Programme Specification

Queen Margaret University
EDINBURGH

Where appropriate outcome statements have be referenced to the appropriate Benchmarking Statement **(BS)**

1	**Awarding Institution**	Queen Margaret University
2	**Teaching Institution**	Queen Margaret University
3	**Professional body accreditation**	Society and College of Radiographers
		Consortium for the Accreditation of Sonographic Education (CASE)
4	**Final Award(s)**	MSc Medical Imaging
		MSc Medical Imaging (Ultrasound)
		MSc Medical Imaging (Clinical Reporting)
		MSc Medical Imaging (MRI)
		MSc Medical Imaging (CT)
	Subsidiary exit awards	PgD Medical Imaging
		PgD Medical Imaging (Ultrasound)
		PgD Medical Imaging (Clinical Reporting)
		PgD Medical Imaging (MRI)
		PgD Medical Imaging (CT)
		PgC Medical Imaging
		PgC Medical Imaging (Ultrasound)
		PgC Medical Imaging (Clinical Reporting)
		PgC Medical Imaging (MRI)
		PgC Medical Imaging (CT)
5	**Programme Title**	MSc Medical Imaging
6	**UCAS code** (or other coding system if relevant)	
7	**SCQF Level**	11
8	**Mode of delivery and duration**	Part time: 3-7 years
9	**Date of validation/review**	20th April 2016

10. Educational Aims of the programme

The various pathways within the Medical Imaging postgraduate programme aim to service the needs of practitioners and managers working in a challenging and constantly developing health care system where methods of service delivery are forever evolving.

The overall postgraduate programme aims to provide healthcare practitioners with higher degree level studies which will allow them to develop their professional knowledge, reflect on and critically evaluate practice and enhance their clinical and research skills.

Combining theoretical principles with practical experience will allow the development of autonomous, advanced practitioners in specialist fields.

11. Benchmark statements/professional and statutory body requirements covered by the programme

CONSORTIUM FOR THE ACCREDITATION OF SONOGRAPHIC EDUCATION (CASE)., 2015. *Validation and Accreditation Handbook 2015.* London: CASE. http://www.case-uk.org/resources/CASE+Handbook+2015+$28Final+Version$29.pdf

SCOTTISH CREDIT AND QUALIFICATIONS FRAMEWORK., 2012. *SCQF Level Descriptors.* Glasgow: SCQF org. http://scqf.org.uk/wp-content/uploads/2014/03/SCQF-Revised-Level-Descriptors-Aug-2012-FINAL-web-version1.pdf

SOCIETY AND COLLEGE OF RADIOGRAPHERS., 2009. *Developing and Growing the Sonographer workforce: Education and Training needs.* London: SCoR. http://www.sor.org/learning/document-library/developing-and-growing-sonographer-workforce-education-and-training-needs

SOCIETY AND COLLEGE OF RADIOGRAPHERS., 2013. *Education and Career Framework for the Radiography Workforce.* London: SCoR. https://www.sor.org/learning/document-library?title=&field_archive_value=0&taxonomy_topics_tid=All&sort_by=field_date_published_value&sort_order=DESC&page=2

12. Learning Outcomes of the Programme

Knowledge and Understanding and Intellectual Skills
Upon successful completion of the MSc Medical Imaging programme, graduates will be able to:

- systematically and critically evaluate the practices, research and scholarship within Medical Imaging;

- critically evaluate, interrelate and apply knowledge and processes relevant to Medical Imaging, much of which may be at, or informed by, the forefront of developments;

- critically reflect on practice to develop skills of self-appraisal and insight;

- identify, critically analyse and respond creatively to complex problems;

- critically review professional development in Medical Imaging within a multiprofessional context.

Practical and Transferable Skills
Upon successful completion of the MSc Medical Imaging programme, graduates will be able to:

- demonstrate competence in their area of specialism;

- demonstrate, through practice, knowledge of how strategies for research and enquiry are used to create and interpret knowledge in the specialist area of Medical Imaging;

- exercise responsibility, initiative and self-direction to support and further independent study and professional development;

- contribute to a development of Medical Imaging in their specialism;

- communicate effectively to diverse audiences through media appropriate for their specialism;

- demonstrate originality in the application of knowledge and/or practice.

These learning outcomes articulate with the characteristic outcomes described in the Level 11 descriptors of the Scottish Credit and Qualifications Framework (SCQF, 2012).

13. Teaching and learning methods and strategies

Students undertaking the MSc Medical Imaging award will be adult learners who will be engaged in employment and prefer a part time route of study. To accommodate these adult learners, options for e-learning as well as face-to-face learning have been made available for study. This will allow learners to better manage their learning and working time, providing the opportunity to access learning material at a time best suited to their personal and professional demands. Learners will be able to choose from modules that are delivered either through block attendance or through distance e-learning therefore, all learners will require support when off campus. Off campus learning will be supported and facilitated through the use of QMU's virtual learning environment (VLE), and through the use of other electronic media such as email and Skype. The availability of SMART Board recording and video recording has allowed the team to progress e-learning and teaching methods so that a visual recording of lecture presentations can be accessed by students and can be repeatedly viewed, enhancing the lecture content for those who have attended as well as providing a presentation for those who have not attended. The application of such modern teaching methods demonstrates the radiography team's commitment to offering an equal learning experience regardless of when and where the course content is accessed, and an equal learning experience to a diverse group of students with a variety of learning needs including learning disabilities.

The VLE (the Hub) will be used as a course management tool as well as a tool for delivering course material and supporting learning development through asynchronous discussion. Where individual Hub sites will be made available for learning resources, a designated Hub site will serve as a support for the all MSc Medical Imaging learners creating a central focus for the learning community. This site will also administer programme and consultative meetings between staff and learners including Personal Academic Tutor (PAT) meetings, and will be the focus for communication between the programme leader and the learners. Other individual Hub sites related to relevant modules will be used to deliver course material and course discussion where appropriate, and details of assignments with the assignment submissions being delivered through the Hub drop box facility. Access to the QMU student desktop is enabled through the remote access facility in Citrix. This provides access for students to all the software available on campus, electronic library facilities as well as online matriculation.

Radiography staff currently engage in electronic feedback on assessment work, which can be delivered to students through the School of Health Sciences Hub site. Assessment and examination marks are also published electronically to students through the University Student Portal. Radiography staff have engaged in the electronic feedback system provided by GradeMark which allows electronic feedback on students' work in addition to the Turnitin originality report. Students are able to use Turnitin as a formative tool for their writing.

Face-to-face teaching will still be required for those modules that are not available for e-learning delivery. Face-to-face teaching is conducted through the use of adult learning techniques such as group work, laboratory investigations, problem-based learning, group discussion and lecture presentation. Teaching and learning strategies will be delivered in accordance with QMU's Postgraduate Framework (QMU 2011).

Sharing learning experiences within a multidisciplinary context will provide the learners with an insight and an increasing awareness of professional development in associated areas of practice. Students are invited to an annual multidisciplinary study day to present their case studies. This additional learning experience will prepare learners for multi-professional team working, a desirable attribute for the modern day practitioner where working in partnership across teams of healthcare professionals is intensifying.

The modules available for the MSc programme will have direct relevance to the future progression of practice and aim to provide an opportunity for learners to develop learning content in respect of practice needs. Compulsory Research Methods and the Research Project module will encourage learners to explore, to experiment with and to apply research methodology in relation to professional practice. The multidisciplinary context of the compulsory modules will facilitate a broadening awareness of associated areas of practice. Module choice will encourage learners to critically evaluate and question areas of professional practice and encourage learners to adapt new thinking to practice development. The range of module choice will allow learners to select learning content that is most appropriate and relevant to the needs of their area of practice. The flexibility of module

choice will provide an opportunity for learners to further develop an area of special interest and to expand an area of knowledge through a variety of learning approaches such as critical appraisal, work-based learning and research application. Customisation of content will allow learners to explore and to develop areas of professional interest, as well as new areas of practice while attaining Master's level learning. The benefits of supporting new developments will enhance professional knowledge for the programme team, for other leaners as well as the individual learner

14. Assessment strategies

The teaching and assessment strategies will enable learners to develop their full potential by recognising and building on prior knowledge and experience and by facilitating development of subject related and transferable skills. Strategies should develop and reward critical, evaluative and enquiry-based approaches to study.

Assessment at postgraduate level is concerned with advanced-level skills that combine both theoretical and empirical knowledge and the application of that knowledge in the analysis and evaluation of current practice. Various forms of assessment to include critical evaluation of cases, portfolio of evidence of practice, essays, written examination and a project containing evidence of research method and analysis will be used to monitor the progress of students throughout the programme and will contribute towards the award.

Each module will be separately assessed to provide flexibility in the programme. The methods used will be appropriate to the assessment of the acquisition of particular knowledge and to the application of such knowledge into clinical practice.

To ensure adequate feedback to students regarding their progress, formative assessment will be used where appropriate as part of the learning process. Only summative assessments will contribute towards the award. Marking will adhere to the QMU Taught Postgraduate Framework and it's performance indicators.

15. Programme structures and features, curriculum units (modules), credits and award requirements (including any periods of placement)

The MSc Medical Imaging programme is presented as a modular programme. A single module is credited with 15 points at SCQF level 11 (Scottish Higher Education (SHE) M- level).

The programme will offer a variety of attendance pathways for study: work-based learning; distance e-learning and block attendance. A range of modules currently available from within the School of Health Sciences that are related to the development and progression of the Radiography profession can be used to form the programme content. The full MSc Medical Imaging award of 180 M level credits will require study of compulsory modules of 90 credits, which will be covered by Research Methods and the Research Project which must be related to an area relevant to Medical Imaging. Of the remaining 90 M level credits, 60 credits must come from the profession specific modules and the remaining 30 credits from either the profession specific modules or the elective list from QMU's Postgraduate Module Catalogue, a sample of which is identified as being relevant to the programme (Table 1).

In addition a non-credit bearing online study unit is provided: Online Learning. It does not contribute to the final MSc but aims to clarify expectations and enable the development of skills and strategies for successful online learning at master's level. The students who already have prior learning experiences at the expected level will have the opportunity to choose specific aspects of the study unit that address their learning needs.

Table 1: Modules in MSc Medical Imaging Programme

Core Modules	credits
Research Methods (PM051)	30
School of Health Sciences Research Project (PM009)	60
Profession Specific Modules	**credits**
Pathophysiology for Musculoskeletal Image Evaluation	15
Principles of Image Evaluation	15
Clinical Reporting of the Axial and Appendicular Musculoskeletal System	30
Principles of Magnetic Resonance Imaging (RM060)	15
Magnetic Resonance Imaging in Practice (MSK/CNS)	30
Advanced Practice in Magnetic Resonance Imaging Examinations of the Lumbar Spine	30
Principles of Computed Tomography	15
Advanced Practice in Computed Tomography of the Head	30
Computed Tomography in Practice (Head / Chest, Abdomen and Pelvis)	30
Advanced Practice in Computed Tomography Colonography	30
Physics and Instrumentation of Ultrasound	15
Professional Issues Relating to Medical Imaging	15
General Medical Ultrasound in Clinical Practice	30
Obstetric Ultrasound in Clinical Practice	30
Breast Ultrasound in Clinical Practice	30
Musculoskeletal Ultrasound in Clinical Practice	30
Musculoskeletal Ultrasound in Clinical Practice for AHPs	30
Examples of Elective Modules	**credits**
Current Developments (CM035)	30
Epidemiology (DM039)	15
Developing Professional Practice (NM164)	15
Developing Professional Practice (NM107)	30
Developing Professional Practice (NM165)	45
Leading Professional Practice (NM288)	15
Practice Development for Person-centred Cultures (NM299)	15

16. Criteria for admission

The standard precepts of the University Admissions Regulations apply. These can be found on the Quality website: http://www.qmu.ac.uk/quality/gr/default.htm

As well as the general entry requirements for postgraduate study, each module may have its own specific pre-requisites that must be fulfilled prior to registration on the module. Students should pay particular attention to these in drawing up their programmes of study to ensure that they are qualified to be admitted and to complete their intended programmes.

1. To enter the MSc Medical Imaging, applicants should normally hold an honours degree or equivalent and be registered practicing Health Care Professionals in the UK.

Applicants may register as either:

1. an MSc student with the intention of completing 180 SCQF level 11 credits
or
2. as an associate student with the intention of completing stand-alone modules.

Application to the MSc Medical Imaging programme will be in writing on the appropriate application form and will be submitted to be assessed by the programme leader.

Guidance on application for students with a disability is taken from the Taught Postgraduate Framework and states that:

- completed application forms are initially processed in the Admissions Office;
- staff there will highlight disability codes, which have been declared;
- applications from disabled candidates who cannot meet the academic programme entry requirements can be rejected in the normal way.

For the purpose of these MSc programmes contact with students to establish the extent of the disability and to identify the required support, may be made through the use of the telephone.

17. Support for students and their learning

QMU programmes normally provide the following student support:
- Personal Academic Tutors
- Personal Development Portfolios
- Student Handbooks
- Access to Student Learning Services, Learning Resource Centre and IT support
- Access to Student Services: careers, counselling, disability advice
- Representation through Student-Staff Committees

18. Quality Assurance arrangements

This programme is governed by QMU's quality assurance procedures. See the QMU website for more detail: http://www.qmu.ac.uk/quality/