PROGRAMME SPECIFICATION

KEY FACTS

<table>
<thead>
<tr>
<th>Programme name</th>
<th>Radiography (Computed Tomography-CT); Radiography (Magnetic Resonance Imaging-MRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award</td>
<td>MSc</td>
</tr>
<tr>
<td>School</td>
<td>School of Health Sciences</td>
</tr>
<tr>
<td>Department or equivalent</td>
<td>Conjoint Division of Midwifery and Radiography</td>
</tr>
<tr>
<td>Programme code</td>
<td>PSRACT; PSRMI</td>
</tr>
<tr>
<td>Type of study</td>
<td>Part Time</td>
</tr>
<tr>
<td>Total UK credits</td>
<td>180</td>
</tr>
<tr>
<td>Total ECTS</td>
<td>90</td>
</tr>
</tbody>
</table>

PROGRAMME SUMMARY

The programme is organised on a part-time basis. Depending on the module(s) you study in any one term, this may be a one day per week basis or short blocks of three to four days. Distance learning modules are delivered flexibly. The duration of the programme is based on the need to include the appropriate academic, clinical and professional elements appropriate for your individual study pathway. Your final award is determined by the number of Master’s level credits gained. There are three awards available from the programme:

1. Master of Science degree (main award)
2. Postgraduate Diploma
3. Postgraduate Certificate.
4. Individual modules of 15 and 30 Master’s level credits can be studied for professional development purposes. These modules will be awarded a certificate of credit and, should you choose to continue with your postgraduate study, this credit will be accepted towards your final postgraduate award.

Within this programme of study you may graduate with one of two different Postgraduate Certificate awards (MRI or CT) or one of two different Postgraduate Diploma awards (MRI or CT) or one of two different postgraduate MSc awards (MRI or CT) respectively, determined by the modules selected for study. To be awarded a specific postgraduate award in a clinical speciality, for example, Computed Tomography, you must successfully complete the Computed Tomography specific modules.

Length of study:
Postgraduate Certificate - minimum of six months to one year of study
Postgraduate Diploma - minimum of one to one and a half years of study
Master of Science degree - minimum of two to three years of study

Maximum period of registration for the programme is 5 years part-time

These postgraduate programmes in Radiography provide advanced education so you can
achieve a systematic understanding, develop critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your field of study and your area of professional practice in Computed Tomography or Magnetic Resonance Imaging, respectively. These programmes of study will provide you with the advanced scientific, scholarly, professional and technical knowledge required to enable you to propose innovative solutions to improve your current radiographic practice for the benefit of your patients (Framework for Higher education Qualifications, 2008 and 2014).

These programmes will further allow you to build on the knowledge & clinical experience gained from your professional work complementing the experiences you already have and allowing you to enhance your professional development and make a greater contribution to the investigatory healthcare process or treatment pathway.

Aims
The main aims of the programme are:

- To enhance your professional practice and personal development as practitioner in radiography
- To provide you with opportunities for discussion and facilitate the sharing of experiences and best practice between you and other practitioners (including the expert visiting lecturers and your peers) in the classroom sessions
- To enhance your critical, analytical, professional, research & communication skills and promote your ability to relate these skills to your individual clinical practice
- To further develop your skills necessary for life-long independent learning
- To prepare you to take on the professional roles of advanced practitioners
- To encourage you to act autonomously in planning & implementing tasks at a professional level
- To encourage you to develop originality in the application of knowledge to clinical practice
- To enhance your understanding of how established techniques of research and enquiry are used to interpret knowledge in your field.

Postgraduate Certificate
If you are completing the Postgraduate Certificate in Radiography (Computed Tomography) or Radiography (Magnetic Resonance Imaging) you will be able to examine the theories related to the underpinning physical principles, equipment, instrumentation and clinical applications in these respective disciplines. You will show evidence of synthesis and apply your knowledge to the area of clinical practice that you are studying. You will have critical insight into problems related to the area of clinical practice and be able to evaluate your practice in relation to changes at local and national level, to provide safe, high quality care. You will also use a range of techniques to undertake your scholarly work.

Postgraduate Diploma
If you are completing the Postgraduate Diploma in Radiography (Computed Tomography) or Radiography (Magnetic Resonance Imaging) in addition to the above you will explore
knowledge related to other areas of clinical practice and research techniques to broaden your expertise and skills. You will also critically evaluate current evidence in relation to a range of clinical areas and techniques in relation to high quality patient care and safe clinical practice.

**MSc**

If you are completing the MSc in Radiography (Computed Tomography) or Radiography (Magnetic Resonance Imaging) you will demonstrate informed, independent and original thinking in your chosen area of research in Computed Tomography/ Magnetic Resonance Imaging and consider which approaches are relevant to your practice. You will be engaged in research or scholarly activity that contributes novel views to enhance the knowledge base or improve clinical practice within your chosen area of Computed Tomography/ Magnetic Resonance Imaging.

**WHAT WILL I BE EXPECTED TO ACHIEVE?**

On successful completion of this programme, you will be expected to be able to:

**Knowledge and understanding:**
- Demonstrate synthesis and application of the clinical, scientific and professional principles, which influence the practice of Radiography, with emphasis in your respective field of specialisation.
- Develop synthesis and application of knowledge to address complex clinical scenarios and taking into account of current controversies in your field of clinical practice.
- Evaluate your knowledge and understanding of the theoretical concepts and methods which inform and improve clinical practice and scholarly activity.
- Engage in evaluation of current professional issues, which are at the forefront of your discipline.

**Skills:**
- Synthesise coherently and effectively the knowledge and expertise related to your area of practice.
- Critically evaluate a range of evidence, techniques and protocols relevant to clinical practice and make informed judgements about their quality and appropriateness in your clinical setting.
- Confidently undertake audit and research within the clinical environment to further the evidence base in your respective discipline.
- Recognise, analyse and solve complex problems relating to your clinical practice.
- Devise and implement recommendations to improve your practice, based on current evidence, so you contribute to the delivery of a high quality clinical service and practice development.
- Effectively use a range of advanced information technology systems for clinical and scholarly activities.
- Demonstrate effective verbal and non-verbal communication skills and the ability to discuss and address enquiries about advanced techniques and clinical controversies in your specialisation.
- Demonstrate autonomous/independent practice and professionalism.
- Develop your personal and team leadership skills.
• Critically assess your learning needs in relation to the advances in your field and clinical practice, reflect on your own learning and progress and how it can be transferred to practice and design your individual continuing development plan.
• Develop and improve your own competence in recognised ways
• Seek and identify opportunities to apply new knowledge to your own practice in structured ways

Values and attitudes:
• Discuss the medico-legal, ethical and professional frameworks and their impact on clinical practice
• Tailor your practice to address the differences in cultural practices and beliefs of groups and individuals
• Demonstrate the necessary professional values appropriate for conduct within clinical practice
• Demonstrate commitment to the development of your practice and of the profession of Radiography through your engagement with continuing professional development, scholarly activity, audit and research in your field of study.

HOW WILL I LEARN?

The programme design ensures you learn the required information, understand the appropriate topics and can apply these to your clinical and professional practice. A range of teaching and learning methods are used including formal lectures, seminars, tutorials, demonstrations/workshops, clinical practice, work based learning and self-directed study. Lectures are used to disseminate information to you, thus extending your knowledge in some areas and presenting you with new information in others. Seminars, tutorials and discussion sessions are used to reinforce the student centred approach to learning by allowing you to prepare and present material to your peer group and encourages an interchange of ideas. Clinical and professional practice occurs in the workplace where you are able to develop clinical and professional skills and apply knowledge to a wide range of clinical situations. Self-directed study is used to encourage you to take responsibility for your own learning and to promote self-discipline and reflective skills. There is a wealth of online learning opportunities, including web-links to relevant audio, video, research papers as well as online quiz and learning resources.

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessment and Feedback Criteria

The assessment scheme for this programme is designed to use a range of methods to assess the different skills required at an appropriate level. The assessments are designed in such a way that you will be developing your work based skills and engaging in advanced practice and research. It is required that you are working in the clinical speciality in which you will be studying for the duration of your studies. Students registered on the Radiography programme may elect to study any of the modules from the elective list provided that the assignments for each module fully reflect the clinical speciality of the
intended award.

The range of assessments is intended to give a clear picture of your progress over the whole programme and to highlight areas which require remedial action or where you are progressing well. On completion of each set of assessments you are provided with written and/or verbal feedback on your progress and you are encouraged to develop self-evaluation skills. The range of assessments includes unseen examinations, assignments, clinical case studies, oral and poster presentations and independent research. Examinations assess your understanding of facts and concepts and their application to practice. Assignments give you the ability to explore specific topics in depth and to show evidence of the ability to put forward logical arguments, critically evaluate issues and communicate effectively in writing. Formative assessments are planned for each module, to ensure you are well supported and prepared for your final summative assessment.

Case studies assess your ability to look at a particular clinical situation and evaluate the use of the imaging/treatment modality in patient management, thereby assessing the application of knowledge to clinical practice. Presentations are used to assess your ability to put forward logical arguments, critically evaluate issues and communicate effectively using an oral or poster method.

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of an assessment can be measured. Grade-related criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing assessments. These may be provided in programme handbooks, module specifications, on the virtual learning environment or attached to a specific assessment task.

Feedback will be provided in line with our Assessment and Feedback Policy. In particular, you will normally be provided with feedback within three weeks of the submission deadline or assessment date. This would normally include a provisional grade or mark. For end of module examinations or an equivalent significant task (e.g. an end of module project), feedback will normally be provided within four weeks. Feedback on formative assessments will be provided in line with the assessment and feedback policy. The timescale for feedback on final year projects or dissertations may be longer. The full policy can be found at: https://www.city.ac.uk/__data/assets/pdf_file/0008/68921/assessment_and_feedback_policy.pdf

Assessment Regulations

In order to pass your programme, you should complete successfully or be exempted from the relevant modules and assessments and will therefore acquire the required number of credits. You also need to pass each Programme Stage of your programme in order to progress to the following Programme Stage.

The pass mark for each module is 50%.
If you fail a module you will normally be offered one resit attempt.

If you are successful in the resit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass mark for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the requirements for a module and do not complete your resit by the date specified you will not progress and the Assessment Board will require that you be withdrawn from the module and possibly the programme.

If you fail to meet the requirements for the programme, the Assessment Board will consider whether you are eligible for an Exit Award as per the table below. If you would like to know more about the way in which assessment works at City, please see the full version of the Assessment Regulations at: [http://www.city.ac.uk/__data/assets/word_doc/0003/69249/s19.doc](http://www.city.ac.uk/__data/assets/word_doc/0003/69249/s19.doc)

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**WHAT AWARD CAN I GET?**

**Master's Degree:**

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<tr>
<th>Part</th>
<th>HE Level</th>
<th>Credits</th>
<th>Weighting (%)</th>
<th>Class</th>
<th>% required</th>
</tr>
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<tbody>
<tr>
<td>Dissertation</td>
<td>7</td>
<td>60</td>
<td>100%</td>
<td>With Distinction</td>
<td>70</td>
</tr>
<tr>
<td>Taught / distance learning</td>
<td>7</td>
<td>120</td>
<td></td>
<td>With Merit</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Without classification</td>
<td>50</td>
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**Postgraduate Diploma:**

<table>
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<tr>
<th>Part</th>
<th>HE Level</th>
<th>Credits</th>
<th>Weighting (%)</th>
<th>Class</th>
<th>% required</th>
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</thead>
<tbody>
<tr>
<td>Taught / distance learning</td>
<td>7</td>
<td>120</td>
<td>100%</td>
<td>With Distinction With Merit</td>
<td>70 60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Without classification</td>
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**Postgraduate Certificate:**

<table>
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<tr>
<th>Part</th>
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<th>Credits</th>
<th>Weighting (%)</th>
<th>Class</th>
<th>% required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taught</td>
<td>7</td>
<td>60</td>
<td>100%</td>
<td>With Distinction</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>With Merit</td>
<td>60</td>
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</table>
WHAT WILL I STUDY?

Radiography (Computed Tomography) Route

- For the Postgraduate Certificate in Radiography (Computed Tomography) the core modules of RDM019 ‘Clinical Applications of Computed Tomography’ and RCM123 ‘Science and Instrumentation of Computed Tomography’ must be completed.
- For the Postgraduate Diploma in Radiography (Computed Tomography) to obtain a minimum of 120 credits and include the core modules of RDM019 ‘Clinical Applications of Computed Tomography’, RCM123 ‘Science and Instrumentation of Computed Tomography’ and HRM001 ‘Introduction to Research Methods and Applied Data Analysis’ (or HRM011 – distance learning version) with the rest selected from elective modules. You may negotiate with the Programme Director to choose one 15 credit module from the modules on offer within the School of Health Sciences as long as the learning outcomes are in line with those of your programme.
- MSc Radiography (Computed Tomography) to obtain a minimum of 180 credits and include the core modules of RDM019 ‘Clinical Applications of Computed Tomography’, RCM123 ‘Science and Instrumentation of Computed Tomography’, RCM012 ‘Dissertation’ and HRM001 ‘Introduction to Research Methods and Applied Data Analysis’ (or HRM011 – distance learning version) with the rest selected from elective modules. You may negotiate with the Programme Director to choose one 15 credit module from the modules on offer within the School of Health Sciences as long as the learning outcomes are in line with those of your programme.

Radiography (Magnetic Resonance Imaging) Route

- For the Postgraduate Certificate in Radiography (Magnetic Resonance Imaging) the core modules of RDM017 ‘Clinical Applications of Magnetic Resonance Imaging’ and RCM124 ‘Physics and Instrumentation of Magnetic Resonance imaging’ must be completed.
- For the Postgraduate Diploma in Radiography (Magnetic Resonance Imaging) to obtain a minimum of 120 credits and include the core modules of RDM017 ‘Clinical Applications of Magnetic Resonance imaging’, RCM124 ‘Physics and Instrumentation of Magnetic Resonance imaging’ and HRM001 ‘Introduction to Research Methods and Applied Data Analysis’ (or HRM011 – distance learning version) with the rest selected from elective modules. You may negotiate with the Programme Director to choose one 15 credit module from the modules on offer within the School of Health Sciences as long as the learning outcomes are in line with those of your programme.
- MSc Radiography (Magnetic Resonance imaging) to obtain a minimum of 180 credits and include the core modules of RDM017 ‘Clinical Applications of Magnetic Resonance Imaging’, RCM124 ‘Physics and Instrumentation of Magnetic
Resonance Imaging’, RCM012 ‘Dissertation’ and HRM001 ‘Introduction to Research Methods and Applied Data Analysis’ (or HRM011 – distance learning version) with the rest selected from elective modules. You may negotiate with the Programme Director to choose one 15 credit module from the modules on offer within the School of Health Sciences as long as the learning outcomes are in line with those of your programme.

<table>
<thead>
<tr>
<th>Module Title</th>
<th>SITS Code</th>
<th>Module Credits</th>
<th>Core/Elective</th>
<th>Can be Compensated?</th>
<th>Level</th>
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<tr>
<td>Science and Instrumentation of Computed Tomography</td>
<td>RCM123</td>
<td>30</td>
<td>C/E*</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Physics and Instrumentation of Magnetic Resonance Imaging</td>
<td>RCM124</td>
<td>30</td>
<td>C/E**</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Clinical Applications of Magnetic Resonance Imaging</td>
<td>RDM017</td>
<td>30</td>
<td>C/E**</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Clinical Applications of Computed Tomography</td>
<td>RDM019</td>
<td>30</td>
<td>C/E*</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Introduction to Research Methods and Applied Data Analysis</td>
<td>HRM001</td>
<td>30</td>
<td>C</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Introduction to Research Methods and Applied Data Analysis (Distance Learning)</td>
<td>HRM011</td>
<td>30</td>
<td>C</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Introduction to Artificial Intelligence for radiographers</td>
<td>RCM129</td>
<td>30</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Patient centred care: Applications in Medical Imaging</td>
<td>RCM130</td>
<td>15</td>
<td>E</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Cardiac MRI: radiography technique and clinical applications</td>
<td>RCM131</td>
<td>15</td>
<td>E</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Leading and evaluating learning in healthcare</td>
<td>APM058</td>
<td>15</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Student Negotiated Module 1</td>
<td>RCM010</td>
<td>15</td>
<td>E</td>
<td>N</td>
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<tr>
<td>Dissertation</td>
<td>APM002</td>
<td>60</td>
<td>C</td>
<td>N</td>
<td>7</td>
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*Core module for the Computed Tomography route. Elective module for the Magnetic Resonance Imaging route.
**Core module for the Magnetic Resonance Imaging route. Elective module for the Computed Tomography route.**

WILL I GET ANY PROFESSIONAL RECOGNITION?

**Accrediting Body:** College of Radiographers  
**Nature of Accreditation:** Professional Body Accreditation

HOW DO I ENTER THE PROGRAMME?

The minimum entry qualifications for applicants to the postgraduate programme in Radiography will be:

- Honours degree in Radiography (2:2 or above) or  
- Appropriate professional qualifications e.g. Diploma of the College of Radiographers  
- International qualifications in Radiography may be acceptable if the holder is able to gain registration with the Health and Care Professions Council  
- Any applicant with non-standard qualifications may apply subject to confirmation that their qualifications are acceptable and equivalent to an Honours degree in Radiography from a UK university  
- Normally, applicants should have a minimum of 1 year of clinical experience in the clinical speciality in which they wish to study before starting the course and should continue in clinical practice while on the programme

For students whose first language is not English, the following qualifications will meet the English language requirement for entry to a postgraduate course of study:

- International English Language Testing Service (IELTS) with a minimum score of 7 (minimum of 7 in all categories).

**RPL/RP(E)L Requirements**

In accordance with City's Equal Opportunities Policy all applicants are advised that they may apply for exemption from specific modules. It is recognised that there may be applications to the programme from students who have completed a Postgraduate Certificate or Postgraduate Diploma at another university. To obtain exemption the applicant must provide the department with a portfolio of prior achievement(s) in which specific details such as course title, level and credits gained the learning outcomes, course content and assessment methods are presented. The applicant is invited to present this evidence at interview for the panel to review. It is the responsibility of the applicant to initiate any claim for exemption of any part of the course. All requests for exemption are subject to the approval of the Programme Management Team.

The limit to the volume of credit that can be permitted through RPL will be 60 credits where a student holds a Postgraduate Certificate in a Radiography related subject from another
The limit to the volume of credit that can be permitted through RPL will be 120 credits where a student holds a Postgraduate Diploma in a Radiography related subject from another institution.