

Programme Specification: Undergraduate

For students starting in Academic Year 2023/24

1. Course Summary

Names of programme and award title(s)	BSc (Hons) Radiography (Diagnostic Imaging) Diagnostic Radiographer (Integrated Degree) apprenticeship
Award type	Single Honours
Mode of study	Part-time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 6
Normal length of the programme	3 years
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus Online
Accreditation (if applicable)	This programme is accredited by the Society and College of Radiographers and approved by the Health and Care Professions Council (HCPC). For further details see the section on Accreditation.
Regulator	Office for Students (OfS), Institute for Apprenticeships and Technical Education (IfATE)
Tuition Fees	<p>Fees: The employer pays all course fees and no fees are charged to apprentice students.</p> <p>Programme price is set at the maximum funding band for this apprenticeship standard set by the Institute for Apprenticeships and Technical Education (IfATE) which is a government non-departmental body sponsored by the Department for Education (DFE). We reserve the right to increase price in future. Fees will be paid by the employer on behalf of the apprentice using Levy or co-funding arrangements. For further information please visit: https://www.gov.uk/government/publications/apprenticeship-funding-from-may-2017</p> <p>A full breakdown of costs is set out in the commitment statement.</p>

This is an apprentice programme and can only be undertaken with an employer who has interviewed, employed and deemed the apprentice suitable for the BSc (Hons) Radiography (Diagnostic Imaging) (Integrated Degree) apprenticeship. The apprentice must complete the whole degree programme with the employer and Keele University in order to achieve the BSc (Hons) Radiography (Diagnostic Imaging) award. There are no interim awards for this programme. Fees have been determined by the Office for Students and the Institute for Apprenticeships and Technical Education (IfATE) and will be paid by the employer.

How this information might change: Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

2. What is a Single Honours programme?

The Single Honours programme described in this document allows you to focus exclusively on this subject, Radiography (Diagnostic Imaging).

All Higher and Degree Apprenticeships combine higher education study and work-based learning to enable apprentices to achieve a higher-level award whilst in work. The provision of an academic award is integrated with experience, practice and learning in the workplace where the apprentice has paid employment status. Higher and Degree Apprenticeships are co-designed by training providers and employers to ensure that apprentices are equipped with the skills employers need and to develop their own careers.

3. Overview of the Programme

This programme is used to deliver the apprenticeship standard. Apprenticeship standards are co-designed by employers and training providers to ensure that apprentices are equipped with the skills employers need. All higher and degree apprenticeships combine work-based learning with part-time study leading to a recognised qualification. The programme has been designed for delivery in a work-based learning context, where assessments for each module of the programme provide opportunities for the student to apply the learning from the module back into their workplace context.

During delivery we will work with you and your employer to ensure that you progress through your apprenticeship, as a job with training. This will involve regular tripartite review meetings each year of study, monitoring compliance with apprenticeship requirements, including the provision by each employer of 20% off-the-job academic study, and identifying any changes required to your learning plan. Throughout your apprenticeship, you and your employer will have access to APTEM, our apprenticeships management system, where you will be required to sign and submit documents to demonstrate your progress and adhere to compliance requirements.

Achievement of the apprenticeship is through the End Point Assessment (EPA) and further details are provided in the section titled 'How is the programme assessed?'

The End Point Assessment (EPA) for this programme is integrated.

As an apprentice on the BSc (Hons) Radiography (Diagnostic Imaging) Apprentice programme in the School of Allied Health Professions (SAHP), you will study within the Faculty of Medicine and Health Sciences where other professional groups are represented within the Faculty including medicine, paramedical science, nursing and midwifery, and pharmacy. This gives you opportunities for inter-professional learning, in line with government guidelines [1], similar to those you will experience in your workplace. This is called Inter-Professional Education for academic study and multi-disciplinary learning within your workplace.

Radiography (Diagnostic Imaging) has undergone, and continues to undergo, significant development due to the philosophical and political changes that have occurred in health and social care since the early 1990s. These developments have occurred against a backdrop of rapid and on-going changes in technology, changes in the Ionising Radiation Regulations [2], fundamental changes in healthcare practices and extension of responsibility for diagnostic radiographers[3].

The profession of Radiography, like many other health professions, should be evidence-based, with an emphasis on patient care and service delivery, therefore the research element of the programme is consistent with the College of Radiographers (SCoR) Research Strategy [4].

Radiographers, more than at any other time in the history of the profession, are key practitioners in the provision of diagnostic imaging services. In addition to ionising radiation-based imaging, they are responsible for the operation of ultrasound, nuclear medicine and MRI facilities, providing health screening, diagnosing and monitoring disease processes and performing interventional procedures carried out under imaging control. The increased role of all allied health professionals in Public Health and Health Promotion means that for radiographers this will be a core part of their future role [5].

The clinical sites and employers used to place learners from this programme are already encouraging and supporting increasing numbers of radiography practitioners to provide verbal or written advice and guidance to medical and other healthcare workers regarding the interpretation of the clinical images they produce. The Audit Commission (2002) also found that 'many departments are using radiographers more flexibly to take on new roles and there is scope to extend this further'. The College of Radiographers stated, "as a vision for the profession, by 2010 clinical reporting (at least at initial image interpretation level) by radiographers, at the level of production of a written or verbal comment, should become a core competence". Therefore, the programme has a significant emphasis on initial image interpretation with the intention that all students are able to offer a written comment at their point of qualification, as this is a crucial part of practice and development of the profession.

The BSc (Hons) Radiography (Diagnostic Imaging) apprenticeship programme is intended to develop practitioners who can respond to a diverse and challenging service context in which traditional health and social service and associated professional roles are changing rapidly in response to broader political, social, economic and demographic change. These changes have highlighted a need for locally focused, clinically driven, evidence based, healthcare services which may widen opportunities for radiographers to step into positions of leadership within service. To ensure competence there is an obvious need to support these changes through imaginative and innovative education, such as inter-professional learning.

The opportunity for career progression in healthcare has made it increasingly important to ensure that newly qualified radiographers, and other health and social care professionals, have appropriate supervisory,

communication, research and management skills to not only support student radiographers, but also assistant practitioners [6]. Many of these issues are explored within the collaborative elements of the programme but BSc (Hons) Radiography (Diagnostic Imaging) specific modules will address these issues where appropriate. The BSc (Hons) Radiography (Diagnostic Imaging) apprenticeship programme has been developed with specific reference to several additional key external documents including the Health and Care Professions Council Standards for Proficiency for Radiographers (2013), and the QAA Subject Benchmarks Statement Diagnostic Radiography (2002).

The programme design is consistent with outcomes for autonomous practice and the indicative curriculum for Practitioners set out in Society and College of Radiographers: Education and Career Framework for the Radiography Workforce (2013) [6].

The profession is founded on a strong, evolving evidence base and scope of practice, clinical leadership and patient-centred professionalism. The Keele BSc (Hons) Radiography (Diagnostic Imaging) apprenticeship programme is designed to ensure that its content is current, reflecting contemporary radiography practice in the UK, and sufficiently flexible to accommodate the changing demands of health and social care and the future requirements of the profession, both in the UK and globally. The programme is committed to the development and provision of high quality multi- and inter-professional learning. The School of Allied Health Professions uses a range of high-quality clinical bases to deliver the clinical component of their programmes.

The regular monitoring and evaluation of practice placements is the collaborative responsibility of education providers and placement providers and are systematic and measurable as per SCoR guidelines.

The BSc (Hons) Radiography (Diagnostic Imaging) apprenticeship programme at Keele will enable you, through an environment of reflection and research awareness, to develop into an autonomous professional who can initiate and respond to change in a wide variety of settings. You will embrace a vision of patient-centred care within contemporary health and social care environments. You will develop the attributes of a competent practitioner underpinned by knowledge enabling you to become, and remain, fit for purpose, delivering high quality, safe, integrated and effective care. During the programme, you will develop responsibility for your own continuing professional development and will be confident to function in partnership and leadership roles.

Key features of the BSc (Hons) Radiography (Diagnostic Imaging) programme are:

- Expert teaching through a range of highly skilled, appropriately qualified and knowledgeable staff;
- Extensive and co-operative planning for learning and teaching within the clinical environment, both synchronous and asynchronous;
- A state-of-the-art pre-clinical Radiography suite to ensure high level vocational skills with a Digital Health Hub for image interpretation skills training;
- Inter-professional education embedded within the programme allowing students to learn alongside other health and social care students and the multi-disciplinary teams within the clinical environment. This is designed to contribute to professional understanding and respect as students of various professions learn with, from and about each other for the benefit of patient care;
- Comprehensive range of learner support mechanisms (See the Student Handbook);
- Research embedded into the curriculum from year 1 of the programme.

In your programme you will sometimes be expected to role play and engage in simulated clinical scenarios with other students, such as the practice and observation of practical skills in physical contact with other students. For some specific practices, this may necessitate modification of dress - e.g., to shorts and t-shirt. These activities will be conducted in a professional, safe, respectful and culturally sensitive way, under the supervision of academic staff, according to a defined protocol.

References:

- [1] Learning Together - Working Together <https://www.england.nhs.uk/culture/> (July 2022)
- [2] The Ionising Radiation (Medical Exposure) Regulations (2017: <https://www.legislation.gov.uk/ukxi/2017/1322/contents/made>)
- [3] Radiography Skills Mix: A report on the four-tier service delivery model (DoH, 2004)
- [4] Society and College of Radiographers Research Strategy: <https://www.collegeofradiographers.ac.uk/research-grants-and-funding/cor-research-strategy>
- [5] Healthy Lives, Healthy People (DoH, 2010)
- [6] Education and Career Framework for the Radiography Workforce: Society and College of Radiographers (SCoR, 2013)

4. Aims of the programme

The broad aims of the programme are to enable you to:

- Gain the knowledge, skills, attitudes and values to underpin contemporary radiography (diagnostic imaging) practice and develop your competence in applying clinical skills to the practice of radiography (diagnostic imaging). You will develop your clinical reasoning and decision-making skills to enable you to undertake best radiography (diagnostic imaging) practice. The programme will facilitate your development of the competencies required for autonomous practice.

- Develop your research awareness and research application to radiographic practice and the wider health and social care context and equip you with the skills to adapt and respond positively to change. In doing this, you will develop key transferable skills to prepare for graduate employment.
- Enhance the development of your interpersonal skills along with effective team working and partnership skills. This promotes engagement in lifelong learning, a key feature of the development of an autonomous professional.
- Cultivate effective inter-professional working practices that will facilitate the development of leadership, management and entrepreneurial skills.
- Achieve the standards of education and training that is approved by the Health and Care Professions Council, the Society and College of Radiographers and Apprentice Radiographer Standards to prepare you for lifelong learning throughout your career.

5. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Key or transferable skills (including employability skills)

Subject knowledge and understanding

The programme is designed to meet the Health and Care Professions Council's [HCPC] Standards of Education and Training (2017), therefore as a successful graduate of this programme, you will be equipped to meet the:

- HCPC's Standards of Proficiency: Radiographer (2013)
- HCPC's Standards of Conduct, Performance and Ethics (2016)
- Diagnostic radiographer (integrated degree) (level 6) training courses

Subject specific skills

Successful apprentices will be able to:

- Demonstrate a critical understanding of the theories, models, principles and concepts underpinning radiography (diagnostic imaging) within the public policy and organisational context for health and social care practice and service delivery;
- Practise safely, competently and confidently in radiography (diagnostic imaging) within the boundaries of legal, ethical and professional frameworks and be eligible to apply for entry to the professional register;
- Adhere to and, where appropriate, challenge the boundaries, constraints and obligations inherent in professional practice employing skills of critical self-reflection and a commitment to lifelong learning;
- Critically analyse, reflect upon and evaluate research findings, utilising these where appropriate, to underpin an evidence based approach to practice;
- Communicate and work collaboratively with patients, carers and fellow professionals in an appropriate and context specific way;
- Exhibit the appropriate professional values, attitudes and behaviours expected of an integrated member of the interprofessional healthcare team.
- Demonstrate burgeoning leadership and management skills.

These elements are taught, developed and assessed via individual modules, across the three years of the programme.

Achievement of the outcomes for the BSc (Hons) Radiography (Diagnostic Imaging) apprentice demonstrates the HCPC Standards of Proficiency (Radiographers). The programme has been mapped to the following regulatory body outcomes, subject benchmark statements and the professional body outcomes:

- HCPC Standards of Proficiency for Radiographers
- HCPC Standards of Education and Training
- QAA subject benchmarks for radiography
- SCoR Outcomes for Autonomous
- Apprenticeship Standards for Diagnostic Radiographers Practice (Practitioners)

Key or transferable skills (including employability skills)

Successful apprentices will be able to demonstrate:

- The ability to use information and communication technology effectively;
- The ability to engage with numerical data and calculations, and understand their significance;
- The ability to communicate effectively in writing, including the use of language that is appropriate for a variety of audiences;

- The ability to critically review their own work;
- The capability to communicate effectively orally and visually, including participation in group discussions, communicating ideas and presenting information to a variety of audiences;
- The competence to use mature interpersonal skills and awareness, including: a capacity to work in groups both as a team member and as a leader, to be sensitive to the views of others, to be able to negotiate, and to be aware of how one's actions are seen by others;
- The ability to solve problems, including the ability to generate a variety of strategies to address a problem and design, implement and evaluate a solution that addresses the problem;
- The ability to use information handling skills which enables the individual to locate, assess and evaluate information and synthesise and build upon existing information;
- The proficiency to identify and develop a research question/hypothesis within research skills and to be able to construct a range of strategies and methods for answering research questions or testing hypotheses
- An aptitude to develop independent study skills, including the maturity and judgement to manage one's own personal development and a capacity for self-reflection, self- assessment and self-criticism;
- A readiness for lifelong learning and recognition of its necessity within the profession.

Keele Graduate attributes

Engagement with this programme will enable you to develop your intellectual, personal and professional capabilities. At Keele, we call these our ten Graduate Attributes and they include independent thinking, synthesizing information, creative problem solving, communicating clearly, and appreciating the social, environmental and global implications of your studies and activities. Our educational programme and learning environment is designed to help you to become a well-rounded graduate who is capable of making a positive and valued contribution in a complex and rapidly changing world, whichever spheres of life you engage in after your studies are completed.

Further information about the Keele Graduate Attributes can be found here: <http://www.keele.ac.uk/journey/>

6. How is the programme taught?

Learning and teaching methods used on the programme vary according to the subject matter and level of the module. The programme is structured around six key study themes that are introduced, developed and enhanced via individual modules over the three-year programme. In addition, clinical/Practice training and education occurs in your employers' organisation.

Radiographic practical skills are taught both synchronously and asynchronously and are reinforced by both the Practice Education Team and the in-situ days on the Keele campus in the Darwin Suite and the Jack Ashley Digital Health Hub. This will also be supported by on-the-job learning in your workplace. In the clinical setting apprentices work with designated clinical/practice educators/assessors and are also supported by visiting tutors from the School. This ensures integration of academic learning and clinical practice. There will also be at least four tripartite meetings a year with your line manager, academic team and you (the apprentice).

The University based elements of the programme are taught using a variety of blended learning approaches including:

Traditional lectures where the lecturer provides apprentices with a framework and context for further reading and independent study; some lectures may feature invited external speakers who are clinicians, active researchers, and academics in the field of radiography, radiation science and related health practice. These utilise a blended teaching experience with in-situ, asynchronous online sessions and synchronous online sessions.

Interactive lectures to engage the apprentices in their learning, for example the use of Audience Response Systems

Practical work allows the apprentice to observe the application of, or develop the acquisition of radiography (diagnostic imaging) practical skills under the supervision of academic staff and Practice Educators

Simulation and role play, will be embedded in the workbooks to allow you to consider scenarios outside of the practise that you are observing daily to imagined scenarios that will improve your overall practice

Learning in the workplace where apprentices develop their clinical and professional skills under the supervision of a designated practice educator(s)

Group workshops which require apprentices to work together over an extended period to develop a piece of work, will be a feature of the final year learning

Individual and group presentations where apprentices research and present a topic with relevance to practice (for example specific approaches to communication or reasoning for particular approaches in radiography research) to the whole group with time allowed for interactive questions and discussion

Learner and tutor-led tutorials which encourage topics of interest and relevance to a theme to be discussed in depth within a small group; problem-solving scenarios and case studies may be used as a vehicle for such discussion

Web-based learning using the Keele Virtual Learning Environment (KLE) and Microsoft Teams: this is used by all modules and provides a platform for students to share online discussions and to access a wide range of learning resources.

Workbook with continuous milestones completed whilst in the workplace environment

Independent study will be required in each module; some study will be guided by tutors where necessary, but will also be self-directed in relation to the various demands of each module and its assessment. This type of learning may be facilitated by use of various resources such as work packages and access to specific web based programmes. The development of a workbook will also be used as a vehicle for learning. Independent study also forms an important part of the development of the final year research project, which is supported by a designated member of the academic staff.

Apprentices will engage in **inter-professional learning** in groups made up of a range of other health and social care students and the multi-disciplinary team in your workplace.

Apart from these formal activities, apprentices are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Academic Mentors or module lecturers on a one-to-one basis.

These learning and teaching methods enable students to achieve the learning outcomes of the programme in a variety of ways. For example:

- Lectures and independent study enable apprentices to broaden and deepen their existing professional knowledge and understanding of the core scientific principles and concepts of radiography (diagnostic imaging), and to transfer scientific knowledge from theory into practice.
- Practical work in both university and clinical environments enables students to develop, enhance and update their learning of new skills under the supervision of experts and to ensure safe and competent practice, and to integrate theoretical and practical knowledge.
- Focusing on identification of common pathologies demonstrated on the radiographic image, while demonstrating the transferability of these skills to identification of the existence of less common pathologies.
- Discussion on a one-to-one basis following clinical work (de-brief session) using for example, case studies, justification of exposure of the patient to ionising radiation, with evidence and reflection upon experiences to identify personal learning needs.
- Small group work, such as seminars, and workshops, provides opportunities for students to clarify and exchange ideas, and to question and challenge professional concepts.
- Guided independent study, tutorials and the use of portfolios will assist the apprentice to explore in depth, and evaluate, aspects of professional practice.
- Seminars, tutorials and web-based activities encourage students to reflect upon their learning and to take responsibility for its development, and to collaborate with others to share, explore, and evaluate ideas in greater depth. Undertaking a research-based project, using the support of small group workshops (where relevant) and tutorial supervision, further develops the student's independent learning and research capability; it also enables them to plan, implement and document a piece of research with relevance to radiography (diagnostic imaging) in line with the aims of the 2016-2021 Society and College of Radiographers Research Strategy. This piece of work encourages competence with IT skills including use of software packages for data analysis.

7. Teaching Staff

The permanent academic staff contributing to the programme are drawn from the University's School of Allied Health Professions along with contributions from specialist experts when appropriate. The School Team includes: professors, senior lecturers, lecturers, teaching fellows and academic related staff. All permanent academic staff are currently members of, or are working towards, membership of the Higher Education Academy.

All permanent academic staff hold (or are working towards) academic qualifications to at least Masters Level. All staff who are recognised healthcare professionals, such as radiographers, physiotherapists or nurses are registered with the relevant body e.g. HCPC or NMC, and have had experience working in the NHS and other areas of healthcare. The academic staff group currently includes staff from different professions such as Radiographers, Physiotherapists, an Exercise Physiologist and a Biomedical Scientist. The staff group has extensive experience of teaching at undergraduate and postgraduate level and includes individuals with expertise in learning and teaching and research. The work of research active staff has been widely published and shared via conference presentations.

Several staff are active members of clinical specialist interest groups and in various research groups. The School of Medicine has honorary contracts in place with Consultant Radiologists and Medical Physicists.

The clinical component of the programme is delivered and assessed by a range of Practice Educators. These are suitably qualified and professionally registered clinicians working across a broad range of clinical environments who will undertake the SAHP Practice Educators training course (which includes regular updates). This will enable them to achieve the learning outcomes required to participate in the College of Radiographers Practice Educators Accreditation Scheme[1].

[1] Practice Educator Accreditation Scheme; The Approval and Accreditation of Educational Programmes and

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content (HCPC and SCOR standards will continue to be met). The University will endeavour to ensure that any impact on students is limited if such changes occur.

8. What is the structure of the Programme?

The programme is studied part-time over three years and the teaching is delivered via individual modules relating to six themes across each year. This programme is a full calendar year programme but taught elements may not take place throughout the whole year.

The course is structured around six themes.

- Practice Experience
- Anatomy
- Image evaluation
- Radiographic practice/skills
- Research
- Science

Each of these themes are introduced, developed and enhanced via individual modules over the three-year programme, each year carries 120 credits. Adopting a spiral curriculum approach [1] allows each theme to be revisited in subsequent years adding depth and breadth of knowledge. The curriculum also facilitates the progression from novice to advanced beginner to competent practitioner [2].

[1] Harden and Stamper (1999), General Teaching Council for England (2006)

[2] Benner (2001) and Benner (2009)

The academic year runs from January and is divided into two semesters. The degree course is organised into modules: all modules are compulsory modules (a module that you are required to study on this course).

The credit requirements per year is as follows: a minimum of 120 subject credits are required for each year/ level of study.

For further information on the content of modules currently offered please visit:

<https://www.keele.ac.uk/recordsandexams/modulecatalogue/>

Year	Compulsory	Optional		Electives	
		Min	Max	Min	Max
Level 4	120	0	0	0	0
Level 5	120	0	0	0	0
Level 6	120	0	0	0	0

Module Lists

Level 4

Compulsory modules	Module Code	Credits	Period
Axial Anatomy, Image Evaluation and Radiographic Practice	RDI-10024	30	Semester 2-3
Appendicular Anatomy, Image Evaluation and Radiographic Practice	RDI-10026	30	Semester 2-3
Foundations of Research and Radiographic Science	RDI-10028	30	Semester 2-3
Practice Experience 1 Apprentice	RDI-10030	30	Semester 2-3

Level 5

Compulsory modules	Module Code	Credits	Period
Histology, Pathology and Image Interpretation	RDI-20019	15	Semester 2-3
Imaging Technologies: Principles and Research	RDI-20021	30	Semester 2-3
Radiographic skills and Image Interpretation 2 - Ap	RDI-20023	30	Semester 2-3
Practice Experience 2A Apprentice	RDI-20025	30	Semester 2-3
Practice Experience 2B Apprentice	RDI-20027	15	Semester 3

Level 6

Compulsory modules	Module Code	Credits	Period
Initial Image Commenting (IIC)- A	RDI-30019	15	Semester 2-3
Evidence-based Project (A)	RDI-30021	30	Semester 2-3
Practice Experience 3	RDI-30023	30	Semester 2-3
Patient Pathways (Apprentice Route)	RDI-30025	30	Semester 2-3
Leadership, management and organisation (Apprentice Route)	RDI-30027	15	Semester 2-3

Learning Outcomes

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

Level 4

Subject Knowledge and Understanding	
Learning Outcome	Module in which this is delivered
Analyse critically, reflect upon and evaluate research findings utilising these, where appropriate, to underpin an evidence based approach to practice	RDI-10028: Foundations of Research and Radiographic Science

Subject Specific Skills	
Learning Outcome	Module in which this is delivered
Practise safely, competently and confidently in Radiography (Diagnostic Imaging), within the boundaries of legal, ethical and professional frameworks and be eligible to apply for entry to the professional register	All modules
Communicate and work collaboratively with patients, carers and fellow professionals in an appropriate and context specific way	RDI-10024: Axial Anatomy, Image Evaluation and Radiographic Practice RDI-10026: Appendicular Anatomy, Image Evaluation and Radiographic Practice RDI-10030: Practice Experience 1
Exhibit the appropriate professional values, attitudes and behaviours expected of an integrated member of the interprofessional healthcare team	RDI-10024: Axial Anatomy, Image Evaluation and Radiographic Practice RDI-10026: Appendicular Anatomy, Image Evaluation and Radiographic Practice RDI-10028: Foundations of Research and Radiographic Science RDI-10030: Practice Experience 1

Key or Transferable Skills (graduate attributes)	
Learning Outcome	Module in which this is delivered
An open and questioning approach to ideas, demonstrating curiosity, independence of thought and the ability to appreciate a range of perspectives on the natural and social worlds	RDI-10030: Practice Experience 1
An appreciation of the development and value of chosen subjects of study, awareness of their contexts, the links between them, and awareness of the provisional and dynamic nature of knowledge	RDI-10028: Foundations of Research and Radiographic Science
Information literacy: the ability to locate, evaluate and synthesise large amounts of frequently conflicting information, ideas and data	RDI-10028: Foundations of Research and Radiographic Science
The creative ability to solve problems using a range of different approaches and techniques, and to determine which techniques are appropriate for the issue at hand	RDI-10028: Foundations of Research and Radiographic Science
An appreciation of the social, environmental and global implications of the programme content and other activities, including recognition of any ethical implications	RDI-10030: Practice Experience 1
The ability to communicate clearly and effectively in written and verbal forms for different purposes and to a variety of audiences	RDI-10024: Axial Anatomy, Image Evaluation and Radiographic Practice RDI-10026: Appendicular Anatomy, Image Evaluation and Radiographic Practice RDI-10030: Practice Experience 1
The knowledge, skills, self-confidence and self-awareness actively to pursue their future goals	RDI-10024: Axial Anatomy, Image Evaluation and Radiographic Practice RDI-10026: Appendicular Anatomy, Image Evaluation and Radiographic Practice RDI-10028: Foundations of Research and Radiographic Science RDI-10030: Practice Experience 1
The ability and motivation to participate responsibly and collaboratively as an active citizen in the communities in which they live and work	RDI-10024: Axial Anatomy, Image Evaluation and Radiographic Practice RDI-10026: Appendicular Anatomy, Image Evaluation and Radiographic Practice RDI-10030: Practice Experience 1
A professional and reflective approach, including qualities of leadership, responsibility, personal integrity, empathy, care and respect for others, accountability and self-regulation	All modules
The flexibility to thrive in rapidly changing and uncertain external environments and to update skills and knowledge as circumstances require	RDI-10024: Axial Anatomy, Image Evaluation and Radiographic Practice RDI-10026: Appendicular Anatomy, Image Evaluation and Radiographic Practice RDI-10030: Practice Experience 1

Level 5

Subject Knowledge and Understanding	
Learning Outcome	Module in which this is delivered
Adhere to and, where appropriate, challenge the boundaries, constraints and obligations inherent in professional practice employing skills of critical self-reflection and a commitment to lifelong learning	RDI-20025: Practice Experience 2A RDI-20027 Practice Experience 2B RDI-20023: Radiographic Skills and Image Evaluation 2
Analyse critically, reflect upon and evaluate research findings utilising these, where appropriate, to underpin an evidence based approach to practice	RDI-20021: Imaging Technologies: Principles and Research

Subject Specific Skills	
Learning Outcome	Module in which this is delivered
Practise safely, competently and confidently in Radiography (Diagnostic Imaging), within the boundaries of legal, ethical and professional frameworks and be eligible to apply for entry to the professional register	All modules
Communicate and work collaboratively with patients, carers and fellow professionals in an appropriate and context specific way	RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B
Exhibit the appropriate professional values, attitudes and behaviours expected of an integrated member of the interprofessional healthcare team	RDI-20021: Imaging Technologies: Principles and Research RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B
Demonstrate leadership skills	RDI-20021: Imaging Technologies: Principles and Research RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B

Key or Transferable Skills (graduate attributes)	
Learning Outcome	Module in which this is delivered
An open and questioning approach to ideas, demonstrating curiosity, independence of thought and the ability to appreciate a range of perspectives on the natural and social worlds	RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B
An appreciation of the development and value of chosen subjects of study, awareness of their contexts, the links between them, and awareness of the provisional and dynamic nature of knowledge	RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20021: Imaging Technologies: Principles and Research
Information literacy: the ability to locate, evaluate and synthesise large amounts of frequently conflicting information, ideas and data	RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20021: Imaging Technologies: Principles and Research
An appreciation of the social, environmental and global implications of the programme content and other activities, including recognition of any ethical implications	RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B RDI-20023: Radiographic Skills and Image evaluation 2
The ability to communicate clearly and effectively in written and verbal forms for different purposes and to a variety of audiences	RDI-20021: Imaging Technologies: Principles and Research RDI RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B
The knowledge, skills, self-confidence and self-awareness actively to pursue their future goals	RDI-20027: Imaging Technologies: Principles and Research RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B
The ability and motivation to participate responsibly and collaboratively as an active citizen in the communities in which they live and work	RDI-20021: Imaging Technologies: Principles and Research RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B
A professional and reflective approach, including qualities of leadership, responsibility, personal integrity, empathy, care and respect for others, accountability and self-regulation	All modules
The flexibility to thrive in rapidly changing and uncertain external environments and to update skills and knowledge as circumstances require	RDI-20021: Imaging Technologies: Principles and Research RDI-20023: Radiographic skills and Image Interpretation 2 RDI-20025: Practice Experience 2A RDI-20027: Practice Experience 2B

Level 6

Subject Knowledge and Understanding	
Learning Outcome	Module in which this is delivered
Demonstrate a critical understanding of the theories, models, principles and concepts underpinning Radiography (Diagnostic Imaging) within the public policy and organisational context for health and social care practice and service delivery	RDI-30027: Leadership, management and organisation RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways
Adhere to and, where appropriate, challenge the boundaries, constraints and obligations inherent in professional practice employing skills of critical self-reflection and a commitment to lifelong learning	RDI-30027: Leadership, management and organisation
Analyse critically, reflect upon and evaluate research findings utilising these, where appropriate, to underpin an evidence based approach to practice	RDI-30021: Evidence-based Project

Subject Specific Skills	
Learning Outcome	Module in which this is delivered
Practise safely, competently and confidently in Radiography (Diagnostic Imaging), within the boundaries of legal, ethical and professional frameworks and be eligible to apply for entry to the professional register	All modules
Communicate and work collaboratively with patients, carers and fellow professionals in an appropriate and context specific way	RDI-30019: Initial Image Commenting RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation
Exhibit the appropriate professional values, attitudes and behaviours expected of an integrated member of the interprofessional healthcare team	RDI-30019: Initial Image Commenting RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation
Demonstrate leadership skills	RDI-30019: Initial Image Commenting RDI-30021: Evidence-based Project RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation

Key or Transferable Skills (graduate attributes)	
Learning Outcome	Module in which this is delivered
An open and questioning approach to ideas, demonstrating curiosity, independence of thought and the ability to appreciate a range of perspectives on the natural and social worlds	RDI-30019: Initial Image Commenting RDI-30023: Practice Experience 3
An appreciation of the development and value of chosen subjects of study, awareness of their contexts, the links between them, and awareness of the provisional and dynamic nature of knowledge	RDI-30027: Leadership, management and organisation RDI-30019: Initial Image Commenting RDI-30025: Patient Pathways
Information literacy: the ability to locate, evaluate and synthesise large amounts of frequently conflicting information, ideas and data	RDI-30027: Leadership, management and organisation RDI-30019: Initial Image Commenting RDI-30025: Patient Pathways RDI-30023: Practice Experience 3
An appreciation of the social, environmental and global implications of the programme content and other activities, including recognition of any ethical implications	RDI-30027: Leadership, management and organisation RDI-30025: Patient Pathways RDI-30023: Practice Experience 3
The ability to communicate clearly and effectively in written and verbal forms for different purposes and to a variety of audiences	RDI-30019: Initial Image Commenting RDI-30021: Evidence-based Project RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation
The knowledge, skills, self-confidence and self-awareness actively to pursue their future goals	RDI-30019: Initial Image Commenting RDI-30021: Evidence-based Project RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation
The ability and motivation to participate responsibly and collaboratively as an active citizen in the communities in which they live and work	RDI-30019: Initial Image Commenting RDI-30021: Evidence-based Project RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation
A professional and reflective approach, including qualities of leadership, responsibility, personal integrity, empathy, care and respect for others, accountability and self-regulation	RDI-30019: Initial Image Commenting RDI-30021: Evidence-based Project RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation
The flexibility to thrive in rapidly changing and uncertain external environments and to update skills and knowledge as circumstances require	RDI-30019: Initial Image Commenting RDI-30021: Evidence-based Project RDI-30023: Practice Experience 3 RDI-30025: Patient Pathways RDI-30027: Leadership, management and organisation

9. Final and intermediate awards

By committing to an apprenticeship, you are committing to work towards achieving the final award for the programme. There are no interim awards for this apprenticeship.

The End Point Assessment must be passed in order to gain the final award title of BSc (Hons) Radiography (Diagnostic Imaging)/ Diagnostic Radiographer (Integrated Degree) apprenticeship.

Credits required for each level of academic award are as follows:

Honours Degree	360 credits	You will require at least 120 credits at levels 4, 5 and 6. You must also have passed all clinical assessments. Graduates are eligible to apply for registration with the HCPC and on successful registration will be entitled to practice as a Diagnostic Radiographer in the UK.
Diploma in Higher Education	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher. This award does not confer eligibility to apply for registration with the HCPC or to practice as a radiographer.
Certificate in Higher Education	120 credits	You will require at least 120 credits at level 4 or higher. This award does not confer eligibility to apply for registration with the HCPC or to practice as a radiographer.

10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used on your programme:

Written work/assignments test the quality and application of subject knowledge. In addition, they allow students to demonstrate their ability to carry out basic literature searches, communicate their ideas effectively in writing and support their arguments with appropriate referencing. Written pieces vary in their length depending upon the module.

Written Examinations in different formats test apprentices' knowledge and (as appropriate), their ability to apply that knowledge appropriately to professional practice. Examinations may consist of essay, short answer and/or multiple choice questions.

Reflective assignments enable the apprentice to develop their skills of reflective learning and practice; these are fundamental skills used by all healthcare professionals as part of their continuing professional development

Oral presentations assess apprentices' subject knowledge and understanding. They also test their ability to work effectively as members of a team, to communicate what they know orally and visually, and to reflect on these processes as part of their own personal development.

Practical Examinations - these occur in modules that involve the teaching and learning of practical clinical skills. These examinations enable apprentices to demonstrate the safe and effective application of practical clinical skills, and to justify their choice

Research project is an apprentice led piece of independent research. Nominated supervisors support the student throughout the process, which includes gaining ethical approval from the Student Project Ethics Committee (SPEC) within the School of Allied Health Professions or other appropriate ethics committee. This assessment develops the student's capacity as an independent learner and their ability to engage in the research process. It also develops the student's IT skills in use of various software for presentation and data analysis (e.g. Word, Excel, SPSS)

Clinical assessment is undertaken during clinical practice using the Practice Experience modules.

Continuous Workbooks to be undertaken in the workplace with monthly milestones to meet and mapped against all academic modules

End Point Assessment as well as containing in-programme training and assessment, the apprenticeship has an End Point Assessment (EPA). All apprentices must undertake this independent assessment, which is a synoptic assessment of the knowledge, skills and behaviours that have been learnt throughout the apprenticeship. The purpose of the assessment is to make sure the apprentice meets the standard set by employers and are fully competent in the occupation. It is taken by apprentices at the very end of the on-programme phase of training when their employer (and in some cases their training provider) is satisfied that they have met the "gateway" criteria. The University will confirm at an Award Board which students have met the gateway criteria.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You

will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions. Clinical competence is assessed as pass/fail within each of the modules. All clinical assessments must be passed to enable successful completion of the programme.

11. Contact Time and Expected Workload

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data are a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data are representative and not specific.

In this undergraduate course at Keele, apprentices will experience a mix of contact time and assessment types dependent on the module. The figures below are an example of activities that an apprentice may expect, by year (stage) of study. Contact time includes scheduled activities such as: lectures, seminars, tutorials, project supervision, demonstrations, practical classes and labs, supervised time in labs, and clinical placements. As part of their apprenticeship agreement, employers must provide apprentices with 20% of their time "off the job" to support their apprenticeship programme of academic study. Please note: 20% of each week should be given to academic study over the whole calendar year of employment during the apprenticeship; while on the job the apprentices will be required to complete the workbooks and prepare for actual clinical encounters as part of the clinical assessment, as well as undertake the modular programme of study.

All apprentices will also have to undertake regular tripartite meetings and undertake the gateway meeting to undertake their integrated End Point Assessment.

Activity

	Scheduled learning and teaching activities	Guided independent Study	Placements
Year 1 (Level 4)	29%	40%	31%
Year 2 (Level 5)	30%	35%	35%
Year 3 (Level 6)	25%	40%	35%

Apprentices on the BSc (Hons) Radiography (Diagnostic Imaging) programme are required to attend 100% of academic and clinical hours for all years (stages) of study. These hours are reflected in the academic year calendar and in the online timetable.

12. Accreditation

This programme is accredited by the Society and College of Radiographers and approved by the Health and Care Professions Council (HCPC).

Please note: Graduates of the programme are eligible to apply for registration with the Health and Care Professions Council (HCPC). In order to use the title 'radiographer' a practitioner must be registered with the HCPC. HCPC registration is a prerequisite for employment as a radiographer in the NHS. The programme is designed to meet the requirements of the HCPC Standards of Education and Training (2017) and HCPC Standards of Proficiency (Radiographers) and the Society and College of Radiographers (SCoR) Education and Career Framework for the Radiography Workforce (2013). The programme design is consistent with outcomes for autonomous practice and guidance set out in the 'Indicative Curriculum for Practitioners' by the SCoR.

13. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at:

<http://www.keele.ac.uk/student-agreement/>

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

14. What are the typical admission requirements for the Programme?

See the relevant course page on the website for the admission requirements relevant to this programme:

<https://www.keele.ac.uk/study/>

Under UK Government rules, apprentices must be employed for a minimum of 30 hours per week and must have the right to live and work in the UK (applies only in England). An apprentice cannot be self-employed. The employer must enter into an Apprenticeship Agreement with the apprenticeship student. All candidates must be employed in a role related to the subject matter of the apprenticeship and be sponsored by their employer. Applications can only be made through the sponsoring employer. The University will consider all such applications and will have the final decision whether to accept the candidate for entry to the programme.

The recommended minimum entry requirements for Level 4 entry to the programme are:

- Applicants will normally be required to hold at least six GCSEs (or equivalent) at grade C or above (grade 4 or above in the reformed GCSEs (England) including: Mathematics, English Language, Combined or Single Science subjects

We normally require applicants to evidence the above qualifications before starting the apprenticeship.

Applications are welcomed from those with qualifications equivalent to the above. Relevant or prior experience will be taken into account when considering a candidate's suitability for the programme.

At application applicants are required to undertake a 'Skills Scan' where they are asked to self-assess against the knowledge, skills and behaviour of the apprenticeships standard. Applicants are also asked if they want to make an application for Recognition of Prior Learning (RPL) through the University procedure. There is a requirement for new knowledge and skills to be developed through apprenticeships, with a minimum duration of one year. Recognition of Prior Learning is considered on a case-by-case basis. The University's guidance can be found here: <https://www.keele.ac.uk/qa/programmesandmodules/recognitionofpriorlearning/>

Apprenticeship applicants will require the support of their employer prior to commencing the application process. Selection will take place through an application and shortlisting process led by the employing organisations. Applicants will have demonstrated satisfactory occupational health clearance, good character through reference(s), and a satisfactory enhanced Disclosure and Barring Service as part of the application process with the employing organisation.

All offers are normally conditional upon the applicant having a satisfactory Occupational Health assessment, and an enhanced clearance by the Disclosure and Barring Service (DBS).

It is a mandatory requirement that students become student members of the Society and College of Radiographers (SCoR). Student membership of the SCoR provides access to a range of useful resources and also provides insurance for clinical placements. Further information can be found at the SCoR website www.sor.org.

English for Academic Purposes

Please note: All new international students entering the university will sit a diagnostic language assessment. Using this assessment, the Language Centre may allocate you to an English language module which will become compulsory. This will replace any GCP modules. *NB:* students can take an EAP module only with the approval of the English Language Programme Director and are not able to take any other Language modules in the same academic year.

English Language Modules at Level 4:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2)
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

15. How are students supported on the programme?

The School provides a comprehensive range of support for apprentices learning on the Programme in addition to that provided by the University. Key to the success of this support are the following:

- Each apprentice is allocated to an Academic Mentor who is responsible for reviewing and advising on students' academic and clinical progress. Academic Mentors also offer pastoral support, acting as a first point of contact for apprentices on non-academic issues which may affect their learning. Academic Mentors can refer apprentices on to a range of specialist health, welfare and financial services coordinated by the University's Student Services.
- Module Leaders provide support for learning on the modules and the related assessments. They ensure that appropriate, tutorial support is available via the module team and that the team provides feedback in a timely manner.
- Module leaders also ensure that individual feedback on in-course assessments is available to all apprentices.
- The School Disability Liaison Officer provides support for learners with disabilities (including specific learning difficulties) and works closely with wider university support staff.
- Practice Educators who provide supervision whilst apprentices are in the workplace clinical environment.
- Visiting Tutors who liaise between the School and Clinical Bases and provide support to apprentices during

- clinical placements.
- Throughout the year members of academic staff operate an 'open door' policy during normal working hours. All members of academic staff are available to see students on an individual basis outside normal working hours via a flexible appointments system.

At your workplace, you will be supported by your employer. Exact arrangements and terminology are the responsibility of the employer but typically, you will have a named contact person who manages the relationship between the programme and the employer. The University and the employer are bound by contract to work together to support you as an apprentice. This will include 3-4 tripartite review meetings between the University, the apprentice, and the employer.

If your employment circumstances change whilst you are on the programme; support can be accessed from the University's Careers and Employability Service.

16. Learning Resources

The programme is delivered in teaching rooms in the School of Allied Health Professions and across the university, all of which are equipped with a computer, internet access and projection equipment. Rooms are designed to be flexible and can be used for larger groups, also more informally for small groups working together. The learning resources available to students on the programme include:

An extensive collection of materials relevant to undergraduate study held in both the main University Library on Keele campus, and in the Health Library on the campus of the University Hospital of North Midlands NHS Trust. A number of relevant journals are also accessible online to all registered students, and are accessible from anywhere in the world with a University username and password.

The Keele Virtual Learning Environment (KLE) provides easy access to a wide range of learning resources including lecture notes, presentations and discussion boards enabling learners and tutors to discuss topics, all information about the programme and all modules and other materials designed specifically for particular modules. It can also be used to develop reusable learning objects (RLOs) and integrate learning with assessment.

The School of Allied Health Professions has a wide range of relevant teaching materials available including a large selection of anatomical models, video and DVD materials and ALS Patient Simulator. There is a dedicated Radiography (Diagnostic Imaging) simulated environment within the University and a computer suite for simulated Radiography (Diagnostic Imaging) learning.

Computers for student use are situated in both the Main Library and in the Health Library. Specialised image evaluation is available in a dedicated Digital Hub.

The majority of the resources required for the programme are also available online.

17. Other Learning Opportunities

Some learners may have the opportunity to present their 3rd year project work via poster or presentation at conferences. A contribution from the School towards the costs incurred by the student in these ventures may be available and will be considered on an individual basis.

Apprentices will be encouraged to submit their research work for publication in Synergy: Imaging and Therapy Practice, to gain experience in writing for publication.

Tripartite process may identify additional opportunities for development which will be discussed as part of the tripartite review process.

Such opportunities occur outside the normal timetabled programme thus a commitment of time will be required from the apprentice.

18. Additional Costs

Student membership of the Society and College of Radiographers is required in all three years of the programme: at the time of writing [academic year 2021-22] costs £24 per year and is paid directly each year to the membership section of the Society.

Tuition fees are paid by your employer but you may incur costs not covered by the mandatory components of the apprenticeship e.g. library fines, print costs and costs associated with graduation.

Certification for non-mandatory awards may require students to pay a fee.

Activity	Estimated Cost
Student membership of the Society and College of Radiographers (£24 per year)	£48
Total estimated additional costs	£48

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation. We do not anticipate any further costs for this programme.

19. Quality management and enhancement

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.

Learner evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of annual programme review.
- Findings related to the programme from the annual National Student Survey (NSS), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at programme and School level.
- Feedback received from representatives of students in all three years of the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:

<http://www.keele.ac.uk/ga/externalexaminers/currentexternalexaminers/>

20. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

1. Benner P (2001) From novice to expert: Excellence and power in clinical nursing practice. Prentice Hall NJ
2. Benner P (2009) Expertise in nursing practice: caring, clinical judgment and ethics. Springer Pub Co New York
3. College of Radiographers 2004: The Approval and Accreditation of Education Programmes and Professional Practice in Radiography;
4. College of Radiographers 2013: Education and Career Framework for the Radiography Workforce;
5. <https://www.sor.org/learning/document-library/education-and-career-framework-radiography-workforce> College of Radiographers, 2012: Quality Standards for Practice Placement;
6. College of Radiographers, 2015: Research Strategy;
7. College of Radiographers, 2013: Scope of Practice;
8. College of Radiographers, 2013: Education and Career Framework for the Radiography Workforce;
9. Department of Health 2008: High Quality Care for All: NHS Next Stage Review Final Report
10. Department of Health: Ionising Radiation (Medical Exposure) Regulations 2000; (last update January 2017)
Department of Health 2008: Modernising Allied Health Professional (AHP) Careers; a competence-based career framework;
11. Department of Health 2009: NHS 2010-2015: from good to great. Preventative, people-centred, productive;
12. General Teaching Council for England (2006) Research for Teachers: Jerome Bruner's constructivist model and the spiral curriculum for teaching and learning.
<http://www.ntrp.org.uk/sites/all/documents/Jerome%20Bruner's%20constructivist%20model%20and%20the.pdf>
accessed on line 09.02.17
13. Harden RM and Stamper N (1999) What is a spiral curriculum? Medical Teacher Vol 21 No 2
14. Health and Care Professions Council 2015: Health, Disability and becoming a healthcare professional
Health and Care Professions Council 2016: Standards of Conduct, Performance and Ethics; Health and Care Professions Council 2017: Standards of Education and Training.
15. Health and Care Professions Council 2013: Standards of Proficiency- Radiographers
16. Health and Care Professions Council 2016: Guidance on Conduct and Ethics for Students;
17. Keele University Regulations and Guidance for Students and Staff: <http://www.keele.ac.uk/regulations> Keele University Learning and Teaching Strategy to 2020:

18. Quality Assurance Agency for Higher Education, Subject Benchmark Statement: Radiography (2001)
19. [Skills for Health 2010: Career Framework for Health Descriptors; http://www.skillsforhealth.org.uk/career-framework/?sec=cf](http://www.skillsforhealth.org.uk/career-framework/?sec=cf)
20. UK Government Statutory Instrument: Ionising Radiation Regulations 1999; The Stationery Office Ltd
21. UK Government: The Equality Act 2010; The Stationery Office Ltd
22. [UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: http://www.qaa.ac.uk/qualitycode](http://www.qaa.ac.uk/qualitycode)

21. Annex - Programme-specific regulations

Programme Regulations: BSc (Hons) Radiography (Diagnostic Imaging) apprenticeship

Final Award and Award Titles	BSc (Hons) Radiography (Diagnostic Imaging) Diagnostic Radiographer (Integrated Degree) apprenticeship
Intermediate Award(s)	Diploma in Higher Education Certificate in Higher Education
Last modified	July 2022
Programme Specification	https://www.keele.ac.uk/qa/programmespecifications

The University's Academic Regulations which can be found on the Keele University website (<https://www.keele.ac.uk/regulations/>)[1] apply to and regulate the programme, other than in instances where the specific programme regulations listed below over-ride them. These programme regulations list:

- *Exemptions* which are characterised by the omission of the relevant regulation.
- *Variations* which are characterised by the replacement of part of the regulation with alternative wording.
- *Additional Requirements* which set out what additional rules that apply to students in relation to this programme.

The following **exemptions, variations** and **additional requirements** to the University regulations have been checked by Academic Services and have been approved by the Faculty Education Committee.

A) EXEMPTIONS

The clause(s) listed below describe where an exemption from the University's Academic Regulations exists:

For the whole duration of their studies, students on this Programme are exempt from the following regulations:

- **No exemptions apply.**

B) VARIATIONS

The clause(s) listed below describe where a variation from the University's Academic Regulations exists:

Approved deviations from Keele University Academic Regulations are in place for the programme with regard to the following:

- Attendance (see below)
- Progression. Apprentices are required to pass the required coursework for all programme modules. Condonement and compensation of failure in any year is not permitted
- Awards (see below)

Additional Requirements

The programme requirements listed below are in addition to the University's Academic Regulations:

Programmes Covered by The Regulations: These regulations apply to the following undergraduate programme: BSc (Hons) Radiography (Diagnostic Imaging) - full time route cohort entrants 2017 onwards.

Additional requirement 1: Fitness to Practise:

Students registered on the programme are subject to the University Fitness to Practise regulation (Keele University Regulation B5) <https://www.keele.ac.uk/regulations/regulationb5/>

Guidance: A student whose behaviour gives cause for concern regarding professional conduct or suitability will in the first instance, be advised of the implications of their behaviour and offered the opportunity to address the concerns raised. They will be advised that should there be no change in their behaviour, they will be referred to the School Health and Conduct Committee.

Where behaviour that gives cause for concern regarding professional conduct or suitability is repeated, the student may be issued with a School written warning and may then be referred to the School Health and Conduct Committee.

Where student behaviour gives cause for grave concern regarding professional conduct or suitability the student will be referred directly to the School Health and Conduct Committee.

The School of Allied Health Professions has a duty to ensure that students registered on the programme are fit to practise, in order to protect present or future patients, clients or service users and to comply with the requirements of professional / regulatory bodies. Students registered on the programme must comply with the requirements of the Society and College of Radiographers (SCoR) and the Health and Care Professions Council (HCPC).

Students must make known at the first opportunity, any issues which impact upon their ability to study effectively.

Guidance: It is the student's obligation to disclose any circumstances that may affect either their capacity to study effectively or their professional conduct and / or suitability. Failure to make such a declaration may constitute an issue of fitness to practise and may limit the grounds a student may invoke to support an appeal. Examples of the types of issues that it may be appropriate to disclose include temporary or permanent changes in health status, adverse personal circumstances or changes in Disclosure and Barring Service (DBS) status (these examples are not exhaustive). Where a student may be unsure as to whether disclosure is appropriate they must seek advice from their personal academic mentor, year head or the programme director. Any such advisory discussions will be treated in confidence and it will then be the student's responsibility to disclose information should they be so advised.

The School Health and Conduct Committee will monitor issues regarding student health and conduct that cause concern regarding a student's fitness to practise in line with the Faculty of Health Fitness to Practise policy and Keele University Fitness to Practise Regulation B5. See: <https://www.keele.ac.uk/regulations/regulationb5/>

Additional requirement 2: Entry Requirements

Apprenticeship applicants will require the support of their employer prior to commencing the application process. Selection will take place through an application and shortlisting process led by the employing organisations. Applicants will have demonstrated satisfactory occupational health clearance, good character through reference(s), and a satisfactory enhanced Disclosure and Barring Service as part of the application process with the employing organisation. These may be required to be checked by the University's Occupational Health Department and, if required, the School's Health and Conduct Committee. Acceptance on the programme is dependent on satisfactory medical screening.

Acceptance on the programme is dependent on satisfactory review of any criminal convictions via the Disclosure and Barring Service (DBS) enhanced disclosure.

On commencement of the programme all undergraduates must complete consent and disclosure documentation. These must then be updated annually or sooner if there are changes to an individual student status.

Guidance: Any undergraduate who is found to have an undisclosed health condition, which may prejudice their ability to perform radiography effectively, may be required to leave the programme.
<https://www.keele.ac.uk/students/supportingyou/>. Similarly, any student who is found to have an undisclosed criminal conviction may be asked to leave the programme, even though the conviction is considered to be "spent".

On commencement of the programme, all BSc (Hons) Radiography (Diagnostic Imaging) students are required to register with the Society and College of Radiographers (SCoR) [hereafter referred to as the Society of Radiographers (SoR)]. Radiography undergraduates are, for the duration of their programme, student members of the Society of Radiographers.

Guidance: As Student Members of the Society of Radiographers, students have the benefit of professional liability insurance cover for practice experience in the UK and other countries (except North America and Canada), provided they are appropriately supervised. It is the responsibility of each student to ensure the validity of this insurance outside the UK.

Failure to register with the SoR will impact upon the student's professional liability status and will preclude the student from undertaking the practice experience modules of the programme. Such action will preclude completion of the programme. In these circumstances the student will be required to withdraw from the programme.

All undergraduate radiography students are obliged to comply with the Society of Radiographers (2013) Code of Professional

Conduct, <https://www.sor.org/learning/document-library/code-professional-conduct>

Students must also comply with the Health and Care Professions Council's Guidance on conduct and ethics for students (2016) and work towards graduate attributes described in the Health and Care Professions Council Standards of Proficiency(2013). <https://www.hcpc-uk.org/standards/standards-of-proficiency/>.

Students must also comply with any supplementary guidance documents produced by regulatory and / or professional bodies. Failure to abide by SoR and / or HCPC rules and guidance may, following an investigation (see previous section), result in the student being required to withdraw from the programme.

Guidance: As Student Members of the SoR, students have responsibilities with regard to their conduct and behaviour. A copy of current documents, and / or electronic access to them, will be provided to each student on commencement of the programme.

All students must comply with the School requirements with regard to immunisation. Failure to comply with this regulation will preclude the student from undertaking the practice experience modules of the programme. Such action will preclude satisfactory completion of the programme. In these circumstances, the student will be required to withdraw from the programme.

All students must comply with School requirements in respect of ethical procedures and approval for activities related to the research project. Failure to comply with this regulation may constitute an issue of fitness to practise.

Additional requirement 3: Progression

Assessment exemptions are not normally [1] permitted.

Students must complete and sign consent and disclosure documentation at the beginning of each academic year in order to participate in the practical skills components of the programme. Students who do not complete this documentation will not be able to participate in the practical skills components of the programme. This will preclude students from undertaking practice experience modules and will result in the student being required to withdraw from the programme.

Guidance: Students are advised that failure to disclose / update information in this consent and disclosure documentation will be considered a breach of professional responsibility. Consequently, disciplinary and / or Fitness to Practise procedures may be invoked and the student may be required to withdraw from the programme (see also additional requirement 1).

In order to progress, students are required to pass the required assessment for all modules, thus being awarded the full 120 credits per academic year. Condonement or compensation of failure in any year is not normally permitted. Practice experience assessments cannot be condoned or compensated. Students must successfully complete all modules on the programme (360 credits) to achieve the award of BSc (Hons) Radiography (Diagnostic Imaging).

The student must normally have passed the relevant campus-based module(s) for all practice experience underpinning each placement prior to the start of the placement.

Guidance: In the case of failure of an underpinning module, the Programme Director, Practice Education Lead and the Academic Mentor will consider each individual case and recommend an appropriate course of action to ensure, as far as possible, safe practice in the practice setting. This action may delay the student's progress on the programme and may result in a delay in graduation.

Students will normally be allowed one reassessment attempt, following initial failure of an assessment, across all levels of the programme. Failure, on reassessment, normally results in the student being required to withdraw from the programme.

Students who fail the practice experience assessment at the first attempt will be given the opportunity to repeat the assessment in the same location or in a different location in the same specialist area (following a period of remediation and induction), which will facilitate meeting of the learning outcomes.

All required practice experience (clinical placement) hours must be completed prior to assessment marks being finalised for each academic year; the course of action to be followed will be decided by academic staff and the clinical educator concerned.

In the event of failure of a practice experience assessment, the required time needed to successfully achieve the outstanding intended learning outcomes will be negotiated and agreed between the Practice Education Lead (or their appointed designate) and the practice educator.

Guidance Note: In the event of substantial levels of authorised absence from practice experience a review of the students' achievement of the module Intended Learning Outcomes (ILOs) and number of practice experience hours accrued will be undertaken by the Programme Director and / or Practice Education Lead. If the student has been unable to achieve all the module ILOs and / or there is a significant shortfall of accrued practice experience hours, appropriate remedial action will be recommended by the Programme Director and / or Practice Education Lead.

With regard to both campus and practice experience assessment, retrospective evidence will not normally be considered in respect of any student appeal against an academic decision (see also additional requirement 3).

Submission of health-related extenuating circumstances for consideration at three or more consecutive examinations boards will normally require the student to be referred for assessment to the Occupational Health Service.

Guidance: In these circumstances the school would recommend a referral to the Occupational Health Service in order for them to:

Explore with the student whether any underlying health issues exist and to provide guidance to the school about how these may be effectively managed.

Determine what (if any) support measures and / or reasonable adjustments the school should put in place to maximise the student's academic performance.

Students taking a leave of absence will not normally be permitted to extend this leave of absence beyond one full academic year.

Guidance: This time limit is designed to ensure appropriate currency in student learning / professional competence thus supporting the maintenance of appropriate clinical standards and patient / colleague safety.

The maximum time frame for completion of studies will not normally exceed 5 academic years.

Guidance: This time limit is designed to ensure appropriate currency in student learning / professional competence thus supporting the maintenance of appropriate clinical standards and patient / colleague safety.

Additional requirement 4: Awards

Programme awards are made under Keele University Regulation C3:
<https://www.keele.ac.uk/regulations/regulationc3/>

Students who have successfully completed all assessments (including a minimum of one thousand two hundred [1,200] hours of practice experience) and so have obtained full credits for the programme, will be awarded a BSc (Hons) Radiography (Diagnostic Imaging). These graduates will then be eligible to apply to register with the Health and Care Professions Council, a pre-requisite for employment as a radiographer in the UK. Graduates will also be eligible for full membership of the Society of Radiographers.

*Guidance: In order to achieve a BSc (Hons) Radiography (Diagnostic Imaging) and be eligible for registration with the Health and Care Professions Council candidates **MUST** successfully complete all modules and achieve 360 credits. Should a candidate fail to accrue 360 credits they will be offered:*

To revisit the failed assessment in line with current School and Keele University regulations. If successful, the candidate will be awarded a BSc (Hons) Radiography (Diagnostic Imaging) degree and thus be eligible to apply for Health and Care Professions Council registration.

Where an award is made under Ordinance B6 (Aegrotat award) that award will be an unclassified degree in Imaging Studies. Aegrotat awards will not include the term 'Radiography'. Candidates who obtain an Aegrotat award will not be eligible for registration with the Health and Care Professions Council.

<https://www.keele.ac.uk/sas/academicservices/legalgovernance/governance/aegrotatandposthumousawards/>

Additional requirement 5: Attendance

Attendance at ALL components of the BSc (Hons) Radiography (Diagnostic Imaging) undergraduate programme is mandated. Designated module leaders may issue permission in writing for attendance in specified cases to be waived; this will not be applicable for practice, practical and tutorial attendance. As radiography is a professional programme, and students are expected to demonstrate appropriately responsible behaviour at all times. Students who do not comply with this attendance regulation may be subject to University disciplinary procedures and / or Health and Conduct / Fitness to Practise procedures.

Guidance: Attendance will be monitored and students with a poor attendance record without good cause will normally be subject to disciplinary procedures. Students with a poor attendance record may be required to withdraw from the programme. Absences may be authorised (at the discretion of the Programme Director) where students comply fully with the procedure for reporting sickness and non-attendance.

Students who fail to comply with this attendance regulation may be acting outside their scope of practice and so be in breach of the SoR Code of Professional Conduct (2013) <http://www.sor.org.uk> and the Health and Care Professions Council

[Standards on conduct, performance and ethics for students \(2016\)](http://www.hcpcuk.org/assets/documents/10002C16Guidanceonconductandethicsforstudents.pdf)
<http://www.hcpcuk.org/assets/documents/10002C16Guidanceonconductandethicsforstudents.pdf>

In such circumstances, the School may implement University disciplinary procedures and / or Health and Conduct / Fitness to Practise procedures. The School may then be unable to recommend the student to apply for entry onto the register of the Health and Care Professions Council, thus they would be ineligible to practice as a radiographer.

Additional requirement 6: Practice Experience Placements

The School will provide comprehensive requirements and guidelines for practice experience blocks to which apprentices must adhere. Failure to comply with this regulation may result in disciplinary action including action under the University Fitness to Practise regulation.

Where an apprentice's professional conduct and / or suitability is deemed not to meet professional standards, the Programme Team may deem it inappropriate / unacceptable for the student to participate in the practice experience placements. Subsequently, the student may be required to withdraw from the programme.

An apprentice demonstrating unprofessional / dangerous / unsafe behaviour in the practice setting will be withdrawn from the practice experience placement and may, following an investigation, be required to withdraw from the programme (see Fitness to Practise Regulation information).

Guidance: Apprentices are also referred to the BSc (Hons) Radiography (Diagnostic Imaging) Clinical Practice Placement handbook for further information.

Additional requirement 7: Submission of Assessment

Apprentices must comply with the submission requirements documented in the current BSc (Hons) Radiography (Diagnostic Imaging) student handbook.

Additional requirement 8: Miscellaneous

All Apprentices must comply with School Health and Safety Guidelines contained within the BSc (Hons) Radiography (Diagnostic Imaging) student handbook.

Apprentices must comply with the dress code required by practice experience settings. These guidelines are intended to explain to students the rationale for the expectations placed upon them and clarify our expectations that students will adhere to the policies of their host organisation. The Health and Care Professions Council (2016) expects healthcare students to behave and dress in a way that promotes a professional image and inspires public confidence.

Apprentices must comply with the dress code required for practical classes. Jewellery may not be worn during practical classes or in practice experience settings except for a wedding ring (without raised gems) and one pair of stud earrings.

Guidance: If a student raises a faith-related issue with regard to clothing / jewellery regulations the School will contact a relevant religious authority for guidance.

[1] References to University Regulations in this document apply to the content of the University's Regulatory Framework as set out on the University website here <https://www.keele.ac.uk/regulations/>.

Version History

This document

Date Approved: 02 February 2023

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1	2022/23	DESIREE O'LEARY	09 August 2022	