaging 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 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 48 weeks of the program 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 radiation therapists.

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 industry advisory group.

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

The Accreditation Committee of the Medical Radiation Practice Board of Australia (MRPBA) has advised that it will assess this new program for accreditation during 2020, when the first student cohort is in second year.

Graduates of MRPBA-accredited programs are eligible to apply for registration through the MRPBA – further details on this are available from the MRPBA and AHPRA websites.

Program code: BP321
Duration
Full-time: 4 Years (Delivered in 3.5)
Location
Bundoora campus
Selection mode
ATAR (2018: 96.40)
How to apply
Semester 1: VTAC
vtac.edu.au
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/bp321
Program structure

Year 1
You will study a number of common courses with the other two streams of medical radiations including anatomy, medical radiations physics, foundations of professional practice and research in health science. Specialisation in each stream will start in semester 1.

The second semester stream specific course includes your first clinical placement.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Medical Radiations Physics 1</th>
<th>Foundations of Professional Practice</th>
<th>Introduction to Human Biosciences</th>
<th>Medical Imaging 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medical Radiations Physics 2</td>
<td>Research in Health Sciences</td>
<td>Limb and Trunk Anatomy</td>
<td>Medical Imaging 2</td>
</tr>
</tbody>
</table>

Years 2 and 3
Years 2 and 3 are designed to further develop your specialised knowledge in medical imaging and include a clinical placement block each semester. You will develop the ability to be a self-directed, reflective learner as you progress through the program.

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Introduction to Pathology</th>
<th>Communications Skills for Health Professionals</th>
<th>Head and Visceral Anatomy</th>
<th>Medical Imaging 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross Sectional Anatomy</td>
<td>Introduction to Cross Sectional Imaging Applications</td>
<td>Medical Imaging Practice 2</td>
<td>Medical Imaging 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Health Psychology</th>
<th>Advanced Imaging Applications 1</th>
<th>Medical Imaging Practice 3</th>
<th>Medical Imaging 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation for Professional Practice</td>
<td>Advanced Imaging Applications 2</td>
<td>Medical Imaging Practice 4</td>
<td>Elective</td>
</tr>
</tbody>
</table>

Year 4
Year 4 commences at the end of year 3 (no break) and is designed to consolidate your knowledge and skills and prepare you for your transition of clinical practice.

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Project</th>
<th>MI Supervised Clinical Practice</th>
<th>Transitioning to MI Clinical Practice</th>
</tr>
</thead>
</table>

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

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.

Immunisations: There is a requirement for specific immunisations to protect yourself and member of the public.

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.
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 48 weeks of the program 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.

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, bone scans and lung scans.

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 topography (PET), and specialist areas in radiation therapy.

**Industry connections**

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

**Professional recognition**

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

The Accreditation Committee of the Medical Radiation Practice Board of Australia (MRPBA) has advised that it will assess this new program for accreditation during 2020, when the first student cohort is in second year.

Graduates of MRPBA-accredited programs are eligible to apply for registration through the MRPBA – further details on this are available from the MRPBA and AHPRA websites.
### Program structure

#### Year 1
You will study a number of common courses with the other two streams of medical radiations including anatomy, medical radiations physics, foundations of professional practice and research in health science. Specialisation in each stream will start in semester 1.

The second semester stream specific course includes your first clinical placement.

#### Years 2 and 3
Years 2 and 3 are designed to further develop your specialised knowledge in nuclear medicine and include a clinical placement block each semester. You will develop the ability to be a self-directed, reflective learner as you progress through the program.

#### Year 4
Year 4 commences at the end of year 3 (no break) and is designed to consolidate your knowledge and skills and prepare you for your transition of clinical practice.

---

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Name 1</th>
<th>Course Name 2</th>
<th>Course Name 3</th>
<th>Course Name 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Medical Radiations Physics 1</td>
<td>Foundations of Professional Practice</td>
<td>Introduction to Human Biosciences</td>
<td>Nuclear Medicine 1</td>
</tr>
<tr>
<td></td>
<td>Medical Radiations Physics 2</td>
<td>Research in Health Sciences</td>
<td>Systems Physiology</td>
<td>Nuclear Medicine 2</td>
</tr>
<tr>
<td>Year 2</td>
<td>Introduction to Pathology</td>
<td>Communications Skills for Health Professionals</td>
<td>Nuclear Medicine Practice 1</td>
<td>Nuclear Medicine 3</td>
</tr>
<tr>
<td></td>
<td>Cross Sectional Anatomy</td>
<td>Introduction to Cross Sectional Imaging Applications</td>
<td>Nuclear Medicine Practice 2</td>
<td>Nuclear Medicine 4</td>
</tr>
<tr>
<td>Year 3</td>
<td>Health Psychology</td>
<td>Advanced Imaging Applications 1</td>
<td>Nuclear Medicine Practice 3</td>
<td>Nuclear Medicine 5</td>
</tr>
<tr>
<td></td>
<td>Preparation for Professional Practice</td>
<td>Advanced Imaging Applications 2</td>
<td>Nuclear Medicine Practice 4</td>
<td>Elective</td>
</tr>
<tr>
<td>Year 4</td>
<td>Project</td>
<td>NM Supervised Clinical Practice</td>
<td>Transitioning to NM Clinical Practice</td>
<td></td>
</tr>
</tbody>
</table>

Compulsory courses | University electives

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

---

### 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.

**Immunisations:** There are requirements for specific immunisations to protect both yourself and the public.

**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.