

Medical Imaging & Interpretation (Radiology)

Medical Imaging is an essential component of modern medicine, playing a key role in the diagnosis, treatment and monitoring of disease. The Medical Imaging MSc covers:

- the basic physics involved in the different imaging techniques
- image formation, pattern recognition and applications in the field of radiology
- current issues in a modern UK NHS radiology department.

Whilst not a clinical skills course, the teaching of the technical aspects of imaging techniques is firmly grounded and in their clinical usage. Many of our lecturers are at the forefront of research in their field and bring insights from emerging imaging techniques.

This programme is designed for recent graduates preparing for a career in medical imaging, professionals already working in the field, and medical students wishing to intercalate.

You'll study modules worth 180 credits. Through the programme you'll become familiar with the range of clinical imaging techniques. By the end of it you should be able to:

- Demonstrate knowledge and understanding of the physical and mathematical aspects of image formation of several techniques;
- Identify the anatomical and physiological properties of tissue associated with image formation and contrast for several techniques;
- Analyse and compare the technical performance of various modalities;
- Demonstrate an understanding of the clinical applications of each technique, the variables involved and how they can be compared;
- Critically analyse the optimisation of combinations of imaging modalities for specific patient groups;
- Analyse the equipment and staff management issues associated with the use of modern technology in modern clinical practice;

- Apply IT in literature searching, analysis and display of data, and report writing to enhance lifelong learning in medical imaging;
- Demonstrate enhancement of their professional skills in communication, problem-solving, learning effectively and quickly, and effective self-management;
- Critically evaluate relevant published work, demonstrating an understanding of the underpinning principles of statistics, project design and data analysis;
- Plan and implement a research project.

As an MSc student, you undertake a research project in the field of Medical Imaging. New research topics are available each year and include projects in MRI, Ultrasound, X-ray and their clinical application. You'll be asked to state your preferred research project. Before projects are allocated, you are encouraged to meet potential supervisors and discuss the research work.

COMPULSORY MODULES

- Principles for Medical Imaging Interpretation 15 credits
- Medical Imaging Core Skills 15 credits
- Digital Radiography and X-ray Computed Tomography 15 credits
- Magnetic Resonance Imaging 15 credits
- Ultrasound Imaging 15 credits
- Radionuclide Imaging 15 credits
- Medical Image Analysis 15 credits
- Research Methods 15 credits
- Research Project 60 credits

Entry Requirements

- An MBBS or equivalent degree
- Successfully completed one year of internship at a hospital and must supply their Certificate of Completion.

- An IELTS score of 7.0, with a minimum of 6.5 in each section* and a reference letter confirming that all previous training in medicine has been in English.
- Graduated from an internationally recognised medical school.
- Completed their undergraduate training and be fully registered with the Medical Council in their respective countries.
- Two character reference letters from any member of their medical school academic staff, OR from their current senior medical colleagues and consultants.

Fees

International: £19,750 (total)