Our medical imaging science postgraduate degrees are based upon pioneering research for the delivery of optimal patient care.

Why study medical imaging science at the University of Sydney?

- Learn from leading experts in the field of medical imaging
- Study online from anywhere in the world
- Learn at your own pace
- Choose from a range of specialisations
- Gain professional development and qualifications
- Increase your employability in your field

You will only be charged for the number of units of study in which you enrol and you will be invoiced on a semesterly basis.

What will you study?

As a medical imaging science student, you will develop an understanding of current concepts in medical imaging, medical image perception and medical image optimisation, and graduate with the skills necessary to advance high quality evidence-based practice across the medical imaging sciences and within your field.

You will have the opportunity to pursue elective units across the discipline or specialise in a specific area of interest.

As part of your studies, you may also have the opportunity to operate imaging technology remotely through the internet for testing principles.

Who should study this course?

Designed for recent medical radiation science graduates looking to specialise; professionals already working in the field; and graduates from related science and clinical disciplines who wish to gain advanced knowledge and skills in research.

How will you learn?

Our medical imaging science degrees are:
- offered online by distance education
- available full-time or part-time

Graduate Certificate
0.5 years full time
1 year part time
Graduate Diploma
1 year full time
2 years part time
Master’s
1.5 years full time
3 years part time
**Become an expert in your field**

Our courses are designed for medical radiation practitioners looking to specialise in a range of fields. You may choose one or two of the following specialisations:

- CT
- MRI
- Radiographic image interpretation
- Breast imaging
- Hybrid imaging (PET & SPECT/CT or PET/MR)
- Research.

**Recognition of prior learning**

Graduates with a bachelor’s degree with honours, or one year of full-time employment after registration with the Australian Health Practitioner Regulation Agency (AHPRA); and graduates with a postgraduate degree can apply for up to 24 credit points of recognition of prior learning which will shorten the duration of study.

**Important dates**

- Applications close 31 January
- Course commences in March

**Further information**

For additional information on fees, admission requirements and how to apply, visit sydney.edu.au/health-sciences/study/courses/medical-imaging-science

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**Computed Tomography**

Develop new knowledge in the theory of CT instrumentation and image formation. You will also study best practice methods to optimise radiation dose and image quality as well as evidence-based clinical CT protocols and related anatomy and pathology.

**Magnetic Resonance Imaging**

Further your understanding of the important theoretical concepts of MRI whilst developing your technical knowledge of various imaging parameters sequence types and their clinical applications. You will also study a range of examination techniques used in MSK, CNS and body imaging and investigate emergent MR technologies.

**Radiographic Image Interpretation**

Gain knowledge of aspects of normal and abnormal plain x-ray appearances focusing on disorders of the appendicular and axial skeleton, abdomen and chest, and develop advanced skills in critical appraisal and rigorous analysis of the literature as it relates to advanced radiographic practice.

**Breast Imaging**

Study the fundamentals of digital mammography, relevant radiation physics, and client care, as well as the latest trends in new and novel imaging methods for breast care detection.

**Hybrid Imaging**

Study the basic science of positron emission tomography (PET) and single photon emission tomography (SPECT), computed tomography (CT) and magnetic resonance (MR) imaging. You will study the equipment, tomographic reconstruction, image display and analysis used in current clinical hybrid systems, as well as the techniques used to improve image quality, quantify radiopharmaceutical biodistribution and reduce radiation dose to the patient.

**Research Studies**

Design and implement a research project in the field of medical imaging science with appropriate methods and analysis. This specialisation is only available in the Master of Medical Imaging Science.