Science and principles of computed tomography (CT)

Course code: 7HSK0102  Semester: B
Level: 7  Credit: 15

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

The course can be taken as a 'stand alone' or used towards a postgraduate qualification. If you take this course as part of a postgraduate award, a degree, or equivalent, is required.

Course aims
The aim of this course is to enable you to enhance your knowledge and understanding of the scientific principles and operation of Computed Tomography (CT) equipment.

Course content
This course explores the scientific principles of Computed Tomography (CT).

You will study the concepts and principles of CT, safety, principles of operation and the associated risks and benefits.

Students are encouraged to examine the relationships between CT operating parameters, image quality, scan time and radiation dose. A clinical placement in CT is helpful but not essential.

The course covers the following areas:
- Evolution of CT
- Data acquisition
- CT image reconstruction
- Image manipulation
- CT scanning parameters
- Dose reduction methods in CT
- Artifacts in CT
- Safety aspects of CT

Teaching is based on a combination of lectures, tutorials, small group seminars/workshops.

How does this course map the NHS KSF?
This course contributes to the development of knowledge and understanding for Core Dimensions 2, 3, 4, 5.

Assessment
This typically consists of an essay or assignment.

Where is the course taught and by whom?
Teaching involves both University and external lecturers. Sessions take place at the University's College Lane campus in Hatfield.

Teaching is based on a combination of lectures, tutorials, small group seminars/workshops.

Computer equipment requirement
Delivery of the course will incorporate blended learning which aims to combine e-learning activities with campus based learning

Cost
The fee for new self-funding students is £605
Please note that the fee may vary depending on your source of funding and whether you are a returning student

Contract funding for NHS staff
The University is contracted by the NHS to provide post-registration education/CPD and training for its health professionals. If you are an NHS employee contact the senior manager responsible for post-registration education/CPD in your Trust to check if the course you wish to attend can be supported by the Trust's contract with our University.

When does this course run?
This is a 4-day course:
- Monday 7 March 2016
- Tuesday 8 March 2016
- Monday 18 April 2016
- Tuesday 19 April 2016

Course enquiries
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