

# **Course Specification**

Cou	rse Summary Information	
1	Course Title	BSc (Hons) Diagnostic Radiography
2	Course Code	US1448
3	Awarding Institution	Birmingham City University
4	Teaching Institution(s) (if different from point 3)	
5	Professional Statutory or	Health and Care Professions Council (HCPC)
	Regulatory Body (PSRB)	College of Radiographers (CoR)
	accreditation (if applicable)	

6	Course Description
	As a diagnostic radiographer you play a valuable part in a service user's pathway by providing the imaging needed to support their diagnosis, treatment, and recovery. This is done through the use of highly specialist technology. A career in diagnostic radiography combines science, technology, patient care and an eye for detail. As well as being a rewarding field to work in, it offers a diverse career pathway with a variety of options to progress to advanced practice. Our Diagnostic Radiography course here at BCU is approved by the College of Radiographers and will support you to develop the skills and knowledge you need to prepare you to become a fully qualified diagnostic radiographer once you have graduated. On successful completion of all course requirements, you will be entitled to apply for registration with the regulator, the Health and Care Professions Council (HCPC), to gain registered practitioner status and be able to practice in the UK either within the NHS or the private sector.
	Our West Midlands based Diagnostic Radiography course provision is well-established and will offer you a mixture of education in academic and clinical environments. When on campus, as well as classroom delivery, you will have access to our specialist teaching spaces, including a well-equipped x-ray suite, image viewing facilities, ward, and operating theatre. You will also develop your specialist skills as you spend time on placements within a variety of imaging departments supported by our clinical partners in the Midlands region.
	Your academic studies include subjects which form the core of diagnostic radiography practice, including the study of human anatomy, physiology and pathology, principles of radiation and imaging, and how to deliver exacting standards of patient care in the context of varying social and psychological needs. You will also develop a strong understanding of what it means to be a registered professional. The purpose of this is to ensure that you are prepared for practice with all the skills and knowledge you need to be a competent and confident diagnostic radiographer. This course will also support you with your employability skills so that you are ready to make the move into the working world as you complete your studies.
	As you advance your knowledge of diagnostic radiography practice and the application of imaging technology to differing pathologies, you will develop academic and analytical skills and will explore the research evidence that forms the bases of current and emergent practices. You will also develop your ability to apply research strategies to health and care practice and will consolidate your clinical skills and knowledge to support your transition to registered practitioner status.



7	Course Awards		
7a	Name of Final Award	Level	Credits Awarded
	BSc (Hons) Diagnostic Radiography (Eligible to apply for professional registration with HCPC)	6	360
7b	Exit Awards and Credits Awarded		
	Cert HE Studies in Healthcare (Not eligible for professional registration	4	120
	Dip HE Studies in Healthcare (Not eligible for professional 5 registration)		240
	BSc Studies in Healthcare (Not eligible for professional 6 300 registration)		300
	BSc (Hons) Studies in Healthcare (Not eligible for professional registration if zero-credit practice modules are not successfully completed)	6	360

8 **Derogation from the University Regulations** 1. For modules with more than one item of assessment, all items of assessment must be passed in order to pass the module. 2. The practice element of each zero-credit clinical practice module must be passed before commencing the practice element of the succeeding practice module. 3. Compensation of marginally failed modules is not permitted. 4. Condonement of failed modules is not permitted. 5. Due to limited placement capacity, where learners are repeating a stage of study and have previously passed the placement (or placement module) they will not repeat the placement or its assessment when repeating the stage. The original mark(s) will stand and will be combined with any marks achieved during the remainder of the repeat stage to calculate the overall stage mean. 6. Where a student has failed a practice assessment in placement, any offer of a repeat of the stage will be contingent on the availability of a placement and will take place at the next available opportunity, which will not necessarily be in the following academic year. As a consequence, learners will not have an automatic right to repeat Level 4 (other stages are at the discretion of the Progression Assessment Board (PAB) and will be dependent on a further clinical placement being secured) 7. For modules with more than one item of assessment, resits that are allocated a grade are capped at the item level.

9	Delivery Patterns			
Mode(	(s) of Study	Location(s) of Study	Duration of Study	Code(s)
Full Tin	ne	City South	3 years	US1448
Part Tir	me	City South	6 years	US1449

#### 10 Entry Requirements

The admission requirements for this course are stated on the course page of the BCU website at <u>https://www.bcu.ac.uk/</u> or may be found by searching for the course entry profile located on the UCAS website.



11	Course Aims
	The BSc (Hons) Diagnostic Radiography course aims to develop competent, autonomous, caring, professional, patient-focussed diagnostic radiographers who are capable of problem solving and critical thought. With a solid understanding of the core foundations of diagnostic radiography, our graduates will have a passion and enthusiasm to reflect upon, research and enhance the diagnostic radiography profession. They will be flexible and confident, with highly developed interpersonal skills, capable of delivering and advocating for high quality inclusive care tailored to the needs of their service users and carers.

12	Course Learning Outcomes		
	Upon successful completion of the course, learners will be able to:		
1	Apply appropriate knowledge and skills, professional attributes, and transferable skills as required for employment as a diagnostic radiographer eligible for registration with the HCPC.		
2	Practise as an autonomous, safe, and effective practitioner, within the professional, legal, and ethical boundaries of diagnostic radiography and within their own scope of practice.		
3	Work individually and collaboratively with peers, multidisciplinary professionals and workers, patients, carers, and other stakeholders.		
4	Critically evaluate current and developing evidence across different areas of practice to problem solve and innovate, with the aim to enhance imaging practice and patient-centred care.		
5	Reflect on and identify points of development and support for their own future continuous personal and professional development.		
6	Understand their role in the supervision and development of others in clinical practice as a qualified practitioner.		
7	Critically reflect upon the role of the diagnostic radiographer within the multidisciplinary team (including advanced practice), and the effectiveness of leadership and management within healthcare organisations.		
8	Support and advocate for patients, colleagues, and others with diverse needs and from diverse cultures, and to practice and contribute effectively to a global and inclusive workforce.		
9	Adapt and support changes in practice, in order to improve the patient experience, service delivery and drive the profession forward within an evolving healthcare environment.		



13	Level Learning Outcomes		
	Upon completion of Level 4 / the Certificate of Higher Education, students will be able to:		
1	Describe and define the underlying concepts, principles and core legislation that underpin		
_	diagnostic radiography practice.		
2	Identify anatomy and physiology of the appendicular skeleton, chest, and abdomen, and		
	describe associated conventional radiographic techniques.		
3	Recognise normal anatomical appearances on conventional radiographic images of the		
	appendicular skeleton, chest, and abdomen.		
4	Explain how and why high levels of professionalism and care underpin safe and effective clinical		
-	practices.		
5	Develop their academic skillset to support the recognition of their own learning needs with		
	respect to studying at Level 4 and beyond.		
	Upon completion of Level 5 / the Diploma of Higher Education, students will be able to:		
1	Apply knowledge of the principles of imaging technology, anatomy, physiology, and pathology of		
•	the whole human body, to explain and critically appraise the rationale for the use of different		
	imaging modalities and adapted technique to meet the specific needs of the patient.		
2	Distinguish between disease and traumatic processes evident on radiographic images from		
-	across a range of modalities.		
3	Analyse legal and ethical aspects of professional radiographic practice with an applied approach		
	to clinical practice.		
4	Use analytical skills of research and enquiry to evaluate an evidence base in order to support		
	the development of a rationale for an area of research.		
	Upon completion of 60 credits at Level 6 / the Bachelors Degree (with Honours), students		
	will be able to:		
1	Demonstrate the applied knowledge and skills, professional attributes and transferable skills		
	required for employment as a Diagnostic Radiographer eligible for registration with the HCPC*.		
	*This will only be possible when the 0-credit Clinical Modules have been successfully		
	completed. Where this is not the case, a BSc (Hons) Studies in Health Care will be awarded,		
	and the graduate will not be eligible for registration with the HCPC.		
2	Critique and adapt radiographic techniques in response to complex clinical scenarios to produce		
-	quality diagnostic images in a safe and efficient manner.		
3	Perform image appraisal using a framework for preliminary clinical evaluation.		
4	Evaluate advanced practice opportunities within diagnostic radiography, the role of the		
-	radiographer in the multidisciplinary team, as well as the effectiveness of leadership and		
	management within healthcare organisations.		
5	Critically review relevant literature and methodologies, to formulate a research proposal/project,		
	which informs current clinical practice.		

14	Course Learning, Teaching and Assessment Strategy
	There will be delivery of academic modules worth 120 credits during each of the 3 years of the course. In addition to these, there will be a zero-credit clinical module at each level of study that you will also be required to complete. All modules are core, and therefore all content and assessments (both academic and clinical) must be passed to meet the requirements for the award of BSc (Hons) Diagnostic Radiography. Upon successful completion of all academic and clinical modules, you will be eligible to apply for registration with the HCPC as a diagnostic radiographer.



We utilise a variety of methods within our learning and teaching strategy to encourage reflective and critical thinking. The aim of this is to enable you to become a confident and autonomous learner, with sound academic and clinical knowledge, supporting your employability and skillset for lifelong learning and continuous professional development.

The year plan is designed to integrate theory and practice using a modular approach with alternating blocks of academic study and clinical practice across all 3 years. Delivery of academic elements of the Diagnostic Radiography course will predominantly be at the university, either in a face-to-face capacity or through online learning platforms, such as the university's online Virtual Learning Environment (VLE), Moodle, to deliver a blended approach to learning. Clinical experience is gained through attending an allocated clinical placement rotation and is reinforced within the university environment through the use of our dedicated skills suite and simulation activities. Our onsite radiography suite has capabilities for both DR (Digital Radiography) and CR (Computed Radiography), allowing you to see the evolution of technology and the importance of utilising effective imaging technique. The radiography suite is used throughout all 3 years of the course alongside our PACS (Picture Archiving and Communication System) and anatomical model resources in order to support your learning of anatomy, physiology, positioning technique and technical factors.

There will be a variety of learning and teaching activities within the course including seminars, individual or small group tutorials, didactic lectures, and study groups. These will include anatomy, physiology and pathology workshops, simulation of clinical scenarios, debates, group presentations, amongst others.

Throughout the course there will be an integration of clinical practice experience with academic learning, so that you can forge connections between your developing professional knowledge and practical skills as developing diagnostic radiographers. Our approach has been to embed fundamentals of professional knowledge within the first phases of the course so that you can develop a firm foundation in the principles of radiation and imaging, anatomy and physiology, and the provision of an excellent standard of patient care. As you advance through the levels of study, you will explore increasingly complex aspects of radiographic practice and develop your skills in analysing the evidence base that underpin protocols and procedures so that you understand where and how diagnostic radiography fits into a patient's diagnostic pathway and beyond. During the final stages of the course, you will be encouraged to adopt self-critical and analytical approaches to your developing professional identity and your role as a diagnostic radiographer within the wider multidisciplinary hospital teams.

Clinical experience is gained through attending clinical placement rotation and is reinforced within the university environment through the use of our dedicated skills suite and simulation activities. Within the first semester of Level 4, you will be required to meet 4 mandatory requirements before you will be permitted to attend placement. These include a clear enhanced DBS (Disclosure and Barring Service) check, agreement from Occupational Health that you are fit to attend placement, as well as mandatory training in Basic Life Support (BLS) and Patient Movement and Handling. You will be required to renew your mandatory training in each academic year to maintain and develop your skills in these areas. You must also make us aware if there are any changes to your DBS at any point during the course, or if any changes to your physical or mental health impact on your fitness to practice. More information on this is available in the Course Handbook and Student Clinical Handbook.

Throughout the course, you will be assessed using a variety of methods including examinations, assignments, presentations, case studies, in-person OSCE/VIVAs, and clinical assessments of competence. They will be supported in the development of your academic skills (including academic writing, knowledge base, referencing, literature searching, and criticality) as part of the curriculum starting at Level 4 but also with the support of wider academic support services across the university (e.g., Personal Development Department, Centre for Academic Success,



and the Library). You will be supported in the development of your clinical competency skills by both academic and clinical-based staff. You will also be given opportunities to develop transferable skills, which you will be able to use in your employed professional lives after graduation and verbal skills to articulate and justify your decisions and intentions.

Formative assessment opportunities exist within all modules and help you to prepare for your summative assessments. Following completion of any formative assessments, you will receive feedback on your performance as well as guidance on how you should proceed with your learning to support your success in the summative item(s) (feedback and feedforward). Similarly, for your summative assessments, you will receive feedback on the assessment items, as well as feed forward on how to improve for future assessments.

In order to complete this course a student must successfully complete all the fol CORE modules (totalling 120 credits):				
Module Code	Module Name	Credit Value		
RAD4054	Academic Skills and Knowledge	20		
RAD4063	Principles of Radiation Production and Protection	20		
RAD4059	The Chest, Abdomen and Pelvis	20		
RAD4062	Principles of Conventional Radiography	20		
	The Appendicular Skeleton	20		
RAD4064		20		
RAD4061	Introduction to Care and Professional Practice			
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RAD4061 RAD4060 evel 5: n order to comp CORE modules Module Code RAD5063 RAD5066 RAD5064	Clinical Placement in Diagnostic Radiography 1         olete this course a student must successfully com (totalling 120 credits):         Module Name         Considerations for Professional Practice         The Axial Skeleton         Radiographic Technologies and Imaging Principles	0 aplete all the for Credit Value 20 20 40		



### Level 6:

*In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):* 

Module Code	Module Name	Credit Value
RAD6074	Advanced Academic Skills and Knowledge – Research	40
RAD6077	Adaptive Technique and Advancing Technologies	40
RAD6080	Preparation for Professional Practice	20
RAD6079	Critical Thinking in Practice	20
RAD6078	Clinical Placement in Diagnostic Radiography 3	0

# 15b Structure Diagram

#### Level 4

SEMESTER ONE	SEMESTER TWO	
Core	Core	
Academic Skills and Knowledge (20 credits)	Introduction to Care and Professional Practice (20	
Principles of Radiation Production and Protection	credits)	
(20 credits)	Principles of Conventional Radiography (20	
The Chest, Abdomen and Pelvis (20 credits)	credits)	
	The Appendicular Skeleton (20 credits)	
Core		
Clinical Practice Placement in Diagnostic Radiography 1 (0 credits)		

#### Level 5

SEMESTER ONE	SEMESTER TWO
Core	Core
Considerations for Professional Practice (20 credits)	Further Academic Skills and Knowledge – Preparing for Research (20 credits)
The Axial Skeleton (20 credits)	Systems of the Body (20 credits)
Co	bre
Radiographic Technologies and	Imaging Principles (40 credits)
Clinical Placement in Diagno	stic Radiography 2 (0 credits)

#### Level 6

SEMESTER ONE	SEMESTER TWO
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Core

Preparation for Professional Practice (20 credits)

Core Critical Thinking in Practice (20 credits)

Core

Adaptive Technique and Advancing Technologies (40 credits)

Advanced Academic Skills and Knowledge – Research (40 credits)

Clinical Placement in Diagnostic Radiography 3 (0 credits)

#### 16 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning, and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- Scheduled Learning includes lectures, practical classes, and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- Private Study includes preparation for exams

The *balance of assessment* by mode of assessment (e.g., coursework, exam, and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

#### Level 4

#### **Workload**

#### 21% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	250 (21%)
Directed Learning	350 (29%)
Private Study	600 (50%)
Total Hours	1200

#### **Balance of Assessment**

Assessment Mode	Percentage
Coursework	33.3%
Exam	33.3%
In-Person	33.3%

#### Level 5

#### <u>Workload</u>

#### 18% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	204 (17%)
Directed Learning	406 (34%)



Private Study	590 (49%)
Total Hours	1200

#### Balance of Assessment

Assessment Mode	Percentage
Coursework	33.3%
Exam	33.3%
In-Person	33.3%

#### Level 6

# **Workload**

# 11% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	135.5 (11%)
Directed Learning	282.5 (24%)
Private Study	782 (65%)
Total Hours	1200

# **Balance of Assessment**

Assessment Mode	Percentage
Coursework	66.6%
Exam	0
In-Person	33.3%