

Bachelor of Medical Imaging (Honours)

2019



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

**MEDICAL AND
HEALTH SCIENCES**
SCHOOL OF MEDICAL SCIENCES

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

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.”



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.

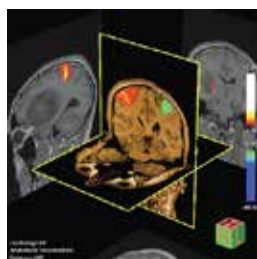
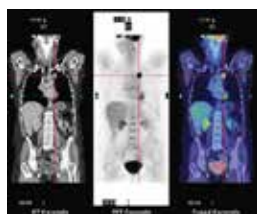
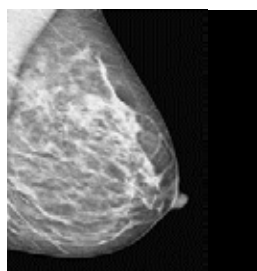
We also deliver the only postgraduate registrable programmes in New Zealand for the Medical Imaging profession.

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

GENED

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

Semester Two

Part I	BIOSCI 107	CHEM 110	POPLHLTH 111	GEN ED	BIOSCI 101	BIOSCI 106	MEDSCI 142	PHYSICS 160		
Part II	MEDSCI 201	MEDSCI 203	MEDSCI 205	MEDIMAGE 201	HLTHPSYC 122	MEDIMAGE 202	MEDIMAGE 203	CLINIMAG 201		
Part III	MEDIMAGE 301	MEDIMAGE 302	MEDIMAGE 303	CLINIMAG 301	MEDIMAGE 304	MEDIMAGE 305	MEDIMAGE 306	CLINIMAG 302		
Part IV	4th year option: choose 30 points from 700-level courses.			MEDIMAGE 740 (A)	CLINIMAG 401 (A)	4th year option: choose 30 points from 700-level courses.			MEDIMAGE 740 (B)	CLINIMAG 401 (B)

 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.

The Faculty of Medical and Health Sciences Student Centre

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Questions: www.askauckland.ac.nz

www.fmhs.auckland.ac.nz



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