

# Programme Specification for BSc (Hons) Diagnostic Radiography

## 1. Awarding Institution / Body

University of London (UoL) and St George's Hospital Medical School

## 2a Teaching Institution

St George's Hospital Medical School (SGHMS) & Kingston University (KU)  
Faculty of Health and Social Care Sciences  
School of Radiography

## 2b Work-based Learning

Clinical experience is gained from some of the following accredited placements:

- Ashford and St Peter's NHS Trust
- Chelsea & Westminster Hospital NHS Trust
- Frimley Park Hospital, NHS Trust
- Kingston Hospital NHS Trust
- Mayday Healthcare NHS Trust
- Guy's and St Thomas' Hospital NHS Trust
- Royal Surrey County Hospital NHS Trust
- St George's Healthcare NHS Trust
- St Helier and Epsom NHS Trust
- West Middlesex Hospital NHS Trust

## 2c Location: Mainly KU, Penrhyn Road and SGHMS

## 3. Programme Accredited by:

Health Professions Council [HPC] and Society/College of Radiographers [SCoR]  
(Joint Validation Committee [JVC])

## 4. Programme Titles and Final Awards

BSc (Honours) Diagnostic Radiography (UoL)  
Undergraduate Diploma in Imaging Studies with Practice (SGHMS)  
Undergraduate Certificate in Imaging Studies with Practice (SGHMS)  
Undergraduate Certificate in Imaging Studies (SGHMS)

## 5. UCAS Code : B810

## 6. Mode(s) of study and Minimum and Maximum Periods of Registration:

Full time (3-6 years)

## 7. QAA Subject Benchmarking Group(s)

Allied Health Professions

## 8. Educational Aims of the Programme

- Provide the students with the knowledge and skills to equip them for a career in diagnostic radiography.
- Develop the students' competence in applying clinical skills to the practice of radiography.
- Develop the critical and analytical powers of the student in relation to diagnostic radiography.
- Provide the student with the skills to adapt and respond positively to change.

- Develop critical, analytical problem-based learning skills and the key skills to prepare the student for graduate employment.
- Assist the students to develop the skills required for both autonomous practice and team-working
- Enhance the development of the students' interpersonal skills.
- Provide education and training that is accredited by the College of Radiographers/Health Professions Council.
- Provide the students with opportunities for shared multidisciplinary learning with medicine, physiotherapy, therapeutic radiography, midwifery and nursing.

**9. Intended Learning Outcomes** - *the programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:*

#### **Knowledge and Understanding**

- A1 Theoretical basis of diagnostic radiography practice.
- A2 Anatomical, biomedical and physiological principles related to human health and disease.
- A3 Current developments in the practice of theory of diagnostic radiography.
- A4 Fundamental concepts of psychosocial science relevant to the student's becoming a health team member, practitioner and healthcare educator.
- A5 Theoretical basis of scientific research and clinical audit.
- A6 The context of health care provision including the structure and policies of the NHS and of professional regulation.

#### **Skills and other attributes**

##### **Intellectual skills**

- B1 Apply the skills needed for academic study and enquiry
- B2 Evaluate research and a variety of types of information and evidence critically
- B3 Synthesise information from a number of sources in order to gain a coherent understanding of theory and practice
- B4 Apply strategies for appropriate selection of relevant information from a wide source and large body of knowledge
- B5 Utilise problem solving skills
- B6 Analyse, evaluate and interpret the evidence underpinning diagnostic radiography practice critically and initiate change in practice appropriately

##### **Professional practical skills**

- C1 Undertake skilled competent, safe, evaluative reflective diagnostic radiography practice
- C2 Communicate effectively with individuals, relatives, carers, and health care professionals establishing professional and ethical relationships
- C3 Make judgements from the oral and physical presentation of an individual and evaluate and assess the undertaking of clinical examinations
- C4 Reflect upon informed decisions about clinical practices consistent with accepted protocols and the individual patients' needs
- C5 Effectively and safely apply key skills to the management of individuals, with continual analysis and evaluation of outcome and appropriate modification of interventions
- C6 Make evaluative judgements on the technical outcomes from imaging procedures and report the findings accordingly

### **Key skills**

- D1 Communicate effectively with a wide range of individuals using a variety of means
- D2 Evaluate the student's own academic, professional and clinical performance
- D3 Utilise problem-solving skills in a variety of theoretical and practical situations
- D4 Manage change effectively and respond to changing demands
- D5 Take responsibility for personal and professional learning and development (personal development planning)
- D6 Manage time, prioritise workloads and recognise and manage personal emotions and stress
- D7 Understand career opportunities and challenges ahead and begin to plan a career path
- D8 Information management skills, e.g. IT skills
- D9 Work with others to support teamwork, leadership and assertiveness
- D10 Interpret and use numerical and statistical information accurately

Key skills are generally incorporated within modules and related to relevant assessments as appropriate. The module outcomes including key skills mapped against individual modules are shown at Annex 3. A map of the Benchmark Statements located against the modules is shown at Annex 4.

## **10. Programme structures and requirements, levels, modules, credits, and awards**

The course is studied over three years full-time. There is an equal balance between University-based study and work-based experience in hospitals. Study is undertaken at three levels (one for each level of study). The programme is arranged in 8 terms with 28 study weeks in the first, 46 weeks in the second year and 47 weeks in the final year.

The course is divided into study units called modules. Each module has a credit value of 15 credits but modules may be subdivided into smaller or amalgamated into larger units (7.5 to 60 credits) according to the subject and nature of learning. Each 15-credit module represents approximately 150 hours of student learning, endeavour and assessment. Each year level has an equivalent of 120 credits. A scheme diagram is shown at Annex 1.

A feature of the programme is interprofessional learning. At Level 1 is a multidisciplinary *Interprofessional Foundation Programme* that combines active learning with different health professional groups including medicine, physiotherapy, diagnostic radiography, nursing and biomedical sciences. Further interprofessional learning takes place in modules at level two and three. Modules with interprofessional learning are shown at Annex 2. A further feature of the course is a sustained period of clinical practice designed to assist in developing and demonstrating clinical practice skills. The second and third years both have two terms that are clinically based and one term that is University based. Work-based modules account for 120 credits in total. The study modules within the course, the levels at which they are studied, the credit ratings of modules and the awards that can be gained are shown at Annex 2. Modules incorporate key skills and facilitate personal development planning as an integral part of the learning process that can be embodied within a student's Progress File. Students' enrolled on the programme have an access account to the University's web-based learning management system, Blackboard, at [www.lms.kingston.ac.uk](http://www.lms.kingston.ac.uk). This enables access about the programme including course administration matters, module and assessment details, course learning materials and e-mail communication.

## Conventions

This programme includes modules and sub-modules which are fully identified within the Module Description documents. These modules are coded to indicate the associated radiography degrees and multidisciplinary modules, level and length by the following convention:

DR	=	Diagnostic radiography	
M	=	Multidisciplinary	
TR	=	Therapeutic Radiography	
DRC	=	Clinical Diagnostic Radiography	
1	=	Module at level I	
2	=	Module at level II	
3	=	Module at level III	
01	=	Unique number of module	
a, b, c, d,	=	Half module (or part of a larger module)	(7.5 credits)
X	=	Whole module	(15 credits)
Y	=	Double module	(30 credits)
Z	=	Quadruple module	(60 credits)

### *HE Level 1*

<i>Code</i>	<i>Module</i>	<i>Credit</i>
DRM 101Z	Common Foundation Programme	60
DRM 102X	Science and Technology I	15
DRM 103a	Communication I	7.5
DR 104X	Skeletal Imaging I	15
DR 105X	Visceral Imaging I	15
DR 106a	Preparation for Practice	7.5

*Potential award = Undergraduate Certificate in Imaging Studies (SGHMS) [120 credits]  
Candidates who successfully complete DRC 201Y in addition will be eligible for an  
Undergraduate Certificate in Imaging Studies with Practice (SGHMS) [150 credits]*

### *HE Level 2*

<i>Code</i>	<i>Module</i>	<i>Credit</i>
DRC 201Y	Clinical Experience I	30 (Level I)
DRM 202a	Research Methods	7.5
DRM 203a	Communication II	7.5
DRM 204X	Science and Technology II	15
DR 205a	Skeletal Imaging II	7.5
DR 206a	Visceral Imaging II	7.5
DR 207X	Imaging Modalities	15
DRC 208Y	Clinical Experience II	30

*Potential award = Undergraduate Diploma in Imaging Studies with Practice (SGHMS) [240 credits]*

### **HE Level 3**

<b>Code</b>	<b>Module</b>	<b>Credit</b>
DRC 301X	Clinical Experience III	15
DRC 302Y	Clinical Experience IV	30
DRM 303Y	Research Project	30
DRM 304X	Management and Interprofessional Debates	15
DR 305Y	Integrated Radiography	30
	a Science and Technology III	(7.5)
	b Contemporary Issues in Radiography	(7.5)
	c Applied Pathology	(7.5)
	d Social Psychology in Healthcare	(7.5)

*Potential award = BSc (Hons) Diagnostic Radiography (UoL) [360 credits]*

### **11. Support for students and their learning**

- Two week induction programme for orientation and introducing study skills.
- Student Handbook and Module Guides.
- Library and study skill packages
- Extensive library and other learning resources and facilities at both KU & SGHMS
- Learning management system, Blackboard, for access to electronic course information and learning materials via the internet
- Radiography equipment: practical rooms equipped with two X-ray machines and processing equipment
- Clinical education supported by clinical supervisors and assessors located within service provider units.
- Close collaboration between the University and hospital clinical sites via the University Clinical Co-ordinator, Clinical Liaison Tutor scheme and Clinical Liaison Committee.
- Academic liaison staff make regular, planned visits to the clinical placements to support and collaborate with students and the clinical supervisors and assessors.
- All students are allocated personal tutors whose role is to assist them with personal problems and to advise on pastoral issues.
- Student e-mail and open personal access to tutorial staff including the Course Director. Access to student counsellors on both the KU and SGHMS sites.
- Access to Teaching and Learning Support Services, which provides assistance and guidance e.g. dyslexia
- Honorary contracts for students and staff at clinical placements
- Progress File and Learning Contract

### **12. Criteria for Admission**

The admissions policy is intended to open the course to candidates who satisfy the minimum entry requirements having followed the widest possible range of academic routes.

### **Selection Procedure**

The selection procedure is based on candidates meeting the appropriate academic and non-academic criteria and successful performance at interview.

## **Academic Criteria**

Candidates must be able to satisfy the general admissions requirements of the University of London and of the School of Diagnostic Radiography in one of the following ways:

### ***School/College leavers who have reached 17.5 years on admission***

#### **A Levels**

- Normally a minimum of 240 UCAS tariff points from a minimum of one 12 unit or two 6 unit courses or three 'A' Levels excluding General Studies.
- Preference given to 'A' Level in the Sciences (including Geography)
- Five grade 'C' GCSE passes which should include Maths, English Language, Physics or Combined Science.

**BTEC:** An appropriate National Diploma with a good standing including Merit and Distinction passes in appropriate units.

**Irish Leaving Certificate:** Minimum of three passes at Grade 'B' and three passes at Grade 'C' or above at Higher Level.

**Scottish Highers:** three passes with a minimum of one at B and two at C grade

**GNVQ Science:** An advanced GVNQ in Science.

***Mature and overseas who are not graduate students*** considered on an individual basis

- **Admission with exemptions** for advanced standing and credit accumulation may be possible.
- **Access Courses:** Validated access course in appropriate subjects – minimum of 66 level 3 credits
- **Degree :** A degree from a British or Irish University or CNAA degree or overseas equivalent

#### ***Additional requirements***

- All students will be screened by the Occupational Health Department to assess their fitness to undertake the clinical component of the degree
- Student Registration with the Society of Radiographers
- Declaration of disclosure of any criminal convictions including outstanding and spent via the Criminal Records Bureau (CRB) enhanced disclosure checks
- Full disclosure of previous educational and professional experience
- Evidence of assessed academic education within past 5 years.

#### **Advanced Standing and Credit Accumulation and Transfer Scheme (CATS)**

- Candidates who are in possession of a prior qualification which has some similar elements to the academic course may be exempted from part of the course of study in accordance with the general and course regulations.

#### **Non-academic criteria**

Applicants will be considered for interview from all backgrounds who can demonstrate within their UCAS Personal Statement, a desire to work in a healthcare field and an awareness of the radiography profession and the inclusion of any supporting aptitudes and qualities.

#### **Equal opportunities and disability**

Admission procedures are consistent with SGHMS Equal Opportunities Procedures and in accordance with current legislation. Candidates with disabilities will be considered in conjunction with the Occupational Health Service, to ensure that they are able to fulfil the requirements of the courses.

### **13. Methods for evaluating and improving the quality and standards of teaching and learning**

#### ***Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards –***

- Module reviews (feedback questionnaires and staff report);
- Annual course review report prepared by course tutor considered by course committee;
- Periodic review and revalidation involving external panel members;
- Course accreditation by HPC and SCoR.
- First post competency check-list for employers and students.
- Peer teaching observation;
- Visiting Examiner reports.
- Audit of clinical placements
- Annual monitoring by HPC/SCoR and NHS purchasing commissioners.

#### ***Committees with responsibility for monitoring and evaluating quality and standards***

- Staff / Student Consultative Committee
- Course Committee
- Clinical Liaison sub-committee
- Common Foundation Multidisciplinary Committee
- SGHMS Academic Quality Assurance Committee (AQAC)
- SGHMS Academic Board
- Faculty Quality Committee
- Faculty Learning & Teaching Committee
- Faculty Board
- Board of Examiners - meets in June and September to consider marks, progression and awards

#### ***Mechanisms for gaining student feedback on the quality of teaching and their learning experience***

- student-staff consultative committee and student representation at the Course Committee.
- optically read questionnaire evaluation of modules and year end evaluation by group discussion
- audit of clinical experience.

#### ***Staff development priorities include:***

- Staff roles in the management of the programme are clearly identified
- Regular updating in professional and IT/Computing developments including 'Blackboard' training
- Staff to hold or attain formal teaching qualifications and higher degrees
- Staff participate in the staff appraisal scheme and institutional staff development programmes
- Regular course team meetings and comprehensive annual review and planning for forthcoming academic year

### **14. Regulation of standards**

### ***Assessment rules & Honours classification***

- Course specific regulations are approved by SGHMS Academic Board and are in accordance with the SGHMS (University of London) General Regulations for Students and Programmes of Study
- Minimum pass mark is 40% for each module.
- Overview of assessment details are provided in the Student Handbook and a full assessment brief provided within the Module Guides and final year Research Project Handbook.
- To qualify for the award of Honours Degree, students must complete all the course requirements and must pass all modules.
- Marks from second and third year assessments only will contribute to the final classification of the degree.
- Marks for each module are weighted according to the credit weighting and level of the module. The weighting of marks contributing to the degree for levels 1, 2 and 3 is: 0 1 2.

### ***Summary of grades, marks and their interpretation for honours degree classification***

<u>GRADE</u>	<u>MARKS</u>	<u>INTERPRETATION</u>
A	70% - 100%	First Class
B	60% - 69%	Upper Second Class
C	50% - 59%	Lower Second Class
D	40% - 49%	Third Class
E	30% - 39%	Fail
F	0% - 29%	Bad Fail

### ***Role of Visiting Examiners***

Visiting Examiners are appointed by the Academic Board and are appointed from the academic community of diagnostic radiography. The role of visiting examiner is that of moderator.

In order to do this they:

- approve examination programmes
- review course work
- see all examination scripts
- attend the Board of Examiners' meetings

### **15. Indicators of quality and standards**

- Diagnostic Radiography education contract renewed in 1998 following contract review by NHS.
- Course validation including accreditation of clinical sites by the Radiographers Board at the Council for Professions Supplementary to Medicine in 1998
- Independent review of the quality of educational provision in the School of Radiography by the Quality Assurance Agency Subject Review process in 1999 achieving an excellent grading of 23 out of a maximum 24 points.
- Inclusion in Department of Health/QAA Prototype Academic Review of Health Profession Programmes: Allied Health Professions in 2002 for the new review arrangements in 2003-6

### **16. Course Reference Points**

- QAA Benchmark Statements 2002
- Health Professions Council – Standards of Proficiency (Draft 2003)
- SCoR Curriculum Framework (Draft 2003)

- SCoR documents including:  
*Statement for Professional Conduct 2002*  
*Curriculum Framework (Draft 2003)*
- Joint Validation Committee Policy
- QAA Codes of Practice including:  
*Framework for HE Qualifications, Placement Learning*
- DoH/NHS Directives and Policies
- SGHMS and KU institutional policies, procedures and regulations etc:  
Intranets [www.kingston.ac.uk](http://www.kingston.ac.uk), [www.sghms.ac.uk](http://www.sghms.ac.uk)

## 17. Teaching and Learning Strategies

Learning and teaching strategies for the BSc (Hons) Diagnostic Radiography programme are designed to enable students to move from some dependence to self-direction in order to take responsibility for their own learning as they progress through the course. In the same way, the knowledge and skills required for critical reasoning (analysis, synthesis and evaluation) will be developed in a progressive approach.

Opportunities for shared learning with students in other healthcare disciplines help to promote interprofessional team working. The integration of theory with practice, underpinned by research and the best available evidence, along with the application of professional and key skills are embedded within learning and teaching at all levels. Lifelong learning will be encouraged through academic study, practice and by pastoral support from the Personal Tutor, development of the knowledge and skills for reflective practice and the encouragement of self-directed learning activities.

Learning sessions are enhanced by use of web-based materials supported by “Blackboard” as the learning management system (LMS) supporting a wide range of learning strategies.

An induction programme is provided at the commencement of the course and mechanisms for the support of study skills are available that are detailed in the Student Handbook. A range of key skills also feature across modules.

Specific teaching and learning strategies are indicated in the individual module outlines and provided in the Module Directory.

*Teaching strategies may include:*

- |  |                                       |
|--|---------------------------------------|
| • Lectures                                 | • Individual tutorials / supervision  |
| • Practicals                               | • Clinical assessment exercises       |
| • Demonstrations                           | • Role-play                           |
| • Seminars                                 | • Group workshops                     |
| • Case studies                             | • Debates                             |
| • Discussion Groups                        | • Observational placements and visits |
| • Tutorials                                | • LMS ‘Blackboard’                    |
| • Self-directed learning/independent study |                                       |

*Learning strategies may include:*

- |                                |                               |
|--------------------------------|-------------------------------|
| • Compilation of the portfolio | • Case study presentations    |
| • Peer review                  | • Reflective ‘diaries’        |
|                                | • Seminar paper presentations |

- Written assignments
- Use of learning contracts in group work
- Observation
- Participation in group work
- Self-directed reading
- LMS Blackboard, Computer
- Aided Learning, Web-based learning

## **18. Assessment Strategies**

The purpose of assessment is to enable students to demonstrate that they have fulfilled the learning outcomes (objectives) of the programme of study and achieved the standard required for the award they seek. They also have a role to play in facilitating achievement of the overall course aims as undertaking items of assessment will form part of the learning process.

Assessment is by a combination of academic coursework (which includes essays, reports and presentations and written examinations) and a clinical practice assessment.

The assessment strategies enable staff and students to monitor performance against the overall learning outcomes for the course.

### **Assessment Aims**

The overall assessment aims for the undergraduate programmes, in summary are to:

- demonstrate the achievement of the level of learning within modules;
- demonstrate that the students have a thorough grounding in the academic and clinical components of the course;
- ensure that the students have competence in understanding research relevant to their discipline;
- demonstrate that the students have gained a high level of competency in key skills;
- reflect the students' abilities in determining that their progression is appropriate to their abilities;
- highlight individual strengths and weaknesses and give a guide as to how the student is performing and progressing;
- help facilitate the achievement of the overall course aims and objectives;
- assist learning by providing feedback to students.

The assessment techniques are wide and varied to ensure that the range of abilities for individual students is measured appropriately.

The assessment strategies for the modules demonstrate that the aims and learning outcomes of each module are achieved and reflect the teaching and learning strategies employed in the delivery of the module. A range of assessment methods enables the spectrum of learning circumstances to be assessed validly. They also reflect an assessment of level of learning balanced against the expected variation of students' personal assessment strengths.

Since the course combines academic rigour closely allied to clinical competence the assessment methods effectively reflect factors that lie at the foundation of the discipline. These include knowledge, analysis and decision making, clinical safety and accuracy, and research methodology.

The assessments for each module and their contribution to overall marks and grades are shown at Annex 2.

The full assessment range is also identified within the Module Directory and is detailed within the Module Guides and assignment guides.

Formative assessment features across modules and all students will be given the opportunity to practise each of the assessment strategies employed. The assessment strategies will be considered

within the study skills and students will have the opportunity to gain confidence with the wide range of strategies before they are put into practice.

All clinical staff involved with clinical supervision and assessment have appropriate training.

In line with academic assessments, clinical practice assessment documentation is afforded similar internal and external scrutiny processes.

Assessment criteria for academic work are indicated in the Student Handbook.

*This specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes advantage of the learning opportunities that are provided. More detailed information on the specific learning outcomes, indicative content and the teaching, learning and assessment methods of each study unit or module can be found 1) in study module guides 2) in the course/student handbook.*

Key sources of information are:

- Course documents
- Student Handbook
- The St George's Hospital Medical School prospectus and the Kingston University prospectus
- Course leaflets
- The St George's Hospital Medical School internet site and the Kingston University internet site
- General Regulations for students and programmes of study
- QAA subject review reports

## **LIST OF ANNEXES**

**Annex 1 - Academic and Clinical Block Structure for the degree**

**Annex 2 - List of Modules and assessments**

**Annex 3 - Modules mapped against learning outcomes**

**Annex 4- Modules mapped against Benchmark Statements**