

## **MSc Medical Imaging and Radiation Sciences – Advanced Medical Imaging**

### **Course Overview**

This MSc Medical Imaging and Radiation Science- Advanced Medical Imaging programme is designed to enable radiographers develop their knowledge and understanding within the field of diagnostic radiography. You will demonstrate development of your critical evaluative and problem-solving skills within radiography and in particular specialised areas of practice such as Magnetic Resonance Imaging and Computerised Tomography. The course enhances your current knowledge and understanding and gives you opportunities to challenge and critically evaluate your professional practice.

**Additionally, this programme aims to** enable students to:

- critically analyse and evaluate the evidence base and current developments in practice and to propose new explanations and apply these where appropriate
- demonstrate initiative, originality, leadership and self-reflection in decision making and to propose new explanations and apply these where appropriate
- demonstrate a patient centred approach to radiographic practice that values everyone enhancing the quality of the patient experience and improving patient outcomes

### **Professional Accreditation**

The MSc Medical Imaging and Radiation Sciences – Advanced Medical Imaging programme is endorsed by the College of Radiographers.

### **Who is it for?**

- The course is suitable for radiographers and health care professionals who want to specialise in this area and are interested in advancing their existing skills or acquiring new ones. It is designed to meet your needs whether you are in full or part-time employment.

You will need to be registered with the Health Care Professions Council (HCPC) (or equivalent professional registration).

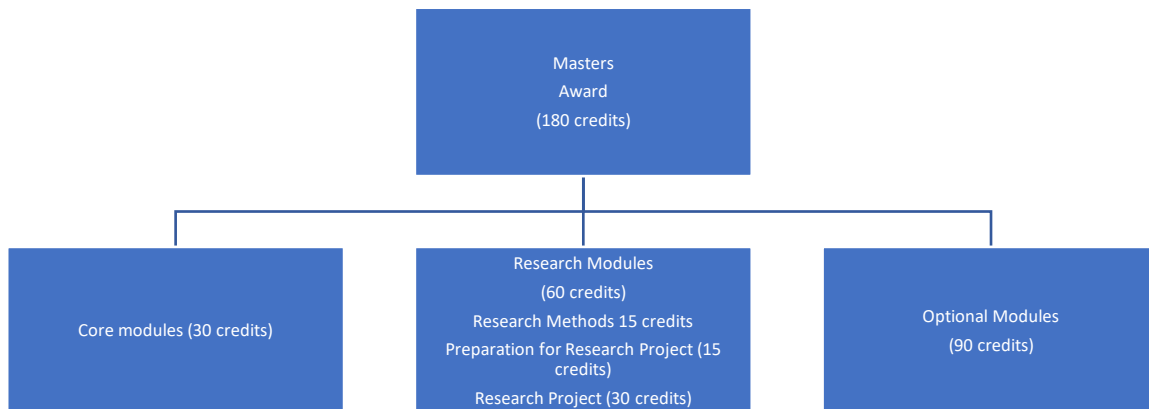
### **Course Structure**

The course is flexible and modular allowing you to create a programme of study to meet your personal development and career aspirations. To attain a Master's award you need to complete 180 credits. There are also interim awards available:

- Postgraduate certificate (PgC) (60 credits)
- Postgraduate diploma (PgD) (120 credits)

The rate and pace of study are up to you. You have up to 6 years to complete your master's course.

The Master's degree consists of three elements to include: core, research and optional modules (optional modules may comprise additional core modules or interprofessional modules).



## Core Modules

<b>Medical Imaging and Radiation Sciences</b>		
<b>Advanced Medical Imaging Modules</b>		
*7HSK0336	MRI Science and Principles	15
*7HSK0340	CT Science and Principles	15
*7HSK02054	MRI Applications	30
*7HSK02057	CT Applications	30
*7HSK0339	MRI Independent Practice Development	15
*7HSK0342	CT Independent Practice Development	15
7HSK0318	Developing Professional Practice: Independent Study 1	15
7HSK0319	Developing Professional Practice: Independent Study 2	30

7HSK0320	Developing Professional Practice: Work-based skills 1	15
7HSK0322	Developing Professional Practice: Work-based skills 3	30
7HSK2055	Evidencing Professional Practice 1	15
7HSK2056	Evidencing Professional Practice 2	30

**\*These modules are not offered in 2022/23 academic year**

The Developing Professional Practice and Evidencing Professional Practice study modules allow you to gain an in depth understanding of a particular subject area in which you have a specific interest.

- The Independent Study modules allow you to develop to improve theoretical knowledge and understanding and apply to bespoke area of study
- The Work based skills modules allow you to improve or develop a specific set of clinical skills for a bespoke area of study
- The Evidencing Professional practice modules allow you to reflect on an area of practice development and how it has impacted upon personal and professional practice

- Optional modules

<b>Interprofessional modules</b>		
7HSK0293	Leadership Education and Developing others	30
7HSK0306	Leading Service Change	15
7HSK0168	Advanced Decision Making in Health and Social Care	15
7HSK0186	Coaching Skills for Leading	15
*7HSK0361	Informed Consent	15
*7HSK0362	Psychology of Cancer	15
7HSK0109	AHP Independent Prescribing	30
7HSK0110	AHP Supplementary Prescribing	30
7HSK0289	Advanced Clinical Practice	15
7HSK0290	Advanced Health Assessment and Diagnostic Indicators	15
<b>Radiography modules</b>		
7HSK0354	Principles of Clinical Radiographic Reporting	15

7HSK0355	Musculoskeletal Image Interpretation	30
*7HSK0357	Image Recognition: Chest Radiography	15
*7HSK0359	Image Recognition: Brain (CT)	15

**\*These modules are not offered in 2022/23 academic year**

#### **Research modules:**

The Research modules are compulsory for completion of the MSc

<b>7HSK2048</b>	<b>Research Project</b>	<b>30</b>
<b>7HSK2049</b>	<b>Preparation for Research Project</b>	<b>15</b>
<b>7HSK0308 or 7HSK0368</b>	<b>Research Methods or Research Methods – Distance Learning</b>	<b>15</b>

N.B Research Methods must be completed prior to Preparation for the Research Project, and both must be successfully completed before the Research Project is undertaken.

#### **Order of modules**

- The modules can be studied in any order provided prerequisites are met for the module requirements
- Research Project is normally the last module you study.

#### **Start date**

The programme commences in September 2022. The MRI and CT modules are not offered in the 2022/23 academic year. However, the programme can be commenced using the interprofessional modules such as the independent study modules where a bespoke course can be built. Alternatively, the leadership and management modules can be undertaken to build towards advanced practice.

#### **Award titles**

Depending on your plan of study you can obtain different award titles

Award Title	Module requirements
MSc Advanced Medical Imaging	180 credit points to include 60 credits of compulsory research modules and 30 credits (minimum) from core modules
Postgraduate Diploma Advanced Medical Imaging	120 credit points to include 30 credits (minimum) from core modules

Postgraduate Certificate Advanced Medical Imaging	60 credit points to include 30 from core modules
Postgraduate Certificate Computed Tomography	60 credits to include the following modules 7HSK0340 CT Science and Principles 7HSK2057 CT Applications 7HSK0342 CT Independent Practice Development
Postgraduate Certificate Magnetic Resonance Imaging	60 credits to include the following modules 7HSK0336 MRI Science and Principles 7HSK2054 MRI Applications 7HSK0339 MRI Independent Practice Development

### Where will you study?

The courses take place at College Lane campus in Hatfield, just 25-minutes away from central London by train. Luton airport and Stansted airport are just 40 minutes away.

Some of the modules are work based or distance learning and do not require attendance at the university.

### Examples of study routes

The programme allows students to specialise in CT, MRI or a combination of both. Also, the profession specific modules can be combined with other modules such as management to address management and professional needs.

The boxes contain examples of suites of modules that can be taken by students.

Postgraduate Certificate MRI (Focussing on MRI) 60 credits
7HSK0336 MRI Science and Principles (15 credits)
7HSK2054 MRI Applications (30 credits)
7HSK0339 MRI Independent Practice (15 credits)

Postgraduate Certificate Computed Tomography (Focussing on CT) 60 credits
7HSK0340 CT Science and Principles (15 credits)
7HSK2057 CT Applications 1 (30 credits)
7HSK0342 CT Independent Practice Development (15 credits)

Postgraduate Certificate Advanced Medical Imaging(Focussing on bespoke area)  
60 credits

7HSK0319 Developing Professional Practice: Independent Study 2(30 credits)

7HSK0322 Developing Professional Practice: Work-based skills 3(30 credits)

Postgraduate Diploma Advanced Medical Imaging (Focussing on bespoke area)  
120 credits

7HSK0319 Developing Professional Practice: Independent Study 2(30 credits)

7HSK0322 Developing Professional Practice: Work-based skills 3(30 credits)

7HSK2056 Evidencing Professional Practice 2

7HSK0306 Leading Service Change (15 credits)

7HSK0168 Advanced Decision Making in Health and Social Care (15 credits)

Postgraduate Diploma Advanced Medical Imaging – combining role specific  
modules and management modules (120 credits)

7HSK0336 MRI Science and Principles (15 credits)

7HSK2054 MRI Applications (30 credits)

7HSK0340 CT Science and Principles (15 credits)

7HSK0293 Leadership Education and Developing others (30 credits)

7HSK0306 Leading Service Change (15 credits)

7HSK0168 Advanced Decision Making in Health and Social Care (15 credits)

MSc Advanced Medical Imaging 180 credits

7HSK0336 MRI Science and Principles (15 credits)

7HSK0337 MRI Applications 1 (30 credits)

7HSK0339 MRI Independent Practice (15 credits)

7HSK0319 Developing Professional Practice: Independent Study 2 (30 credits)

7HSK2056 Evidencing Professional Practice 2(30 credits)

7HSK2048 Research Project (30 credits)

7HSK2049 Preparation for Research Project (15 credits)

7HSK0308 Research Methods (15 credits)

## Entry Requirements

The normal entry requirements for the programme are:

An honours degree in Radiography and normally be registered with the Health and Care Professions Council or have acceptable qualifications in a related health profession.

Candidates will normally have some relevant clinical practice experience subsequent to qualification.

Where appropriate, candidates require employment in, or access to an appropriate clinical site whilst enrolled on the programme. Students are responsible for securing an appropriate clinical placement.

## Application

There are two modes of application:

- Independent – you apply for a single module and are registered as an Independent student on the master's programme. This is a useful approach if you are unsure about applying for a master's course. It will give you an idea of the level of input required and the amount of time involved. You can undertake up to 45 credits as an independent student. If you decide to undertake more credits then you are transferred to the part-time route.
- Postgraduate Diploma/ Masters – you apply for the master's course and are registered as a part-time student. You will need to complete an application form and provide one reference

On your application form you will need to indicate which module/s you intend to study in your first year. You select subsequent modules you plan to study on a yearly basis by completing a "continuing student" form.

## Fees

- The masters course is modular and the fees are payable per module. Some modules are subject to non-standard fees (e.g. ultrasound clinical modules).
- You retain the fee package which you commenced on when you joined the part-time master's course (as long as you do not have a break in study). If you first studied a module as an "independent" student (see section on application) this may mean your fees will increase from your first module.

For NHS employees, the University works with NHS trusts, Clinical Commissioning Groups (CCGs) and Community Education Provider Networks (CEPNs) across the East of England under the recently configured Sustainability and Transformation Plans

and their Local Workforce Advisory Boards' transformational frameworks. It is therefore worth checking with the CPD lead for your Trust as part or all of your fees may be covered.

- If you completed your undergraduate degree at UH, you are entitled to a fee deduction of 20% on all modules.
- A postgraduate loan is available for this course. If you receive a loan the course needs to be completed within three years.

### **Key strengths of the course**

- Flexible programme of study which can be tailored to your own needs
- opportunity to share ideas with other health professions in order to develop intellectual abilities and assist in the advancement of health care
- interprofessional learning
- teaching by experienced staff and visiting external specialists
- Enhances career progression - many students have gone on to roles as clinical specialists, team leaders, clinical mentors, lecturers and researchers. Your choice of "optional modules" will be key in facilitating you to maximise your career potential.

### **Further Information**

#### **How to apply**

To apply for the courses you need to complete a University application form which can be found at <https://www.applycpd.com/herts>

You can also contact the Health CPD office on

**01707 284956** or by email at **cpdhealth@herts.ac.uk**

We're always happy to answer questions, give advice or arrange a visit.

#### **Course/programme enquiries**

For further enquiries about the course contact Naomi Brown [n.2.brown@herts.ac.uk](mailto:n.2.brown@herts.ac.uk)