Department of Allied Health Professions and Midwifery

Science and principles of magnetic resonance imaging (MRI)
7HSK0101 15 Credits at level 7

This course runs over 4 days: Monday 9th October 2017 - Tuesday 10th Oct 2017
Monday 20th November 2017 - Tuesday 21st November 2017

This course is mainly designed for radiographers and other health professionals who want to develop their skills and knowledge of MRI to support their day to day activities in professional practice. However it is also relevant to postgraduate students with an interest in medical physics.

Course aims
The aim of this course is to enable you to enhance your knowledge and understanding of the scientific principles and operation of magnetic resonance imaging (MRI) equipment.

Content
This course explores the scientific principles of MRI. You will study the concepts and principles of MRI, safety, principles of operation and image quality optimisation. Students are encouraged to examine the relationships between MRI operating parameters, image quality, scan time and patient bio effects. A clinical placement in MRI is helpful but not essential. The course covers the following areas: Historical evolution of MRI, Magnets, coils and gradients, Spatial localisation of the image, Image weighting – T1, T2, PD, MRI scanning parameters, Resonance, nuclear spin states, Functional imaging, MR angiography, Artifacts in MRI and Safety aspects of MRI

Assessment
This typically consists of an essay or assignment.

Who teaches this course?
Teaching is based on a combination of lectures, tutorials, small group seminars/workshops.

What our students say
- The module has provided me with opportunity to explore challenging aspects of MRI
- Positive reinforcement of MRI knowledge and been able to apply this in my own clinical practice
- I have really enjoyed the module. I have learnt a lot of physics that I can apply to my clinical practice. It will benefit new MRI radiographers and students working within my department as I feel more confident explaining and teaching physics

Cost
The fee for new self-funding students is £680.00. Please note that the fee may vary depending on your source of funding and whether you are a returning student. To find out information about the fees visit go.herts.ac.uk/cpdfees

The course forms part of a broader CPD framework that can lead to the award of Postgraduate Certificate, Postgraduate Diploma or Master's degree

Course Enquiries
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Booking Enquiries
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