Bachelor of Medical Imaging (Honours)

2021

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 (MITs) 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 an advocate for patients, displaying a high level of professionalism, and functioning as part of the multidisciplinary team.

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

Highlights

- Experience patient-centred teaching and learning 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.
- Graduate eligibility for registration with the New Zealand Medical Radiation Technologists Board (MRTB).

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 research project 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.

Leanne Chen

Student: Bachelor of Medical Imaging (Hons).

"This programme gives you the opportunity to learn advanced techniques with the most up-to-date technology and equipment. Being in such a small cohort also allows you to develop meaningful relationships with your peers and lecturers.

"In the short time that we have known each other, we have become one little Medical Imaging family. We all strive to support and uplift each other.

"Medical Imaging has allowed for me to further build and expand on the knowledge that I previously obtained as a first-year Biomedical Sciences student. It has also allowed me to continue to develop my passion for biology and anatomy.

"I am really enjoying the Medical Imaging programme and highly recommend it to anyone considering studying the subject."

Course schedule

Part I

BIOSCI 101 (Semester Two)
Essential Biology: From Genomes to Organisms

BIOSCI 106 (Semester Two)
Foundations of Biochemistry

BIOSCI 107 (Semester One)
Biology for Biomedical Science: Cellular Processes and Development

CHEM 110 (Semester One)
Chemistry of the Living World

POPLHLTH 111 (Semester One)
Population Health

PHYSICS 160 (Semester Two)
Physics for the Life Sciences

MEDSCI 142 (Semester Two)
Biology for Biomedical Science

GENED (Semester One)

Part II

CLINIMAG 201 (Semester Two)
Radiographic Clinical Practice I

HLTHPSYC 122 (Semester Two)
Behaviour, Health and Development

MEDIMAGE 199 (Semester One)
English Language Competency

MEDIMAGE 201 (Semester One)
Fundamentals of Medical Imaging

MEDIMAGE 202 (Semester Two)
Medical Imaging Science

MEDIMAGE 203 (Semester Two)
Radiographic Imaging I

MEDSCI 201 (Semester One)
Human Structure and Function

MEDSCI 203 (Semester One)
Mechanisms of Disease

MEDSCI 205 (Semester One)
The Physiology of Human Organ Systems

Part III

CLINIMAG 301 (Semester One)
Radiographic Clinical Practice II

CLINIMAG 302 (Semester Two)
Radiographic Clinical Practice III

MEDIMAGE 301 (Semester One)
Radiographic Imaging II

MEDIMAGE 302 (Semester One)
Sectional Imaging Anatomy and Pathology

MEDIMAGE 303 (Semester One)
Physiology and Pharmacology for Medical Imaging

MEDIMAGE 304 (Semester Two)
Advanced Radiographic Imaging

MEDIMAGE 305 (Semester Two)
Professional Practice in Medical Imaging

MEDIMAGE 306 (Semester Two)
Specialised Medical Imaging

Part IV

CLINIMAG 401 A (Semester One)
Radiographic Clinical Practice IV

CLINIMAG 401 B (Semester Two)
Radiographic Clinical Practice IV

CLINIMAG 707 (Semester One)
CT Clinical Practice

MEDIMAGE 711 (Semester Two)
Musculoskeletal Trauma Image Evaluation

MEDIMAGE 740 A (Semester One)
Research in Medical Imaging

MEDIMAGE 740 B (Semester Two)
Research in Medical Imaging

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 402 (A)		CLINIMAG 707

- Common undergraduate course
- Undergraduate/postgraduate Medical Imaging course
- Undergraduate/postgraduate Medical Imaging clinical practice course

Semester Two

BIOSCI 101	BIOSCI 106	MEDSCI 142	PHYSICS 160
HLTHPSYC 122	MEDIMAGE 202	MEDIMAGE 203	CLINIMAG 201
MEDIMAGE 304	MEDIMAGE 305	MEDIMAGE 306	CLINIMAG 302
MEDIMAGE 711	MEDIMAGE 740 (B)	CLINIMAG 402 (B)	

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.

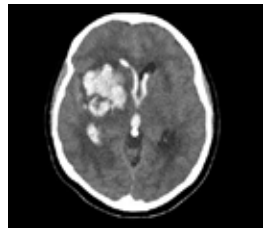
We also deliver the only postgraduate registrable programmes in New Zealand for the Medical Imaging profession.

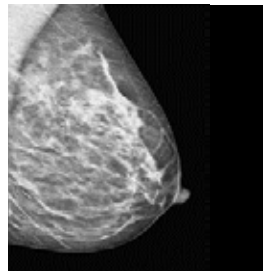
Address

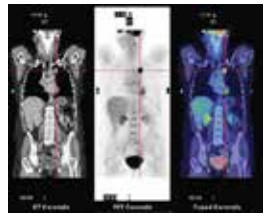
Department of Anatomy and Medical Imaging
Faculty of Medical and Health Sciences
University of Auckland
85 Park Road, Grafton
Auckland 1142, New Zealand

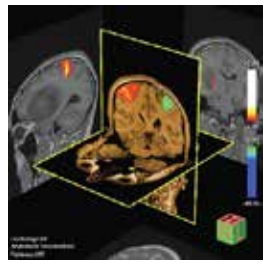
Medical Imaging Website

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









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

The Faculty of Medical and Health Sciences Student Centre
Ground Floor, Building 503
85 Park Road, Grafton
Auckland

Phone: +64 9 923 2760
Email: fmhs@auckland.ac.nz
Questions: www.askauckland.ac.nz

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