Choose your career

Medical Imaging Technologists (MITs) work in a variety of roles either in public hospitals or private radiology practices. Most will begin their career in general radiographic imaging (x-ray) with opportunities to also work in computed tomography (CT), angiography and mammography. MITs may subsequently choose to pursue additional studies to practise in specialisations such as magnetic resonance imaging (MRI), ultrasound and nuclear medicine. The role of the MIT in all of these imaging modalities is ever changing with the rapid advancement of technology.

Other career opportunities include roles with Medical Imaging equipment vendors such as clinical application specialists, or management positions in Medical Imaging departments. MITs can also opt to pursue an academic career engaging in teaching and research.

Rachel Barrass
Postgraduate Diploma in Health Sciences (Medical Imaging) student
Rachel Barrass works as a trainee Nuclear Medicine Technologist at Specialist Radiology & MRI in Auckland.

“All of the lecturers and support staff whom I encountered during my study were extremely helpful, approachable and friendly. I also couldn’t have asked for a more supportive, knowledgeable Clinical Supervisor.

“I am anticipating that this qualification will enable me to be a confident and competent Nuclear Medicine Technologist. After completing my postgraduate studies I intend to focus on consolidating my existing knowledge base, then maybe consider further study in the future.”

Why study Medical Imaging?

The Bachelor of Medical Imaging (Honours) (BMedImag(Hons)) at the University of Auckland is the first undergraduate Medical Imaging programme to be offered by a university in New Zealand and the only degree to offer an honours option in Medical Imaging.

The study of Medical Imaging involves knowledge of:
- human anatomy
- physiology and pathology
- positioning and imaging techniques
- physics and radiation physics
- use of x-ray equipment taking into consideration radiation safety and radioactive materials

Medical Imaging Technologists are required to perform high quality diagnostic imaging procedures and ensure holistic patient care.

Medical imaging is a patient-centred profession. The role involves acting as advocate for patients, displaying a high level of professionalism, and functioning as part of the multidisciplinary team.

The role of the Medical Imaging Technologist (MIT) is ever-changing with the introduction of more complex technologies, increased demand on clinical imaging and educational opportunities.

Highlights
- Experience patient-centred learning and teaching and be well prepared to contribute confidently in the Medical Imaging clinical environment.
- Includes extensive hands-on clinical experience throughout the programme, supported by experienced Medical Imaging technologists in radiology departments.
- Become a critical, reflective practitioner with the ability to engage effectively in a multidisciplinary healthcare environment.

What you’ll be studying

In the first year you will be enrolled in the BSc (Biomedical Science) taking set courses in Biology, Chemistry and Physics. Graduate entrants may be directed to include some or all of the Part I courses depending on their background.

In subsequent years (Parts II–IV) you will:
- Complete courses in radiographic positioning and image acquisition, Medical imaging physical principles and technology, image optimisation and evaluation, patient care and safety, sectional imaging anatomy and pathology, professionalism and evidence-based practice, and specialised imaging
- Obtain clinical experience in simulation labs, hospitals and outpatient radiology facilities
- Complete a final-year dissertation that develops your analytical and research skills in Medical Imaging

The Bachelor of Medical Imaging (Honours) (BMedImag(Hons)) at the University of Auckland is the first undergraduate Medical Imaging programme to be offered by a university in New Zealand and the only degree to offer an honours option in Medical Imaging.
Our department

The Department of Anatomy and Medical Imaging makes a major contribution to general courses in biomedical science teaching and offers specialist courses in the anatomical and imaging sciences. It comprises the disciplines of Anatomy and Medical Imaging and forms part of the School of Medical Sciences of the Faculty of Medical and Health Sciences. Our department is widely recognised for several outstanding developments, including:

- the initiation of a state-of-the-art Biomedical Imaging Research Unit
- an internationally recognised human brain bank for neuroscience research
- a fully integrated facility that underpins anatomy, radiology and pathology teaching on the human body
- Auckland Medical Research Foundation (AMRF)
- Medical Sciences Learning Centre - Whakaaro Pai
- a broad range of high quality histology techniques Histology Laboratory.

Our staff research activities are wide ranging and multidisciplinary, extending from the molecular level, through biological structure, to studies on the whole body.

We also deliver the only postgraduate registrable programmes in New Zealand for the Medical Imaging profession.

Address
Department of Anatomy and Medical Imaging
Faculty of Medical and Health Sciences
University of Auckland
85 Park Road, Grafton
Auckland 1142, New Zealand

Medical Imaging Website
www.fmhs.auckland.ac.nz/medical-imaging

Course schedule

Part I
BIOSCI 101
Essential Biology: From Genomes to Organisms
BIOSCI 106
Foundations of Biochemistry
BIOSCI 107
Biology for Biomedical Science: Cellular Processes and Development
CHEM 110
Chemistry of the Living World
POPLHLTH 111
Population Health
PHYSICS 160
Physics for the Life Sciences
MEDSCI 142
Biology for Biomedical Science

Part II
CLINIMAG 201
Radiographic Clinical Practice I
HLTHPSYC 122
Behaviour, Health and Development
MEDIMAGE 199
English Language Competency
MEDIMAGE 201
Fundamentals of Medical Imaging
MEDIMAGE 202
Medical Imaging Science
MEDIMAGE 203
Radiographic Imaging I
MEDSCI 201
Human Structure and Function
MEDSCI 203
Mechanisms of Disease
MEDSCI 205
The Physiology of Human Organ Systems

Part III
CLINIMAG 301
Radiographic Clinical Practice II
CLINIMAG 302
Radiographic Clinical Practice III
MEDIMAGE 301
Radiographic Imaging II
MEDIMAGE 302
Sectional Imaging Anatomy and Pathology
MEDIMAGE 303
Physiology and Pharmacology for Medical Imaging
MEDIMAGE 304
Advanced Radiographic Imaging
MEDIMAGE 305
Professional Practice in Medical Imaging
MEDIMAGE 306
Specialised Medical Imaging

Part IV
CLINIMAG 401 A
Radiographic Clinical Practice IV
CLINIMAG 401 B
Radiographic Clinical Practice IV
MEDIMAGE 740 A
Research in Medical Imaging
MEDIMAGE 740 B
Research in Medical Imaging

Note:
For more information about 700-level elective courses, please see the Medical Imaging Postgraduate Handbook.
# BMedImag (Hons) degree structure

## Semester One

### Part I
- **BIOSCI** 107
- **CHEM** 110
- **POPLHLTH** 111
- **GEN ED**

### Part II
- **MEDSCI** 201
- **MEDSCI** 203
- **MEDSCI** 205
- **MEDIMAGE** 201

### Part III
- **MEDIMAGE** 301
- **MEDIMAGE** 302
- **MEDIMAGE** 303
- **CLINIMAG** 301

### Part IV
- **MEDIMAGE** 740 (A)
- **CLINIMAG** 401 (A)

### 4th year option:
- Choose 30 points from 700-level courses.

## Semester Two

### Part I
- **BIOSCI** 101
- **BIOSCI** 106
- **MEDSCI** 142
- **PHYSICS** 160

### Part II
- **MEDSCI** 201
- **MEDSCI** 203
- **MEDSCI** 205
- **HLTHPSYC** 122
- **MEDIMAGE** 202
- **MEDIMAGE** 203
- **CLINIMAG** 201

### Part III
- **MEDIMAGE** 301
- **MEDIMAGE** 302
- **MEDIMAGE** 303
- **MEDIMAGE** 304
- **MEDIMAGE** 305
- **MEDIMAGE** 306
- **CLINIMAG** 302

### Part IV
- **MEDIMAGE** 740 (B)
- **CLINIMAG** 401 (B)

### 4th year option:
- Choose 30 points from 700-level courses.

### Color Coding:
- **Existing undergraduate course**
- **New undergraduate/postgraduate Medical Imaging course**
- **New undergraduate Medical Imaging clinical practice course**
Helpful information

Medical Imaging
www.fmhs.auckland.ac.nz/medical-imaging

Bachelor of Medical Imaging programme
www.fmhs.auckland.ac.nz/bmedimag-hons

Academic dates
www.auckland.ac.nz/dates

Accommodation
www.accommodation.auckland.ac.nz

Career Development and Employment Services
www.auckland.ac.nz/careers

Faculty website
www.fmhs.auckland.ac.nz

Fees
www.auckland.ac.nz/fees

Frequently Asked Questions
www.auckland.ac.nz/askauckland

General education
www.auckland.ac.nz/generaleducation

How to apply
www.apply.auckland.ac.nz

How to enrol
www.auckland.ac.nz/enrolment

International students
www.international.auckland.ac.nz

Māori and Pacific Admission Scheme (MAPAS)
mapas@auckland.ac.nz

Need help?
www.askauckland.ac.nz

Scholarships and awards
www.scholarships.auckland.ac.nz

The University of Auckland website
www.auckland.ac.nz

The University of Auckland Calendar
www.auckland.ac.nz/calendar

Questions about Medical Imaging and application closing dates?
Contact our FMHS Student Centre:
fmhs@auckland.ac.nz

Disclaimer: Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.