

Programme Specification

This programme specification is designed for prospective employers and their apprentices, academic staff, enrolled students and their employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate.

Apprenticeship Standard Title	Diagnostic Radiographer (Integrated Degree)		
Programme Title and Name of Award	BSc (Hons) Diagnostic Radiography (top-up)		
Academic Level	6	Total Credits	120
Apprenticeship Standard and Assessment Plan	Diagnostic Radiographer https://www.instituteforapprenticeships.org/apprenticeship-standards/diagnostic-radiographer-v1-3 The QAA Characteristic Statement for Apprenticeships can be found here .		
LARS Code of the Apprenticeship Standard	LARS Code 431	LARS Code of the University Award	tbc
Professional Body Accreditation / Qualification	On completion of the programme graduates will be eligible to apply for registration with the HCPC as a Diagnostic Radiographer. The College of Radiographers (CoR) has issued professional accreditation to this programme		
Date of Professional Body Accreditation	HCPC: 02.11.2021 CoR: 09.12.2021	Accreditation Period	HCPC: open-ended approval, subject to satisfactory monitoring CoR: The approval period is 5 years with effect from December 2021
Employer Organisation	NHS Trusts and Independent / Private sector imaging organisations		
End Point Assessment	Fully Integrated Degree Apprenticeship Standard dated June 2023		

End Point Assessment Organisation	University of Cumbria
External Quality Assurance Body	Ofsted
HECoS Code	Diagnostic Imaging 100129
Criteria for Admission to the Programme	<p><u>Foundation Degree and UDip Radiographer AP Bridging Course</u></p> <p>This Top-Up course is the final step in Assistant Practitioners (APs) meeting the diagnostic radiographer apprenticeship standard competencies alongside professional body standards of proficiency. As such, APs applying for this course will need the relevant qualification required to work as an Assistant Practitioner (normally an FdSc), and relevant work-based experience of 2 years minimum. They will also need to study the Radiographer AP Bridging course which enables the apprentice to meet part of the required knowledge, skills and behaviours of the apprenticeship Standard (and prior to this Top-up element). Exceptions to this will be considered on a one to one basis for example, an AP who has completed 2 years (240 credits) of a BSc (Hons) Diagnostic Radiography degree may be able to join directly onto the Top-Up course if they meet all the required entry criteria and in line with the University's APL process.</p> <p><u>Eligibility for ESFA Funding</u></p> <p>Government funding rules require that an apprentice must have the right to live and work in the UK, must be in employment, paid at least the legal minimum wage and have a written and signed agreement for the apprenticeship with their employer. The minimum duration periods for an apprenticeship set in each Apprenticeship Standard is based on an apprentice working a minimum of 30 hours per week. Where the apprentice works fewer than 30 hours, the minimum duration of the apprenticeship must be increased on a pro-rata basis. Selection of apprentices (in England) is principally an employer-led activity.</p> <p>Funding for the apprenticeship is provided through the Education and Skills Funding Agency (ESFA) and is paid in the following way:</p> <ul style="list-style-type: none"> • Levy paying employers with sufficient funds in their digital account – 100% funding • Non Levy payers -95% ESFA funding, 5% Employer co-funding. Non-levy paying companies will be asked to pay their 5% of the full cost of the apprenticeship at the start of the UDip programme. • Non levy paying organisations, must register on the Governments Digital Apprenticeship Service and reserve funds for their apprenticeship prior to the UDip programme starting unless they are being funded by levy-transfer. <p>All apprentices must be interviewed, assessed and offered a position by an employer before being admitted to the</p>

apprenticeship programme. Although the University may receive direct enquires and filter these before passing to prospective employers, apprentices must apply directly via an employer. After acceptance by an employer, the University of Cumbria will require a formal application, which it will assess according to the programme entry criteria:

University selection criteria

120 credits at level 4 and 120 credits at level 5 in Diagnostic Radiography (DipHE or equivalent - for example 240 credits from a diagnostic radiography related Foundation Degree) or a Foundation Degree in Health and Social Care or similar Healthcare discipline, plus the UDip Diagnostic Radiography bridging course to demonstrate equivalency with level 5 content of a BSc (Hons) Diagnostic Radiography degree.

The University's standard criteria for admissions apply. Please refer to the [Applicant Information](#) pages of the University website for more information. For [APL](#), please refer to the University website. Each candidate will be dealt with on a case-by-case basis. Each candidate for APL will be advised how this may affect ESFA funding. For further information, see the University website:

<https://www.cumbria.ac.uk/business/apprenticeships/>

Applicants will need to supply two satisfactory references and will be invited for an interview. DBS requirements will be maintained through their employer.

Applicants must have the support of a relevant employer to be able engage with and complete this programme.

Detailed criteria for admission to this programme can be found on the programme webpage:

<https://www.cumbria.ac.uk/study/courses/apprenticeships/diagnostic-radiography/>

(<https://www.cumbria.ac.uk/business/apprenticeships/>).

English & Maths

Apprentices should have a minimum of Level 2 qualifications in English and Maths.

For this programme holding level 2 qualifications in English and maths is a pre-entry requirement

A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

Exit from employment

If an apprentice is made redundant during their apprenticeship through no fault of their own, then the employer and University have a legal duty to help the apprentice try to find alternative employment.

If the redundancy is within six months of the planned completion date of the apprenticeship, then ESFA will fund 100% of the

	<p>remaining agreed cost, even if the apprentice cannot find another employer.</p> <p>If the redundancy is over six months from the planned end date, the ESFA will fund the remaining agreed cost for 12 weeks to allow the apprentice to find alternative employment. Where a new employer cannot be found the apprentice will be recorded as having left the programme.</p>	
Additional Qualifications	N/A	
Teaching Institution	University of Cumbria	
Owning Institute	Health	
Programme delivered in conjunction with	Health Trusts and Independent Sector Health Providers	
Principal Mode of Delivery	Distance Learning	
Pattern of Delivery	<p>Full-time with block release.</p> <p>This programme may also be made available on an infill part-time basis at the discretion of the academic programme leader. In such cases, you will study modules alongside the full-time cohort(s) that are running at the time.</p>	
	Total weeks of study:	52 (minimum)
	Delivery pattern:	Online with up to 8 days delivered on the Lancaster campus
	Standard Semester Dates:	No
Delivery Site(s)	Distance Learning	
Programme Length	<p>12 months for the Top up programme only</p> <p>18 months for the Top up and UDip bridging course.</p>	
Exit Awards	<p>The Academic Award of BSc (Hons) Diagnostic Radiographer is linked to the Degree Apprenticeship Standard so it is not appropriate to offer an exit award below that of a BSc as the programme is designed to meet the competencies of the Diagnostic Radiographer Degree Apprenticeship and successful candidates would complete 120 level 6 academic credits from the top-up which includes the End Point Assessment.</p> <p>Academic credit may be awarded if an apprentice is unable to complete the full award due to circumstances beyond their control.</p> <p>If you are unable to achieve clinical competence and therefore are unable meet the relevant professional body standards required for</p>	

	<p>registration as a Diagnostic Radiographer in the UK, you may be awarded the following exit award:-</p> <p>BSc Diagnostic Imaging Theory</p>
Period of Approval	<p>November 2021 – July 2026</p> <p>HCPC approval granted at ETC on 02.11.2021 is open-ended, subject to satisfactory monitoring</p> <p>CoR approval period is 5 years with effect from December 2021 re-approval required by December 2026</p>
<p>This programme has been approved (validated) by the University of Cumbria as suitable for a range of delivery modes, delivery patterns, and delivery sites. This level of potential flexibility does not reflect a commitment on behalf of the University to offer the programme by all modes/patterns, locations, and employers in every academic cycle. The details of the programme offered for a particular intake year will be as detailed on the programme webpage: https://www.cumbria.ac.uk/study/courses/apprenticeships/diagnostic-radiography/</p> <p>Potential apprentices should contact the University for details of the recruiting offer.</p>	

Cumbria Graduate Attributes

Throughout your studies, you will be provided with the skills and knowledge relevant to the global workplace. All successful graduates of the University of Cumbria will be:

- Enquiring and open to change
- Self-reliant, adaptable and flexible
- Confident in your discipline as it develops and changes over time
- Capable of working across disciplines and working well with others
- Confident in your digital capabilities
- Able to manage your own professional and personal development
- A global citizen, socially responsible and aware of the potential contribution of your work to the cultural and economic wellbeing of the community and its impact on the environment
- A leader of people and of places
- Ambitious and proud

Programme Features

This award operates in conjunction with the UDip Radiographer Assistant Practitioner Bridging programme to form a highly innovative degree apprenticeship programme which allows assistant practitioners working within the medical imaging sector to progress their qualifications and skills to meet the professional body requirements. This caters for the diverse range of scopes of practice that assistant practitioners are working within. On completion of the programme, they can apply for registration as a Diagnostic Radiographer with the Health and Care Professions Council (HCPC).

The typical applicant will be a radiography assistant practitioner who has already completed a foundation degree (or equivalent) but the course may also be attractive to applicants who have

attained 240 CATS credits in relevant subjects and have attained at least two years' relevant clinical experience.

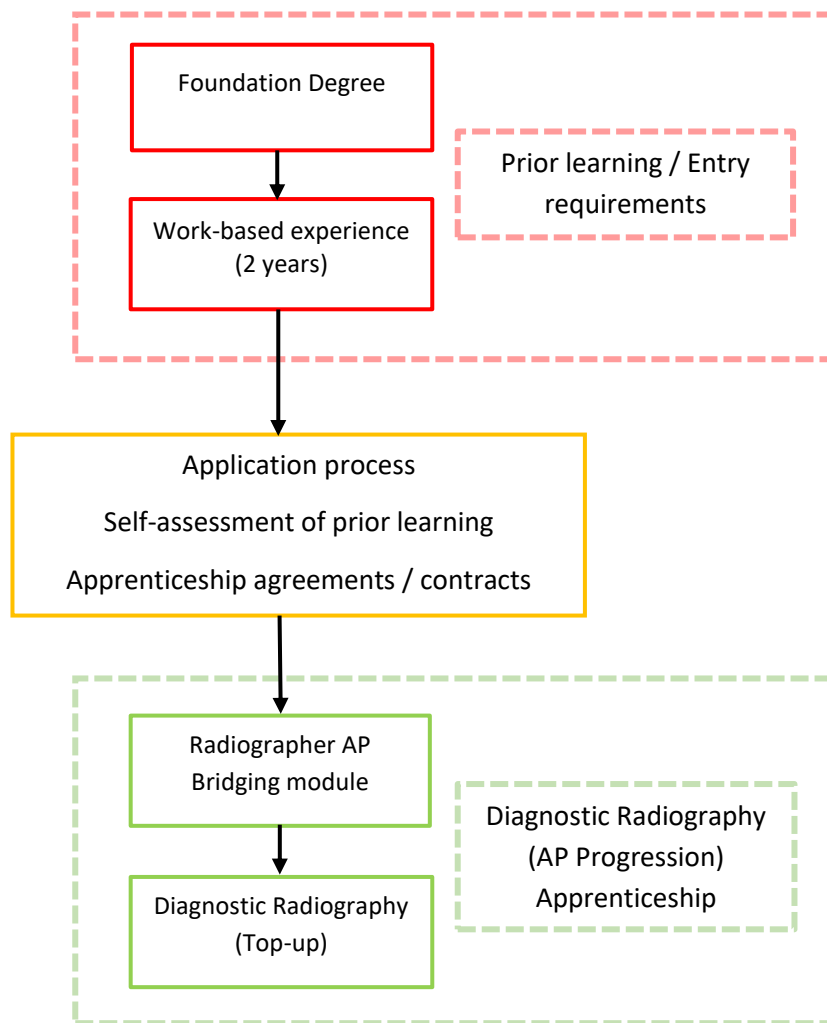
This Programme reflects the current expectations of employers for first post radiographers. You will graduate with a range of radiographic skills which will enable you to be employed within the healthcare setting and a knowledge base that prepares you to enter the radiography profession fit to practice.

The programme has modular teaching in a block approach to encourage focus on particular subject areas and to allow for a spread of assessments throughout the year. The work-based elements of the programme will offer you variety of experiences ensuring your competence. A key feature of the programme is its ability to allow you to gain experience in enhancing your skills in a given imaging modality whilst still attaining the broad set of threshold competences required by the regulator. Apprentices who qualify from this programme will therefore be sought after by employers both in the NHS and independent care settings because they are fit for purpose, ready for their first post in medical imaging and are an informed prepared professional able to work within a given scope of practice within a defined clinical context.

The course is very attractive to employers as they can recruit existing employees to progress their role and extend their scope of practice to that of a qualified diagnostic radiographer. As an apprentice progressing through the system, you are more likely to stay and work with the employers who have invested in your education on completion of your studies. At present there are a growing number of assistant practitioners in the medical imaging workforce, many of whom have achieved generic health and social care foundation degrees, and who are currently working within the medical imaging setting. Many of these individuals wish to develop their education to achieve full practitioner status. This course meets that need.

Diagnostic Radiography (AP Progression) Apprenticeship pathway

The Diagnostic Radiography (AP Progression) Apprenticeship is designed for APs in radiography to demonstrate their knowledge and skills required of a Diagnostic Radiographer. Through your previous qualification (e.g. your foundation degree) and work-based experience you will already have met a number of the Diagnostic Radiography apprenticeship standard competencies (referred to as Knowledge, Skills and Behaviours and shown as K, S, Bs when mapped against programme learning outcomes). The remaining competencies will be met through the two elements of this apprenticeship; the Radiography AP Bridging programme or UDip and the Diagnostic Radiography Top-up. The full mapping of apprenticeship standard competencies against these academic awards (including the FdSc and/or prior learning) can be found in Appendix 4 of this document 'Apprenticeship Standard Competency Mapping'.



Competencies mapped to Prior Learning / Entry requirements

It is recognised that APs working in radiography departments have completed a range of qualifications and work to different scopes of practice. We have mapped a number of apprenticeship standard competencies against what we would expect you to have achieved prior to joining the course, and these will be checked as part of the application process. Please see Appendix 4 for a full list of competencies mapped to prior learning. All of these competencies will also be covered over the duration of the Diagnostic Radiography (AP Progression) Apprenticeship to ensure all apprentices have met all areas of the standard by the end of their apprenticeship.

Radiographer AP Bridging

This UDip programme forms the first element to the Diagnostic Radiography (AP Progression) Apprenticeship. Throughout this you will meet relevant competencies to bring you up to the same level as an end of 2nd year BSc (Hons) Diagnostic Radiography student. Prior to starting, you will complete an 'individual learning needs analysis' (ILNA). This comprehensive document highlights knowledge and skills that apprentices already have and those that need to be developed. It is expected that different APs will have different areas for development and so this document will identify your learning goals for the course and we will tailor your learning accordingly.

The UDip bridging comprises a single 60-credit module covering a range of subject areas. Apprenticeship standard competencies that will be met during this are demonstrated in the mapping document given in Appendix 4 below.

Diagnostic Radiography (Top-Up)

This programme (which this programme specification relates to) follows directly on from the bridging as the second element in the Diagnostic Radiography (AP Progression) Apprenticeship. It broadly follows the modules and content of the 3rd year of an undergraduate Diagnostic Radiography BSc (Hons) degree. Where it differs is in its delivery, which is planned around work-based learning and will fit in teaching sessions around work. Apprenticeship standard competencies have been mapped against individual modules (Appendix 4).

The Health and Care Professions Council (HCPC)

Programmes of study such as this that prepare apprentices for the profession of Radiography are subject to statutory regulation provided by the HCPC which must be achieved and maintained by Higher Education Institutions (HEIs) including their associated clinical practice environments. The University has received formal approval that this programme meets the relevant standards of the HCPC. Apprentices must achieve the Standards of Proficiency to be eligible to apply for HCPC registration on the completion of the programme.

College of Radiographers (CoR)

The College of Radiographers provide professional accreditation for the programme. Standards to be achieved are articulated in the **Learning Development Framework** and associated documents pertaining to clinical placements.

The programme has been developed in close consultation with employers and has taken into account the current needs of the profession and it aims to address workforce shortages. It will provide an additional entry stream into the radiography profession and will offer significant benefits by widening access to a large group of individuals who are not able to study radiography under the existing arrangements. In addition, it will allow employers to 'grow their own' workforce by progressing and upskilling Assistant Practitioners through a flexible educational system to progress to radiography level and meet the needs of current imaging departments.

Aims of the Programme

The overall aims of the Programme are:

1. To develop your interest, knowledge and understanding of the continually changing and expanding field of medical diagnostic imaging.
2. To enable you to learn in both the academic and clinical settings demonstrating levels of achievement whilst being supported within those environments.
3. To enable you to graduate with a realistic and professional attitude to the current working environment and an understanding of the dynamic and changing nature of your clinical role.
4. To produce graduates who are resilient, proficient communicators whose values are centred around effective and compassionate patient care.
5. To encourage you to continue learning throughout your professional life (CPD) assuring a competent, informed member of the healthcare team.
6. To produce practitioners who engage in safe and effective practice.

Programme Outcomes

The programme provides opportunities for you to develop and demonstrate the following:

Level 6: After 120 credits of study (BSc Hons) you will typically be able to

1. Critically review, consolidate and extend a systematic and coherent body of knowledge related to diagnostic radiography.
2. Critically evaluate concepts and evidence in the area of diagnostic radiography from a range of resources.
3. Transfer and apply cognitive and transferable skills and problem-solving strategies to a range of situations and to solve complex problems within the medical imaging sphere.
4. Communicate solutions, arguments and ideas clearly and in a variety of forms.
5. Exercise considerable judgement in a range of situations.
6. Completion of required credits which are directly mapped onto the Apprenticeship Standard for Diagnostic Radiographer.
7. Demonstrate a complex range of competence across the Knowledge, Skills and Behaviours of the Apprentice Standard for Diagnostic Radiographer.
8. Demonstrate a complex range of digital literacy.

Programme Outcomes – Knowledge and Understanding

The programme provides opportunities for you to develop and demonstrate the following:

The learning outcomes described below are taken directly from the Health and Care Professions Council (HCPC) Standards of Proficiency for Radiographers.

After 120 credits of study (BSc Hons) you will be able to demonstrate:

The following outcomes will be applied at level six during year three of the programme. Graduates who have demonstrated these learning outcomes will be equipped to undertake their first post within radiography.

- K1. Understand how to practise safely and effectively within the scope of practice (SoP 2023: 1).
- K2. Understand how to practise within the legal and ethical boundaries of your profession (SoP 2023: 2).
- K3. Look after your health and wellbeing, seeking appropriate support where necessary (SoP 2023: 3).
- K4. Understand how to practise as an autonomous professional, exercising your own professional judgement (SoP 2023: 4).
- K5. Recognise the impact of culture, equality and diversity on practice and practise in a non-discriminatory and inclusive manner (SoP 2023: 5).
- K6. Understand the importance of and maintain confidentiality (SoP 2023: 6).
- K7. Understand how to communicate effectively (SoP 2023: 7).
- K8. Know how to work appropriately with others (SoP 2023: 8).
- K9. Understand how to maintain records appropriately (SoP 2023: 9).
- K10. Have attained the knowledge required to reflect on and review practice (SoP 2023: 10).
- K11. Know how to assure the quality of their practice (SoP 2023: 11).

K12. Understand and apply the concepts of the knowledge base relevant to their profession consistent with a first post in diagnostic radiography (SoP 2023: 12).

K13. Draw on appropriate knowledge and skills to inform practice (SoP 2023: 13).

K14. Possess the knowledge of how to establish and maintain a safe practice environment (SoP 2023: 14).

K15. Further develop your knowledge of how to promote and prevent ill health (SoP 2023: 15).

Programme Outcomes – Skills and other Attributes (including Employability Skills)

The programme provides opportunities for you to develop and demonstrate the following:

The learning outcomes described below are taken directly from the Health and Care Professions Council (HCPC) Standards of Proficiency for Radiographers.

After 120 credits of study (BSc Hons) you will be able to demonstrate:

The following outcomes will be applied at level six during year three of the programme. Graduates who have demonstrated these learning outcomes will be equipped to undertake their first post within radiography.

S1. Practise safely and effectively within your scope of practice (SoP 2023: 1).

S2. Practise within the legal and ethical boundaries of your profession (SoP 2023: 2).

S3. Look after your health and wellbeing, seeking appropriate support where necessary (SoP 2023: 3).

S4. Practise as an autonomous professional, exercising your own professional judgement (SoP 2023: 4).

S5. Recognise the impact of culture, equality and diversity on practice and practise in a non-discriminatory and inclusive manner (SoP 2023: 5).

S6. Be able to maintain confidentiality (SoP 2023: 6).

S7. Communicate effectively (SoP 2023: 7).

S8. Work appropriately with others (SoP 2023: 8).

S9. Maintain records appropriately (SoP 2023: 9).

S10. Reflect on and review practice (SoP 2023: 10).

S11. Assure the quality of your practice (SoP 2023: 11).

S12. Understand and apply the concepts of the knowledge base relevant to the scope of practice of a diagnostic radiographer within their first post (SoP 2023: 12).

S13. Draw on appropriate knowledge and skills to inform practice (SoP 2023: 13).

S14. Establish and maintain a safe practice environment (SoP 2023: 14).

S15. Promote and prevent ill health (SoP 2023: 15).

External and Internal Reference Points

The following Subject Benchmark Statements and other external and internal reference points have been used to inform the Programme Outcomes:

The programme outcomes are referenced to the Apprenticeship Standard for Diagnostic Radiographer (Integrated Degree) and also the related Assessment Plan.

Apprenticeship Standard:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/diagnostic-radiographer-v1-3>

Assessment plan:

https://www.instituteforapprenticeships.org/media/ryfkaexj/st0619_diagnostic_radiographer_l6_epa_for-publication_22062023.pdf

As an apprenticeship, the programme integrates the learning outcomes required for a higher education qualification with those defined by employers as an occupational standard for specific (but broadly based) job roles.

The Health and Care Professions Councils Standards of Proficiency for Diagnostic Radiographers (2023)

Standards of Education and Training (2014)

The College of Radiographers Learning and Development Framework (2013)

NHS People Plan for 2020/21

Diagnostics: Recovery and Renewal – Report of the Independent Review of Diagnostic Services for NHS England (2020).

The NHS constitution 2015

[UoC Strategic Plan](#)

[UoC Learning, Teaching and Assessment Strategy](#)

[UoC Academic Regulations and Academic Procedures and Processes](#)

Business Plan for the Institute of Health

[UoC Student Charter](#)

[UoC Access and Participation Plan](#)

Learning Teaching and Assessment Plan 2019-2022

[Student Achievement Strategy 2019-2021](#)

Institute of Health Implementation Plan - People as Experts

Graduate Prospects

Radiography and Medical Imaging are dynamic and rapidly expanding areas within global health service provision. There is a sustained and year on year increase in the number of referrals for medical imaging procedures. Both MRI and CT scan referrals are currently growing at more than 10% per year and there is a proliferation in the number of scanners being commissioned. All other medical imaging modalities are also seeing increases in demand. In 2018 the College of Radiographers reported 9% vacancy rate within the profession due to workforce shortages. A graduate from this programme will be in high demand both in the UK and internationally.

On completion of the programme many graduates will go on to undertake post-graduate masters level qualifications, e.g. reporting, ultrasound, MRI, which could support an application for an advanced practitioner role.

Delivery Arrangements and Attendance

Proposed delivery arrangements for the Top-up element of your apprenticeship – indicative only, with bespoke delivery to be confirmed at a later stage in partnership with employers.

- 4x 2-day blocks of teaching on a University campus
- 8x 3-day blocks of teaching delivered virtually through a mix of pre-recorded and live teaching sessions
- Work-based learning to take place at the apprentices' normal place of employment

All teaching sessions, including those delivered during attendance blocks, are compulsory and will be monitored via your Tripartite Review meetings in addition to Personal Tutor meetings.

Refer to **Appendix 1** for further information on apprenticeship delivery models.

Learning, Teaching and Assessment Strategies employed to enable the Programme Outcomes to be Achieved and Demonstrated

As an apprentice at the University of Cumbria, you are part of an inclusive learning community that recognises diversity. You will have opportunities to learn by interacting with others in a collegiate, facilitative and dynamic learning environment. Teaching, assessment and student support will allow equal and equitable opportunities for you to optimise your potential and develop autonomy.

We seek to create a stimulating and innovative community of learning, whether encountered on campus or at a distance, on placement or in the workplace. Facilitated by our expert practitioner staff, you will experience a learning environment that is well equipped, flexible, and stimulating.

The course has been in development with employers to develop a flexible blended learning environment which will allow employers to upskill existing staff whilst enabling them to continue in their current role. For an indication of how this blended approach will look, please see the section above ('Delivery Arrangements and Attendance'). This aligns to the UoC Learning, Teaching and Assessment Strategy 2017-22 (1.4, 3.2), widening access agendas and the requirements of the NHS People Plan.

By beginning the apprenticeship with the Radiographer AP Bridging module, this enables the apprenticeship to be tailored to a diverse workforce who are currently unable to progress their qualifications. This aligns to the UoC Learning, Teaching and Assessment Strategy 2017-22 (2.1). Applicants will undertake a rigorous evaluation and mapping of their current skills and experience prior to starting the apprenticeship. This will be achieved via the Individual Learning Needs Analysis (ILNA) and the University Skills Radar self-assessment.

We will work closely with mentors, ensuring they have access to relevant university systems / VLEs such as Blackboard, Pebblepad and APTEM. This aligns to the UoC Learning, Teaching and Assessment Strategy 2017-22 (4,4).

Learning and Teaching

Knowledge, understanding, skills and other attributes are taught at the University with apprentices putting them into context and appreciating their relevance through applying them in the workplace. You are encouraged to undertake independent study both to supplement and consolidate your

learning and to broaden your individual knowledge and understanding of the subject. In particular, work-based learning forms part of many modules, typically as work-based projects or other directed assignments.

Learning and teaching methods are designed to:

- instil the values of the NHS Constitution as fundamental in the delivery of care to patients and their relatives and carers
- be apprentice-centred, flexible and modern whilst being challenging and stimulating
- support different apprentices' needs at different stages of development
- be fully supported by, and integrated with, technological approaches such as the Blackboard virtual learning environment (VLE)
- actively ensure the linkage of theory with practice via the teaching team who have close links with the clinical environment and engage in a variety of professional networks.
- utilise multiple aspect of simulated practice to enhance application of learning
- explicitly consider, value and incorporate public and patient perspectives, involving public, patients and carers directly in formative assessment and the assessment of fitness to practise
- to be fair, objective and impart academic rigour to the teaching and learning processes
- develop the apprentice as independent and self-directed, inculcating the ethos of lifelong and reflective learning
- develop the apprentice's abilities to learn effectively and progress academically, performing academically at level 6 in terms of achieving the programme aims and outcomes through a variety of assessments, including an in-depth evidence based literature review as well as the demonstration of mentoring skills and leadership

Summative and Formative Assessment

Modules use formative and summative assessment so that apprentices' progress through a module in a structured and constructive way and build knowledge for practice in a coherent and logical way. Formative assessments are designed so that feedback on the individual apprentice's performance is provided prior to the submission of the final, summative assessment – though this does not contribute to the final module mark or the credit awarded. The wordage – or equivalent – for both formative and summative assessments is counted towards the whole module assessment wordage. Repetition of assessments methods, where appropriate, are used to allow for apprentices to progress based on feedback received. For example, written assignments are used in the Radiographer AP Bridging module, HMSD6019 assessment and HMSD6024 assessment whilst OSCE assessments are used for both HMSD6018 and HMSD6020.

Assessments will also include work-based projects and experience or other assignments, drawing on your knowledge of and experience in the workplace. Throughout the programme, your employer has an important role to play in supporting assessment, in particular suggesting topics and providing feedback on formative assessment. It is a requirement for this Apprenticeship programme that apprentices must maintain a portfolio of your completed assessed academic work and workplace activities to provide evidence of your achievements and capabilities and that this portfolio is discussed and reviewed with your employer on a regular basis. The progress with the development of your portfolio will be discussed during tripartite apprentice review meetings to ensure that you are making suitable progress. The building of this portfolio is therefore integral to the degree programme and the end point assessment.

The learning and teaching strategy is based on the philosophy that Radiographers occupy a privileged position within society. Patients, clients and members of the public have the right to expect the highest standards of professional behaviour; Radiography lecturers and clinical partners

are gatekeepers for the profession and safeguard entry to it. Training to be a Radiographer, whilst working and studying for this highly valued qualification is a challenging and stimulating process, on both personal and professional levels. The programme is designed to ensure that theory and practice are clearly linked throughout in order to enhance patient care. This includes the requirement for apprentices to demonstrate the appropriate professional attitudes, values and character throughout their written work, their time on placement, and conduct on the programme.

A variety of different assessment methods are employed to provide a valid evaluation of the particular skills, knowledge and behaviours described in the professional body and Diagnostic Radiographer Apprenticeship standard. For example, Image evaluation and pathology recognition are assessed by computer-based assessments in which you are required to view and discuss images.

Your interpretation of complex clinical scenarios will be assessed via oral examinations which develop and challenge your ability to hold professional discussions with service users and colleagues in both the medical imaging sessions and the wider interdisciplinary context.

The application of research module will challenge you to critically review practice and challenge poor practice within medical imaging and use the latest research and evidence in order to allow you to formulate persuasive arguments. This will enable you to make recommendations to enhance service provision and patient care.

Maths and English Development

As per the entry requirement, all apprentices must already hold a minimum of Level 2 qualifications in English and Maths. These skills will be assessed and will be continually developed throughout the apprenticeship programme. This is supported by all apprentices completing an initial assessment of their English and Maths ability at the start of the programme. This is intended to establish a baseline against which progress will be monitored and reviewed in tripartite review meetings.

Service User Engagement

Input from service user groups provided the course development team with a strong steer to include opportunities and experiences which enable those studying the programme to engage with service users and explore their experiences of good and bad care. This has been included in the programme as well as shaping the assessment strategy e.g., the HMSD6019 patient interview and reflection.

Management of Work Integrated Learning

Prior to starting the Radiography AP Bridging module all apprentices will complete an Individual Learning Needs Assessment to identify their specific existing skillset related to the various professional body and apprenticeship standards. This allows for an individual learning plan to be put in place for the duration of this course.

The university apprenticeship management system (APTEM) will be used to record and report evidence related to the apprenticeship standard.

Apprentices will be supported to transfer classroom learning to the workplace via

- Allocation of a personal tutor and workplace mentor
- Tripartite review meetings (managed and conducted by personal tutors)
- Clinical portfolio development
- A named clinical co-ordinator who will provide training for mentors and support workplace staff.

Any apprentice performance issues concerning either academic work or work-based learning will be managed via the university progress review mechanism / fitness to practice policy as appropriate.

Apprentices may be required to undertake placement at an alternative location to their normal workplace in order to meet all of the apprenticeship and professional body standards.

End Point Assessment

All apprentices must take an independent assessment at the end of their training to confirm that they have achieved occupational competence. Rigorous, robust and independent end-point assessment (EPA) is essential to give employers confidence that apprentices completing an Apprenticeship Standard can actually perform in the occupation they have been trained in and can demonstrate the duties, and knowledge, skills and behaviours set out in the occupational standard.

The University and the employer are bound by contract to work together to support the apprentice and to carry out the end-point assessment.

The EPA period should only start, and the EPA be arranged, once the employer and University of Cumbria are satisfied that the apprentice is consistently working at or above the level set out in the occupational standard and all of the pre-requisite gateway requirements for EPA have been met. It is expected that the gateway will be reached on completion of the final module and before the University of Cumbria's Module Confirmation Board (MCB).

Apprentices are supported throughout the programme to ensure they will meet all the gateway requirements e.g., the behaviours, knowledge, skills, English and Maths development, PREVENT, safeguarding, and have a good understanding of British Values as applied to the healthcare context. The main tool for monitoring progress will be via the Tripartite Review meeting in addition to Personal Tutor meetings. Any apprentice who may be having difficulties will have an appropriate action plan developed and recorded with signposting to relevant sources of support. This will be recorded in the APTM system and/or via a Progress review meeting.

The end point assessment for integrated degree apprenticeships that lead to a career in a regulated profession (one where access to the profession is totally controlled by a professional body, in this case the Health and Care Professions Council) will be set at the same standard as other entry routes into the profession. This means that where apprentices fail to meet the gateway criteria for such and integrated end point assessment, they will not be able to complete the university's academic award.

The End Point Assessment criteria for the Diagnostic Radiographer Apprenticeship Standard can be found here:

https://www.instituteforapprenticeships.org/media/ryfkaexj/st0619_diagnostic_radiographer_l6_epa_for-publication_22062023.pdf

Apprentice Support

We provide responsive apprentice support that promotes apprentice success. Our approach to apprentice support is designed to support achievement and progression, champion inclusivity and accessibility, prepare you for opportunities beyond study, and promote independence and resilience, enabling you to achieve your potential.

As an apprentice of the University of Cumbria, you will be taught by academics and expert practitioners who facilitate learning through structured inquiry. You will be provided with access to high quality academic resources through physical and digital libraries and will be supported to

develop skills that enable you to become a critical, reflective, discerning and independent learner and researcher.

Support in your Workplace

At your workplace, you will be supported by your employer. Exact arrangements and terminology are the responsibility of the employer, but typically, you will be supported as follows, where the roles may be combined in one person;

- A Mentor designated by the employer to provide vocational and pastoral support for individual apprentices, who may or may not be your line manager. In particular, support will be provided for work-based learning assignments and the final year project.

The University and the employer are bound by contract to work together to support you as an apprentice. This will include tripartite apprentice review meetings between the University, the apprentice, and the employer. The agenda for these apprentice review meetings will be shared with you in advance but will typically include a summary of your progress on programme, a review of evidence on file, identification of any emerging challenges, tracking the proportion of off-the-job training undertaken, and agreement of an action plan if/where needed. Records of these apprentice review meetings will be held in your profile on the APTM system and may be audited by the ESFA or OFSTED as part of their monitoring and audit processes to ensure provision of high-quality apprenticeships.

Apprentices are required to maintain their own personal record of off the job learning within their portfolio and make this available to their employer and the University.

University Induction

Mentors will also be invited to the induction session for apprentices.

You will receive an initial induction pack to work through remotely which will ensure you are able to engage with university systems and access the virtual learning environment.

The first few days of the course will involve a full induction covering: Blackboard Collaborate virtual learning environment, course structure & assessments, module introduction, academic regulations, clinical assessments, the clinical portfolio including PebblePad, learning information support systems & services. One to one meetings with personal tutors (PT) will be used to introduce wider pastoral support systems. Any apprentices with disabilities or individual learning needs will also have meetings with the relevant support services.

Personal Tutoring

You will also be allocated a Personal Tutor. Your Personal Tutor will be proactively involved in the delivery of your programme and will have contact with you throughout your time at the University. They will support your learning and development, including through tutorials, Progress Reviews and other support as outlined in the Personal Tutoring Policy. The majority of tutorials will be delivered remotely due to the diverse geographical locations of apprentices on the course. However, there will also be flexibility during attendance weeks for apprentices who would prefer tutorials in-person.

Personal Development Planning

Personal Development Planning is incorporated into the programme at all stages. You will undertake tripartite reviews with your personal tutor and the employer in which all aspects of your development is considered. This includes your clinical skills development, academic skills and we will encourage you to think about your longer-term career aspirations and which aspects of the course could help you to develop your interests in a particular.

Library Services and Academic Skills

Module leaders will collaborate with Library Services to ensure that your online reading and resource lists are current and items are available via the library discovery tool OneSearch. In order to

maximise access, availability and usefulness, eBooks and electronic journal titles will, in most cases, be prioritised. You can access a wide range of electronic and print content using [OneSearch](#) and you can find out more about key texts, databases and journals for your subject by accessing the library's [subject resources webpages](#). Where appropriate, module reading and resource lists will be made available to you electronically on Blackboard using the University's [online reading and resource list system](#).

Each campus library has a dedicated webpage. Check out local information about opening hours, reserving books, using self-service kiosks, printing and photocopying, booking study spaces and more. <https://my.cumbria.ac.uk/Student-Life/Learning/Libraries/>

An [Ask a Librarian](#) service runs from 17:00 - 09:00 weekdays and round the clock on weekends and holidays. This means you can get professional help using about library services, finding information, referencing and searching, even when the library is closed. <https://my.cumbria.ac.uk/Student-Life/Learning/Libraries/Ask/>

The [Skills@Cumbria](#) service can help support your academic, library and digital skills and success throughout your programme. It includes a suite of [online self-help resources](#) accessible 24/7 via the University's website and Blackboard site. Additional skills support for apprentices is offered via:

- [Workshops](#)
- Email: skills@cumbria.ac.uk
- [Appointments](#)
- [Webinars](#)
- [Learn Well at Cumbria](#)
- [Study from Home Webpage](#)
- [Digital Capabilities](#) and [LinkedIn Learning Pathways](#)

[Head Start to Apprenticeships](#) Head Start to Apprenticeships is a self-learning module that is completed online and at your own pace. The module gives new apprentices an opportunity to prepare for their transition into university study by starting to develop the academic skills and digital capabilities, as well as understand the apprenticeship processes, to help become successful apprentices. A digital badge is generated for each finished unit and a complete set of badges results in a Certificate of Completion for Head Start to Apprenticeships. All apprentices are given the opportunity to register and complete Head Start prior to registering for their main programme of study. This course is free and available via Blackboard, the Virtual Learning Environment and MOOC. More details and guidelines on how to access the course are available in the [Head Start to Apprenticeships](#) section of our website.

[Head Start Plus](#): Head Start Plus is also an online skills development course, designed to support apprentices who are about or who have just started study at level 5 or 6 (2nd and 3rd year undergraduate). This course is particularly recommended to apprentices who may not have studied at HE level for some time or who are transitioning into the higher HE levels. The course provides a useful refresh on academic skills and practice and an insight into the expectations of tutors at those levels.

This course is free and available via the Open Education Platform powered by Blackboard. To access the course, follow the link to <https://openeducation.blackboard.com/cumbria> and set-up a free account with Open Education. Once logged on, select the course free of charge and work through it at your own pace.

IT and Technical Support

Technology is an invaluable asset when it comes to studying, so it's important you know how to make the most out of the excellent [IT facilities](#) we have available. Our aim is to ensure you can

access university electronic resources from anywhere or any device, whether on or off campus. The [Student Hub](#) is your one-stop gateway to all University systems, Outlook email, and OneDrive.

Whether you consider yourself a computer expert or you're not confident about your IT skills, we're always around to ensure you get the level of support you need. We have a wealth of information and support available on the [IT Services website](#) and have a dedicated IT Service Desk where you can talk to someone by phone or log your question online from anywhere, at any time.

Support Services

[Careers and Employability](#): The Careers and Employability team is here to help you with all things career-related. Through the career hub [My Career Enriched](#), you can:

- find graduate jobs, part-time work, work experience, industry placements and paid internships;
- book one-to-one careers advice appointments with one of the team;
- book onto careers fairs and employability events where you can meet employers;
- attend practical workshops on CVs, applications, interviews, success in your chosen sector; options with your degree, job search skills and more;
- send in your CV or application form for tailored feedback;
- complete mini online courses in Pathways to improve your employability skills.

Career Ahead+ is the University of Cumbria's Employability Award. Completing Career Ahead+ will help you recognise and develop your skills, providing a greater opportunity for you to get the job you want when you graduate. The award is based on what employers look for in an ideal candidate, in relation to skills, knowledge and experience. You will be supported with career direction, gaining experience, and providing all the skills needed to complete the perfect application and be successful in that all important job interview. Contact careerahead@cumbria.ac.uk or visit www.cumbria.ac.uk/careerahead for more information.

[Chaplaincy](#): Our chaplaincy provides a safe place, a listening ear and personal support to all apprentices and staff, regardless of beliefs.

[Disability and Specific Learning Needs](#): The University is committed to ensuring you are able to participate effectively in your chosen programme of study and all areas of University life. The University defines disability broadly, including:

- mobility impairments
- sensory impairments
- medical conditions
- autism (ASD)
- specific learning difficulties (SpLD's such as Dyslexia or Dyspraxia)
- mental health conditions.

Any apprentice identified as having a learning support need either through self-declaration or through assessment by a tutor will be offered an individual assessment of their learning support needs, in order to develop a learning support plan. Learning support will then be given by the disability support team in line with this plan.

[Health and wellbeing](#): Our team forms part of Student Services. Your physical, emotional and psychological well-being are key aspects of living and learning well. The Health and Wellbeing page links to various sources of support, including how to self-refer to the mental health and wellbeing service for appointments. We've highlighted a couple of specifics to get started:

- Register for [Together All](#) an anonymous and stigma free environment where you map your own path to well-being with peer support.
- Sign up to our health and well-being blog: [Live Well at Cumbria](#).

[UoC Active](#): Staying physically fit and well makes a huge difference to psychological wellbeing and to our abilities to study. Check out Sport facilities at UoC Active.

[International Student Support](#): Finding your way in a new country or culture can be challenging. International Student Support welcomes you and will be in touch throughout your stay. We encourage you to contact us if you have any questions or need support: intss@cumbria.ac.uk

[Money Advice](#): The Money Advice Service are here to help you plan your finances and manage your money whilst studying. We also provide information to help you to manage your money more effectively. Our Advisers are based across the University and are here to help with money issues. We run workshops as well as offering one-to-one advice via telephone on taking control of your finances and gaining financial skills which can last for life.

Further support and guidance, including EDI and Safeguarding: We are an inclusive community, committed to supporting and learning from each other, find out more about [Equality, Diversity and Inclusion \(EDI\)](#). Depending on the nature of your course, you may well already know about or be learning about safeguarding in a professional context and to find out about the University of Cumbria's safeguarding policy and procedures visit: [Safeguarding](#).

Student Voice

As an apprentice at the University of Cumbria you automatically become a member of the Students' Union. The Students' Union represents the views and interests of students within the University.

The Students' Union is led by a group of Student Representatives who are elected by students in annual elections. They also support approximately 400 Student Academic Reps within each cohort across the entire University. The Students' Union represent the views of their cohort and work with academic staff to continuously develop and improve the experience for all University of Cumbria students. You can find out more about who represents you at www.ucsu.me.

You can email at any time on studentvoice@cumbria.ac.uk.

University Cumbria Students' Union (UCSU) Student Support

UCSU offers a free, independent and confidential advice service to all learners. They can help with things like academic appeals, extenuating circumstances or if you're considering a formal complaint. UCSU are also on hand to represent you in any formal meetings, for example in malpractice panels or fitness to practice meetings. Appointments are telephone based and can be booked at www.ucsu.me/support

Pop Up Information Points

Keep a look out for these! They are happening on your campus around September/October and January. There will be approachable students and staff around to help out with any practical queries as you settle into your studies, and to remind you of the wide range of support available. You are encouraged to attend as it will give you the opportunity to talk to people about a range of things, such as your finances, and budgeting, additional help for a specific learning difficulty or disability, finding part-time work and working towards your dream career, getting involved in new activities, or juggling everything alongside your studies.

Programme Curriculum Map

Please note this map refers to the Diagnostic Radiography (Top-up) programme only – for how the combined elements (FdSc/UDip & Top up) meet all apprenticeship standard competencies please refer to Appendix 3 and Appendix 4 below

Academic Level	Module Code	Module Title	Credits	Module Status*	Programme Outcomes achieved	Apprenticeship Standards achieved (see Appendix 4)
6	HMSD6020	Image Evaluation (Core Radiography Module)	20	Core	K4, K7, K12, K13, S4, S7, S12, S13	K37, K44, K45, K50, K56, K57 S19, S21, S35, S59, S62, S99, S100, B2, B3, B4, B5, B6, B7
6	HMSD6011	Applying Research to Enhance Professional Practice	20	Core	K2, K4, K6, K10, K11, K13, S2, S4, S6, S10, S11, S13	K8, K20, K32, K58, K59, S22, S51, S52, S53, S64, S70, S76, B2, B4, B6
6	HMSD6018	Focussed Radiological Practice 1 (Theory)	20	Core	K7, K12, K13, S7, S12, S13	K37, K42, K43, K49, K50, K56, K57, S35, S57, S59, S64, S66, S74, S77, S79, S80, S81, S83, S85, S91, S93, B2, B4, B6
6	HMSD6019	Focussed Radiological Practice 2 (Work Based)	20	Core	K1, K2, K4, K5, K7, K8, K10, K11, K12, K13, S1, S2, S4, S5, S7, S8, S10, S11, S12, S13	K16, K21, K24, K25, K28, K32, K34, K35, K49, K53, K56, S1, S3, S6, S7, S9, S13, S16, S17, S20, S34, S35, S36, S43, S47, S50, S61, S64, S65, S66, S67, S73, S74, S77, S79, S80, S81, S83, S85, S86, S87, S88, S93, B1, B2, B4, B5, B6
6	HMSD6022	Applied Clinical Radiography	20	Core	K1, K2, K4, K5, K6, K7, K8, K9, K10, K12, K13, K14, S1, S2, S4, S5, S6, S7, S8, S9, S10, S12, S13, S14	K3, K12, K15, K16, K17, K18, K19, K20, K21, K22, K23, K24, K25, K29, K32, K38, K43, K44, K45, K47, K48, K49, K50, K53, K56, K57, K60, K61, K63, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S16, S17, S18, S19, S21, S23, S24, S25, S27, S28, S29, S30, S31, S32, S33, S34, S35, S36, S37, S38, S39, S40, S41, S42, S46,

						S50, S58, S59, S60, S63, S64, S65, S66, S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S83, S84, S85, S86, S87, S88, S89, S90, S91, S92, S93, S94, S95, S96, S97, S98, S99, S100, S101, S102, S103, S104, S105, S106, S107, B1, B2, B3, B4, B5, B6, B7
6	HMSD6024	Preparation for Professional Practice – the radiographer in the wider context of healthcare	20	Core	K1 – K15, S1 – S15	K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K14, K15, K16, K17, K21, K22, K23, K24, K25, K26, K27, K30, K31, K32, K33, K34, K35, K36, K38, K39, K40, K41, K43, K44, K59, K60, K61, K64, K65, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S15, S16, S17, S18, S19, S20, S22, S23, S24, S25, S26, S27, S28, S29, S31, S33, S34, S37, S38, S39, S40, S41, S42, S43, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S54, S55, S57, S64, S65, S68, S70, S71, S101, S102, S108, S109, B1, B2, B3, B4, B5, B6, B7
	EPAG9002	Diagnostic Radiography Apprenticeship Gateway	0	QPU		

Notes

In accordance with the Apprenticeship Standard and Assessment Plan, apprentices must maintain a portfolio of their completed work to demonstrate their achievements and capabilities. It consists of the practical output of all assessments completed during the programme, including the final project report and presentation (if applicable).

A failed apprentice will not be permitted to re-register on the same programme.

The clinical pathway placements associated with the HMSD6018/9 modules may be subject to availability. The course team will ask you to express your preference as to which clinical modality you want to study and will endeavour to ensure a place is available in that area though this cannot always be guaranteed. If a place is not available, then a suitable alternative will be discussed with you.

All modules, including clinical elements, must be passed for the apprentice to be eligible to apply for HCPC registration on successful completion of the entire programme. Clinical elements are found in HMSD6022, which is the core clinical module, and HMSD6019 where an apprentice can gain experience in an additional modality.

Should an apprentice fail any of these clinical elements (including the attendance requirement) they will be offered one opportunity for reassessment. Progression will be permitted if the initial assessment is not passed, however if the reassessment is not passed resulting in a confirmed fail, the apprentice will be exited from the programme at the next University Assessment Board.

Reassessment of failed clinical modules should occur as soon as possible, in line with handbook recommendations, to allow the apprentice to demonstrate consolidation of technique and pass through the next available Module Assessment Board.

Only apprentices completing the entire programme and who meet all the clinical competence requirements (as demonstrated by completion of the Clinical Portfolio) will be eligible for the target award of BSc (Hons) Diagnostic Radiography.

Apprentices must maintain fitness to practise and their suitability for clinical placement throughout the programme.

Should an apprentice exhibit non-professional behaviour, irregular attendance, continuing failure to make satisfactory clinical progress or dangerous practise, they will not be eligible to progress on the programme. In such cases the clinical placement/manager concerned will alert the programme leader. The Fitness to Practise (FtP) process will be actioned involving the professional lead/programme leader and either the personal tutor or clinical placement co-ordinator and a representative of the clinical department hosting the placement in line with the FtP policy.

This formal Health and Conduct Committee/FtP meeting will consider all appropriate evidence and the decision from this will be presented to the next available Module Assessment Board for consideration in relation to the apprentice's ability to progress on the programme.

Should an apprentice be excluded from a clinical placement or is dismissed by their employer, and that apprentice has failed to follow advice offered in support meetings or disciplinary meetings, the University will not be able to seek another clinical placement for the apprentice to complete the clinical components of the programme.

As per the apprenticeship standard, the employer will decide when the apprentice has met the required standards to pass through the gateway. If a student makes the expected progress on the course this would be after all other modules were passed in the semester 1 module assessment board (approximately mid-February)

* Key to Module Statuses

Core Modules

Must be taken and must be successfully passed

Indicative Apprenticeship Journey: Full Time

The precise arrangements for any particular cohort of apprentices will be confirmed at a later stage in partnership with employers, please also refer to Appendix 5 below which aligns to the UDip that starts on 08.11.2021 over a condensed 20 week timeframe and feeds into the top up that starts on 28.03.2022

Journey Milestone	Method of Checking	Approximate Deadline
Pre-Apprenticeship activities		
Foundation degree completed	Entry Requirement	n/a
L2 Functional Skills Diagnostic completed	Entry Requirement	n/a
Individual Learning Needs Analysis completed	Emailed to clinical co-ordinator	2 weeks prior to start date
Apprentice Diagnostic Radiographer AP Bridging		
Commence Learning	Register on programme / attend lectures	Week 1
Tripartite Review 1	Logged on APTEM, checked by programme leader	By week 4
Reflective essays – first submission	Blackboard (Turnitin)	Week 13
Formative Examination	Blackboard	Week 16
Summative Examination	Blackboard	Week 19
Reflective essays – second submission	Blackboard (Turnitin)	Week 20
Clinical portfolio deadline	Module assessment board	Week 20
End of Radiographer AP Bridging Course	Confirmed by programme leader	Week 24
Apprentice Diagnostic Radiography BSc(Hons) (top-up)		

Commence Learning		Week 25
Tripartite Review 2	Logged on APTEM, checked by programme leader	By week 29
Module Assessment (6018)	Checked by module lead	Week 41
Tripartite Review 3	Logged on APTEM, checked by programme leader	Week 47
Module Assessment (6024)	Checked by module lead	Week 51
Module Assessment (6011)	Checked by module lead	Week 65
Tripartite Review 4	Logged on APTEM, checked by programme leader	Week 67
Module Assessment (6020)	Checked by module lead	Week 72
Module Assessment (6019)	Checked by module lead	Week 74
Module Assessment (6022)	Checked by module lead	Week 74
Diagnostic Radiography Apprenticeship Gateway	Checked by Apprenticeship Team / Programme Lead	By week 74
Module Confirmation Board (MCB)	University of Cumbria Assessment Board process	University Progression and Award Boards (UPAB)

Indicative Academic Programme Delivery Structure: Full Time 18 months *where week 1 is at the start of the UDip Bridge
The precise delivery arrangements for any particular cohort of apprentices will be confirmed at a later stage in partnership with employers
An exemplar delivery structure for the very first delivery of this top up is appended below as Appendix 5 as this cohort will commence on 28.03.2022

Module Code	Module Title	Number of Delivery Hours	Delivery Pattern	Method of Delivery	Method(s) of Assessment	*Approximate Assessment Deadline
			Sept – Dec Jan – May June - Aug	Block Release / Day Release / Distance Learning / Work-based Learning		
HMSD6018	Focussed Radiological Practice 1 (Theory)	200	Feb - Jun	Block Release / Day Release / Distance Learning	OSCE	Week 41
HMSD6024	Preparation for Professional Practice - The radiographer in the wider context of healthcare	200	Feb - Aug	Block Release / Day Release / Distance Learning	Poster Assignment	Week 51
HMSD6011	Applying Research to Enhance Professional Practice	200	Jun - Nov	Block Release / Day Release / Distance Learning	Research Project	Week 65
HMSD6020	Image Evaluation (Core Radiography Module)	200	Feb - Jan	Block Release / Day Release / Distance Learning	Presentation & OSCE	Week 72

HMSD6019	Focussed Radiological Practice 2 (Work Based)	201	Feb - Jan	Block Release / Day Release / Distance Learning / Work-based Learning	Portfolio and Written Assignment.	Week 74
HMSD6022	Applied Clinical Radiography	412	Feb - Jan	Block Release / Day Release / Distance Learning / Work-based Learning	Clinical Portfolio	Week 74
EPAG9002	Diagnostic Radiography Apprenticeship Gateway	0	Year-long		Gateway evidence check	Prior to progression to UPAB

Apprentices with 120 credits having completed the entire programme and met all the clinical competence requirements (as demonstrated by completion of the Clinical Portfolio) will be eligible for the target award of BSc (Hons) Diagnostic Radiography

Training Hours

According to the ESFA's apprenticeships funding rules, all apprenticeship programmes must contain a minimum of 20% off-the-job training hours. The 20% off-the-job training is calculated using the apprentice's contracted employment hours across their whole apprenticeship, equivalent to around one day per working week. The ESFA has defined off-the-job training as "*learning which is undertaken outside of the normal day-to-day working environment and leads towards the achievement of an apprenticeship. Training can be delivered at the apprentice's normal place of work but not as part of their normal working duties*".

Training is distinct from assessment and off-the-job training reinforces practical, work-based learning with technical and theoretical learning. The focus of off-the-job training is on teaching new skills rather than assessing existing skills.

Off the job training must be completed in normal paid working hours and 20% is a minimum requirement. The actual number of hours required for each apprentice will be set out in the apprentice's commitment statement. It is the apprentice's responsibility to maintain an up to date record of off the job learning hours completed. The number of hours required in the commitment statement must be completed before an apprentice can pass gateway for end point assessment.

Where it is apparent that an apprentice will be able to demonstrate competence before the planned gateway date and with fewer hours than set out in the commitment statement. A separate statement must be produced prior to gateway explaining why this is the case and setting out the number of hours to be completed. This must still be a minimum of 20% for the duration of the apprenticeship.

It has been calculated that an employee working full time over the duration of the apprenticeship (including both Radiographer AP Bridging and Top-up elements) will require approximately 500 hours of off the job training time to meet the minimum of 20%. 165 hours of teaching time will contribute to this total; guided independent study does not count towards this total. The remainder will be met by the 400 hours of clinical work-based learning time required for module HMSD6022. This will be logged as part of the apprentices record of off the job learning hours.

Exceptions to Academic Regulations

This programme operates in accordance with the University's Academic Regulations and Academic Procedures and Processes with the following permitted exceptions due to the requirements of the Health and Care Professions Council (HCPC).

All modules, including clinical elements, must be passed for the apprentice to be eligible to apply for HCPC registration on successful completion of the entire programme. Clinical elements are found in HMSD6022, which is the core clinical module, and HMSD6019 where an apprentice can gain experience in an addition modality.

Should an apprentice fail any of these clinical elements (including the attendance requirement) they will be offered one opportunity for reassessment. Progression will be permitted if the initial assessment is not passed, however if the reassessment is not passed resulting in a confirmed fail, the apprentice will be exited from the programme at the next University Assessment Board.

Reassessment of failed clinical modules should occur as soon as possible, in line with handbook recommendations, to allow the apprentice to demonstrate consolidation of technique and pass through the next available Module Assessment Board.

Apprentices must maintain fitness to practise and their suitability for clinical placement throughout the programme.

Should an apprentice exhibit non-professional behaviour, irregular attendance, continuing failure to make satisfactory clinical progress or dangerous practise, they will not be eligible to progress on the programme. In such cases the clinical placement/manager concerned will alert the programme leader. The Fitness to Practice (FtP) process will be actioned involving the professional lead/programme leader and either the personal tutor or clinical placement co-ordinator and a representative of the clinical department hosting the placement in line with the FtP policy.

This formal HCC/FtP meeting will consider all appropriate evidence and the decision from this will be presented to the next available Module Assessment Board for consideration in relation to the apprentice's ability to progress on the programme

Methods for Evaluating and Improving the Quality and Standards of Learning

<p>Mechanisms used for the Review and Evaluation of the Curriculum and Learning, Teaching and Assessment Methods</p>	<ul style="list-style-type: none"> • Module Evaluation • Programme Validation and Periodic Review • Annual Monitoring • Peer Review of Teaching • External Examiner Reports • OFSTED Steering Group • Apprenticeship Steering Group • Student Success and Quality Assurance Committee • ESFA Learner Survey / Quality Curriculum Review • Tri-partite reviews • Meetings with employers
<p>Mechanisms used for gaining and responding to feedback on the quality of teaching and the learning experience – gained from: Students, graduates, employers, placement and work-based learning providers, other stakeholders, etc.</p>	<ul style="list-style-type: none"> • Staff Student Forum • Module Evaluation Forms • Programme Evaluation: National Student Survey, UK Engagement Survey • Module/Programme/Personal tutorials • Meetings with External Examiners • Meetings with Employers • External surveys requested by regulatory bodies

<p>Date of Programme Specification Production:</p>	<p>May 2021</p>
<p>Date Programme Specification was last updated:</p>	<p>September 2024</p>

For further information about this programme, refer to the programme page on the University website:-

<https://www.cumbria.ac.uk/study/courses/apprenticeships/diagnostic-radiography/>

Appendix 1

Apprenticeship delivery structure

Apprenticeship programmes are designed to be offered for full-time study with delivery at the University. However, as a Higher/Degree Level Apprenticeship, other types of flexible delivery may be required. Hence this specification distinguishes between:

- 1) The Curriculum Map, which consists of:
 - the modules including the level, delivery mode (e.g. face to face or blended learning), and delivery activities (e.g. lectures, guided independent study);
 - the designation of modules as core, compulsory, or optional

- 2) The Programme Delivery Structure, which consists of:
 - the semester(s) in which each module is delivered
 - the delivery method for each module (e.g. block release or day release)
 - the method of assessment and indicative assessment deadline(s)

This programme can be made available in two modes of study:

- a) Standard Mode of Study:
 - the initial offer by the University: with the defined curriculum map and programme delivery structure
 - delivered full-time through a mix of day release and block release throughout the period of study
 - with a cohort open to all employers.

- b) Custom Mode of Study:
 - determined by negotiation with a particular employer or delivery partner: following the defined curriculum map, but with a bespoke programme delivery structure, not defined in this specification.

Appendix 2

Apprenticeship Standards to which the Curriculum Map refers

Knowledge

- K1:** The importance of continuing professional development throughout own career.
- K2:** The importance of safeguarding, recognising signs of abuse and the relevant safeguarding processes.
- K3:** What is required of them by the Health and Care Professions Council, including but not limited to the standards of conduct, performance and ethics.
- K4:** The importance of valid consent.
- K5:** The importance of capacity in the context of delivering care and treatment.
- K6:** The scope of a professional duty of care.
- K7:** Legislation, policies and guidance relevant to own profession and scope of practice.
- K8:** The legislative, policy, ethical and research frameworks that underpin, inform and influence the practice of diagnostic radiography.
- K9:** The importance of own mental and physical health and wellbeing strategies in maintaining fitness to practise.
- K10:** How to take appropriate action if own health may affect own ability to practise safely and effectively, including seeking help and support when necessary.
- K11:** The need for active participation in training, supervision and mentoring in supporting high standards of practice, and personal and professional conduct, and the importance of demonstrating this in practice.
- K12:** Equality legislation and how to apply it to own practice.
- K13:** The duty to make reasonable adjustments in practice.
- K14:** The characteristics and consequences of barriers to inclusion, including for socially isolated groups.
- K15:** That regard to equality, diversity and inclusion needs to be embedded in the application of all HCPC standards and across all areas of practice.
- K16:** The emotions, behaviours and psychosocial needs of people undergoing diagnostic imaging, as well as that of their families and carers.
- K17:** When disclosure of confidential information may be required.
- K18:** The principles of information and data governance and be aware of the safe and effective use of health, social care and other relevant information.
- K19:** The need to ensure confidentiality is maintained in all situations in which service users rely on additional communication support, such as interpreters or translators.
- K20:** How concepts of confidentiality and informed consent extend to all mediums, including illustrative clinical records such as photography, video and audio recordings and digital platforms.
- K21:** The characteristics and consequences of verbal and non-verbal communication and recognise how these can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.
- K22:** The need to support the communication needs of service users and carers, such as through the use of an appropriate interpreter.
- K23:** The need to provide service users or people acting on own behalf with the information necessary in accessible formats to enable them to make informed decisions.
- K24:** The principles and practices of other health and care professionals and systems and how they interact with own profession.
- K25:** The need to build and sustain professional relationships as both an autonomous practitioner and collaboratively as a member of a team.
- K26:** The qualities, behaviours and benefits of leadership.
- K27:** That leadership is a skill all professionals can demonstrate.
- K28:** The need to engage service users and carers in planning and evaluating diagnostics, and therapeutic interventions to meet own needs and goals.
- K29:** Information from other healthcare professionals and service users, in order to maximise health gain whilst minimising risks to the service user, such as from radiation dose.
- K30:** The need to involve service users in service design, service delivery, education and research.

K31: The need to engage service users and carers in planning and evaluating their diagnostic imaging and interventional procedures.

K32: The value of reflective practice and the need to record the outcome of such reflection to support continuous improvement.

K33: The value of multi-disciplinary reviews, case conferences and other methods of review.

K34: The value of gathering and using data for quality assurance and improvement programmes.

K35: The principles and regulatory requirements for quality control and quality assurance as they apply to their profession.

K36: The quality improvement processes in place relevant to their profession.

K37: The structure and function of the human body, together with knowledge of physical and mental health, disease, disorder and dysfunction relevant to their profession.

K38: Recognise the roles of other professions and services in health and social care and understand how they may relate to the role of radiographer.

K39: The structure and function of health and social care systems and services in the UK.

K40: The role of the diagnostic radiographer and other operators in the promotion of health and health education in relation to public health, healthy living and health screening for disease detection.

K41: The harms and benefits of population and targeted health screening.

K42: The radiobiological principles on which the practice of diagnostic radiography is based.

K43: The concept of risk vs benefit with regards to ionising radiation and non-ionising radiation, acknowledging this will differ depending on modality, and communicate this with service users, taking into consideration service user judgement.

K44: The philosophy and principles involved in the practice of their profession.

K45: The principles of ionising radiation production, interaction with matter, beam modification, administration of radionuclides and radiation protection.

K46: The physical and scientific principles on which image formation using ionising and non-ionising radiation is based.

K47: Radiation dosimetry and the principles of dose calculation.

K48: The theoretical basis underpinning service user assessment prior to and during their procedure.

K49: The capability, applications and range of equipment used in their profession.

K50: The concepts and principles involved in the practice of their profession and how these inform and direct clinical judgement and decision making.

K51: The pharmacology of drugs used in their profession.

K52: The legislation, principles and methods for the safe and effective administration of drugs used in their profession.

K53: The mechanisms for the administration of drugs, including intravenous and oral contrast agents.

K54: The principles of the safe storage, transportation and disposal of medicinal products used in relation their profession.

K55: The different communication needs, anatomy and disease processes and their manifestation in children.

K56: The signs and symptoms of disease and trauma that result in referral for diagnostic imaging procedures and their image appearances.

K57: The structure and function of the human body in health, disease and trauma, as well as common pathologies and mechanisms of disease and trauma, including the:- musculoskeletal system- soft tissue organs- regional and cross-sectional anatomy of the head, neck, limbs, thorax, pelvis and abdomen- the cardiovascular, respiratory, genitourinary, gastrointestinal and neuroendocrine systems.

K58: A range of research methodologies relevant to own role.

K59: The value of research to the critical evaluation of practice.

K60: The need to maintain the safety of themselves and others, including service users, carers and colleagues.

K61: Relevant health and safety legislation and local operational procedures and policies.

K62: Appropriate moving and handling techniques.

K63: The correct principles and applications of disinfectants, methods for sterilisation and decontamination, and for dealing with waste and spillages correctly.

K64: The role of the profession in health promotion, health education and preventing ill health.

K65: How social, economic and environmental factors, wider determinants of health, can influence a person's health and well-being.

Skills

- S1:** Identify the limits of own practice and when to seek advice or refer to another professional or service.
- S2:** Recognise the need to manage own workload and resources safely and effectively, including managing the emotional burden that comes with working in a pressured environment.
- S3:** Keep own skills and knowledge up to date.
- S4:** Maintain high standards of personal and professional conduct.
- S5:** Engage in safeguarding processes where necessary.
- S6:** Promote and protect the service user's interests at all times.
- S7:** Respect and uphold the rights, dignity, values, and autonomy of service users, including own role in the assessment, diagnostic, treatment and/or therapeutic process.
- S8:** Recognise that relationships with service users, carers and others should be based on mutual respect and trust, and maintain high standards of care in all circumstances.
- S9:** Obtain valid consent, which is voluntary and informed, has due regard to capacity, is proportionate to the circumstances and is appropriately documented.
- S10:** Exercise a duty of care.
- S11:** Apply legislation, policies and guidance relevant to own profession and scope of practice.
- S12:** Recognise the power imbalance which comes with being a health care professional, and ensure it is not for personal gain.
- S13:** Practise in accordance with current legislation governing the use of ionising and non-ionising radiation for medical and other purposes.
- S14:** Identify own anxiety and stress and recognise the potential impact on own practice.
- S15:** Develop and adopt clear strategies for physical and mental self-care and self-awareness, to maintain a high standard of professional effectiveness and a safe working environment.
- S16:** Recognise that they are personally responsible for, and must be able to, justify their decisions and actions.
- S17:** Use own skills, knowledge and experience, and the information available, to make informed decisions and/or take action where necessary.
- S18:** Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasoning appropriately.
- S19:** Make and receive appropriate referrals, where necessary.
- S20:** Exercise personal initiative.
- S21:** Demonstrate a logical and systematic approach to problem solving.
- S22:** Use research, reasoning and problem-solving skills when determining appropriate actions.
- S23:** Respond appropriately to the needs of all different groups and individuals in practice, recognising this can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.
- S24:** Recognise the potential impact of own values, beliefs and personal biases, which may be unconscious, on practice and take personal action to ensure all service users and carers are treated appropriately with respect and dignity.
- S25:** Make and support reasonable adjustments in own and others' practice.
- S26:** Actively challenge barriers to inclusion, supporting the implementation of change wherever possible.
- S27:** Adhere to the professional duty of confidentiality.
- S28:** Respond in a timely manner to situations where it is necessary to share information to safeguard service users, carers and/or the wider public and recognise situations where it is necessary to share information to safeguard service users, carers and/or the wider public.
- S29:** Use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others
- S30:** Communicate in English to the required standard for the profession
- S31:** Work with service users and / or own carers to facilitate the service user's preferred role in decision-making, and provide service users and carers with the information they may need where appropriate
- S32:** Modify own means of communication to address the individual communication needs and preferences of service users and carers, and remove any barriers to communication where possible
- S33:** Use information, communication and digital technologies appropriate to own practice

- S34:** Formulate and provide information and support for service users about their treatment and / or imaging process and procedures, with regular reappraisal of their information needs as appropriate
- S35:** Advise other healthcare professionals about the relevance and application of imaging modalities to the service user's needs
- S36:** Provide appropriate information and support for service users throughout their diagnostic imaging examinations
- S37:** Keep full, clear and accurate records in accordance with applicable legislation, protocols and guidelines
- S38:** Manage records and all other information in accordance with applicable legislation, protocols and guidelines
- S39:** Use digital record keeping tools, where required
- S40:** Work in partnership with service users, carers, colleagues and others
- S41:** Contribute effectively to work undertaken as part of a multi-disciplinary team
- S42:** Identify anxiety and stress in service users, carers and colleagues, adapting own practice and providing support where appropriate
- S43:** Identify own leadership qualities, behaviours and approaches, taking into account the importance of equality, diversity and inclusion
- S44:** Demonstrate leadership behaviours appropriate to own practice
- S45:** Act as a role model for others
- S46:** Promote and engage in the learning of others
- S47:** Demonstrate awareness of the need to empower service users to participate in the decision-making processes related to their profession
- S48:** Demonstrate awareness of the need to encourage, support and mentor staff at all practitioner levels
- S49:** Demonstrate awareness of roles and responsibilities where work is delegated and how this applies in practice
- S50:** Interpret and act upon information from other healthcare professionals and service users, in order to maximise health gain whilst minimising risks to the service user (such as from radiation dose)
- S51:** Engage in evidence-based practice
- S52:** Gather and use feedback and information, including qualitative and quantitative data, to evaluate the responses of service users to own care
- S53:** Monitor and systematically evaluate the quality of practice, and maintain an effective quality management and quality assurance process working towards continual improvement
- S54:** Participate in quality management, including quality control, quality assurance, clinical governance and the use of appropriate outcome measures
- S55:** Evaluate care plans or intervention plans using recognised and appropriate outcome measures, in conjunction with the service user where possible, and revise the plans as necessary
- S56:** Demonstrate awareness of the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process
- S57:** Demonstrate awareness of the philosophy and the development of the profession of diagnostic radiography to inform understanding of current practice
- S58:** Apply the principles of ionising radiation production, interaction with matter, beam modification, administration of radionuclides and radiation protection
- S59:** Distinguish between normal and abnormal appearances on images
- S60:** Recognise and respond to adverse or abnormal reactions to medications used in relation to their profession
- S61:** Demonstrate awareness of the current developments and trends in the science and practice of diagnostic radiography
- S62:** Demonstrate awareness of the principles of Artificial Intelligence (AI) and deep learning technology, and its application to practice
- S63:** Change own practice as needed to take account of new developments, technologies and changing contexts
- S64:** Gather appropriate information
- S65:** Analyse and critically evaluate the information collected
- S66:** Select and use appropriate assessment techniques and equipment
- S67:** Undertake and record a thorough, sensitive, and detailed assessment
- S68:** Undertake or arrange investigations as appropriate

S69: Conduct appropriate assessment or monitoring procedures, treatment, therapy or other actions safely and effectively

S70: Critically evaluate research and other evidence to inform own practice

S71: Engage service users in research as appropriate

S72: Formulate specific and appropriate management plans including the setting of timescales

S73: Assess, monitor and care for the service user across the pathway of care relevant to their profession

S74: Undertake and record a thorough, sensitive and detailed clinical assessment, selecting and using appropriate techniques and equipment

S75: Use physical, graphical, verbal and electronic methods to collect and analyse information from a range of relevant sources including service user's clinical history, diagnostic images and reports, pathological tests and results, dose recording and treatment verification systems

S76: Interrogate and process data and information gathered accurately in order to conduct the procedures most appropriate to the service user's needs

S77: Appraise image information for clinical manifestations and technical accuracy, and take further action as required

S78: Manage complex and unpredictable situations including the ability to adapt planned procedures

S79: Operate diagnostic imaging equipment safely and accurately

S80: Check that equipment is functioning accurately and within the specifications, and to take appropriate action in the case of faulty functioning and operation

S81: Select and explain the rationale for radiographic techniques and immobilisation procedures appropriate to the service user's physical and disease management requirements

S82: Position and immobilise service users correctly for safe and accurate procedures

S83: Authorise and plan appropriate diagnostic imaging examinations

S84: Calculate radiation doses and exposures and record and understand the significance of radiation dose

S85: Perform a broad range of standard imaging techniques, including examinations requiring contrast agents for relevant modalities across a variety of diagnostic or screening care pathways

S86: Assist with a range of more complex diagnostic imaging techniques and interventional procedures providing radiographic support to the service user and other members of the multidisciplinary team

S87: Provide appropriate care for the range of service users and their carers before, during and after imaging examinations, minimally invasive interventional procedures and contrast agent examinations

S88: Perform a range of imaging examinations where the service user's individual characteristics require examinations to be carried out using nonstandard techniques

S89: Perform a range of techniques using mobile imaging equipment outside of a dedicated imaging room

S90: Manage and assist with imaging techniques performed on anaesthetised or unconscious individuals

S91: Adjust ionising radiation exposures and image recording parameters to achieve required image quality at optimal dose for children and adults

S92: Perform a range of imaging techniques and interventions on children

S93: Use to best effect the processing and related technology supporting imaging systems

S94: Manage and assist with fluoroscopic diagnostic and interventional procedures, including those that are complex and involve the use of contrast agents

S95: Perform a broad range of computed tomographic (CT) examinations, including standard head CT examinations, and assist with CT examinations of the spine, chest and abdomen in acute trauma, and to contribute effectively to other CT studies

S96: Perform standard magnetic resonance imaging procedures

S97: Assist with ultrasound imaging procedures

S98: Assist with imaging procedures involving the use of radionuclides including PET tracers and particle emitters

S99: Critically analyse clinical images for technical quality and suggest improvement if required

S100: Distinguish disease trauma and urgent and unexpected findings as they manifest on diagnostic images and take direct and timely action to assist the referrer

S101: Demonstrate awareness of relevant health and safety legislation and comply with all local operational procedures and policies

S102: Work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation

- S103:** Select appropriate personal protective equipment and use it correctly
- S104:** Establish safe environments for practice, which appropriately manages risk
- S105:** Apply appropriate moving and handling techniques
- S106:** Ensure the physical safety of all individuals in the imaging/ therapeutic work environment, especially with regard to radiation safety and high-strength magnetic fields
- S107:** Use basic life support techniques and deal with clinical emergencies
- S108:** Empower and enable individuals (including service users and colleagues) to play a part in managing own health
- S109:** Engage in occupational health, including being aware of immunisation requirements

Behaviours

- B1:** Demonstrate a calm demeanour with empathy, compassion and underpinning emotional resilience to manage day-to-day pressures in unpredictable, emergency and distressing situations, e.g. individuals in cardiac arrest, suffering life changing injuries and/or disease diagnosis.
- B2:** Confident, flexible and adaptable within own scope of practice.
- B3:** Demonstrate emotional intelligence.
- B4:** Act with professionalism, honesty, integrity and respect in all interactions. Maintain good character as outlined in their professional Code of Conduct and not bring their profession or organisation into disrepute.
- B5:** Reflect on own impact on others, take responsibility and be accountable for own actions. Sensitively challenge others and raise issues when appropriate.
- B6:** Actively reflect on own practice and accept and respond to constructive criticism. Be proactive in implementing improvements in order to improve service delivery and patient care.
- B7:** Be aware of and take responsibility for their own fitness in context of physical and/or mental health issues which may affect performance. Seek help and/or guidance as appropriate. Inform Health and Care Professions Council and employer of any change of circumstance that may affect the right to practise.

Appendix 3

Apprenticeship Curriculum Map						
Academic Level	Module Code	Module Title	Credits	Module Status*	Programme Outcomes achieved	Apprenticeship Standards achieved (listed in Appendix 2 above)
4 / 5	N/A	Various within AP Foundation degree	240	N/A	N/A	K1,K2,K4,K5,K6,K7,K8,K9,K10,K11,K12,K13,K14,K17,K18,K19,K20,K21,K22,K23,K24,K25,K26,K27,K29,K30,K32,K33,K37,K39,K40,K41,K48,K51,K52,K53,K54,K55,K56,K57,K58,K59,K60,K61,K62,K63,K64,K65,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S14,S15,S16,S17,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S51,S52,S53,S54,S55,S56,S60,S6,S64,S65,S66,S67,S68,S69,S70,S71,S72,S73,S74,S75,S76,S79,S101,S102,S103,S104,S105,S107,S108,S19,B1,B2,B3,B4,B5,B6,B7
5	HMSD5100	Radiographer AP Bridging	60	N/A	See Radiographer AP Bridging programme specification	K1, K2, K3, K4, K5, K6, K7, K11, K12, K13, K14, K15, K16, K17, K18, K19, K21, K24, K28, K29, K31, K32, K34, K35, K37, K38, K42, K43, K45, K46, K47, K48, K49, K50, K51, K52, K53 K54, K55, K56, K57, K59, K60, K61, K62, K63, S1, S2, S3, S4, S5, S7, S8, S9, S10, S11, S13, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S25, S26, S27, S28, S29, S30, S31, S32, S33, S34, S36, S37, S38, S39, S40, S47, S48, S50, S51, S53, S54, S56, S57, S58, S59, S60, S61, S62, S63, S64, S65, S66, S67, S68, S69, S70, S72, S73, S74, S75, S76, S77, S79, S80, S81, S82, S84, S85, S86, S87, S88, S89, S90, S91, S92, S93, S94, S97, S98, S99, S100, S101, S102, S103, S104, S105, S106, S107, S108, S109, B1, B2, B3, B4, B5, B6, B7

6	HMSD6020	Image Evaluation (Core Radiography Module)	20	Core	K4, K7, K12, K13, S4, S7, S12, S13	K37, K44, K45, K50, K56, K57 S19, S21, S35, S59, S62, S99, S100, B2, B3, B4, B5, B6, B7
6	HMSD6011	Applying Research to Enhance Professional Practice	20	Core	K2, K4, K6, K10, K11, K13, S2, S4, S6, S10, S11, S13	K8, K20, K32, K58, K59, S22, S51, S52, S53, S64, S70, S76, B2, B4, B6
6	HMSD6018	Focussed Radiological Practice 1 (Theory)	20	Core	K7, K12, K13, S7, S12, S13	K37, K42, K43, K49, K50, K56, K57, S35, S57, S59, S64, S66, S74, S77, S79, S80, S81, S83, S85, S91, S93, B2, B4, B6
6	HMSD6019	Focussed Radiological Practice 2 (Work Based)	20	Core	K1, K2, K4, K5, K7, K8, K10, K11, K12, K13, S1, S2, S4, S5, S7, S8, S10, S11, S12, S13	K16, K21, K24, K25, K28, K32, K34, K35, K49, K53, K56, S1, S3, S6, S7, S9, S13, S16, S17, S20, S34, S35, S36, S43, S47, S50, S61, S64, S65, S66, S67, S73, S74, S77, S79, S80, S81, S83, S85, S86, S87, S88, S93, B1, B2, B4, B5, B6
6	HMSD6022	Applied Clinical Radiography	20	Core	K1, K2, K4, K5, K6, K7, K8, K9, K10, K12, K13, K14, S1, S2, S4, S5, S6, S7, S8, S9, S10, S12, S13, S14	K3, K12, K15, K16, K17, K18, K19, K20, K21, K22, K23, K24, K25, K29, K32, K38, K43, K44, K45, K47, K48, K49, K50, K53, K56, K57, K60, K61, K63, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S16, S17, S18, S19, S21, S23, S24, S25, S27, S28, S29, S30, S31, S32, S33, S34, S35, S36, S37, S38, S39, S40, S41, S42, S46, S50, S58, S59, S60, S63, S64, S65, S66, S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S83, S84, S85, S86, S87, S88, S89 S90, S91, S92, S93, S94, S95, S96, S97, S98, S99, S100, S101, S102, S103, S104, S105, S106, S107, B1, B2, B3, B4, B5, B6, B7

6	HMSD6024	Preparation for Professional Practice – the radiographer in the wider context of healthcare	20	Core	K1 – K15, S1 – S15	K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K14, K15, K16, K17, K21, K22, K23, K24, K25, K26, K27, K30, K31, K32, K33, K34, K35, K36, K38, K39, K40, K41, K43, K44, K59, K60, K61, K64, K65, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S15, S16, S17, S18, S19, S20, S22, S23, S24, S25, S26, S27, S28, S29, S31, S33, S34, S37, S38, S39, S40, S41, S42, S43, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S54, S55, S57, S64, S65, S68, S70, S71, S101, S102, S108, S109, B1, B2, B3, B4, B5, B6, B7
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Appendix 4

Knowledge / Skills / Behaviours	FdSc AP	Bridge	TOP UP (HMSD..)					
		HMSD5100	6020	6011	6018	6019	6022	6024
Knowledge								
K1: The importance of continuing professional development throughout own career.								
K2: The importance of safeguarding, recognising signs of abuse and the relevant safeguarding processes.								
K3: What is required of them by the Health and Care Professions Council, including but not limited to the standards of conduct, performance and ethics.								
K4: The importance of valid consent.								
K5: The importance of capacity in the context of delivering care and treatment.								
K6: The scope of a professional duty of care.								
K7: Legislation, policies and guidance relevant to own profession and scope of practice.								
K8: The legislative, policy, ethical and research frameworks that underpin, inform and influence the practice of diagnostic radiography.								
K9: The importance of own mental and physical health and wellbeing strategies in maintaining fitness to practise.								
K10: How to take appropriate action if own health may affect own ability to practise safely and effectively, including seeking help and support when necessary.								
K11: The need for active participation in training, supervision and mentoring in supporting high standards of practice, and personal and professional conduct, and the importance of demonstrating this in practice.								
K12: Equality legislation and how to apply it to own practice.								
K13: The duty to make reasonable adjustments in practice.								
K14: The characteristics and consequences of barriers to inclusion, including for socially isolated groups.								
K15: That regard to equality, diversity and inclusion needs to be embedded in the application of all HCPC standards and across all areas of practice.								
K16: The emotions, behaviours and psychosocial needs of people undergoing diagnostic imaging, as well as that of their families and carers.								
K17: When disclosure of confidential information may be required.								
K18: The principles of information and data governance and be aware of the safe and effective use of health, social care and other relevant information.								
K19: The need to ensure confidentiality is maintained in all situations in which service users rely on additional communication support, such as interpreters or translators.								

K20: How concepts of confidentiality and informed consent extend to all mediums, including illustrative clinical records such as photography, video and audio recordings and digital platforms.								
K21: The characteristics and consequences of verbal and non-verbal communication and recognise how these can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.								
K22: The need to support the communication needs of service users and carers, such as through the use of an appropriate interpreter.								
K23: The need to provide service users or people acting on own behalf with the information necessary in accessible formats to enable them to make informed decisions.								
K24: The principles and practices of other health and care professionals and systems and how they interact with own profession.								
K25: The need to build and sustain professional relationships as both an autonomous practitioner and collaboratively as a member of a team.								
K26: The qualities, behaviours and benefits of leadership.								
K27: That leadership is a skill all professionals can demonstrate.								
K28: The need to engage service users and carers in planning and evaluating diagnostics, and therapeutic interventions to meet own needs and goals.								
K29: Information from other healthcare professionals and service users, in order to maximise health gain whilst minimising risks to the service user, such as from radiation dose.								
K30: The need to involve service users in service design, service delivery, education and research.								
K31: The need to engage service users and carers in planning and evaluating their diagnostic imaging and interventional procedures.								
K32: The value of reflective practice and the need to record the outcome of such reflection to support continuous improvement.								
K33: The value of multi-disciplinary reviews, case conferences and other methods of review.								
K34: The value of gathering and using data for quality assurance and improvement programmes.								
K35: The principles and regulatory requirements for quality control and quality assurance as they apply to their profession.								
K36: The quality improvement processes in place relevant to their profession.								
K37: The structure and function of the human body, together with knowledge of physical and mental health, disease, disorder and dysfunction relevant to their profession.								
K38: Recognise the roles of other professions and services in health and social care and understand how they may relate to the role of radiographer.								
K39: The structure and function of health and social care systems and services in the UK.								
K40: The role of the diagnostic radiographer and other operators in the promotion of health and health education in relation to public health, healthy living and health screening for disease detection.								
K41: The harms and benefits of population and targeted health screening.								
K42: The radiobiological principles on which the practice of diagnostic radiography is based.								

K43: The concept of risk vs benefit with regards to ionising radiation and non-ionising radiation, acknowledging this will differ depending on modality, and communicate this with service users, taking into consideration service user judgement.								
K44: The philosophy and principles involved in the practice of their profession.								
K45: The principles of ionising radiation production, interaction with matter, beam modification, administration of radionuclides and radiation protection.								
K46: The physical and scientific principles on which image formation using ionising and non-ionising radiation is based.								
K47: Radiation dosimetry and the principles of dose calculation.								
K48: The theoretical basis underpinning service user assessment prior to and during their procedure.								
K49: The capability, applications and range of equipment used in their profession.								
K50: The concepts and principles involved in the practice of their profession and how these inform and direct clinical judgement and decision making.								
K51: The pharmacology of drugs used in their profession.								
K52: The legislation, principles and methods for the safe and effective administration of drugs used in their profession.								
K53: The mechanisms for the administration of drugs, including intravenous and oral contrast agents.								
K54: The principles of the safe storage, transportation and disposal of medicinal products used in relation their profession.								
K55: The different communication needs, anatomy and disease processes and their manifestation in children.								
K56: The signs and symptoms of disease and trauma that result in referral for diagnostic imaging procedures and their image appearances.								
K57: The structure and function of the human body in health, disease and trauma, as well as common pathologies and mechanisms of disease and trauma, including the:- musculoskeletal system- soft tissue organs- regional and cross-sectional anatomy of the head, neck, limbs, thorax, pelvis and abdomen- the cardiovascular, respiratory, genitourinary, gastrointestinal and neuroendocrine systems.								
K58: A range of research methodologies relevant to own role.								
K59: The value of research to the critical evaluation of practice.								
K60: The need to maintain the safety of themselves and others, including service users, carers and colleagues.								
K61: Relevant health and safety legislation and local operational procedures and policies.								
K62: Appropriate moving and handling techniques.								
K63: The correct principles and applications of disinfectants, methods for sterilisation and decontamination, and for dealing with waste and spillages correctly.								
K64: The role of the profession in health promotion, health education and preventing ill health.								
K65: How social, economic and environmental factors, wider determinants of health, can influence a person's health and well-being.								

Skills								
S1: Identify the limits of own practice and when to seek advice or refer to another professional or service.								
S2: Recognise the need to manage own workload and resources safely and effectively, including managing the emotional burden that comes with working in a pressured environment.								
S3: Keep own skills and knowledge up to date.								
S4: Maintain high standards of personal and professional conduct.								
S5: Engage in safeguarding processes where necessary.								
S6: Promote and protect the service user's interests at all times.								
S7: Respect and uphold the rights, dignity, values, and autonomy of service users, including own role in the assessment, diagnostic, treatment and/or therapeutic process.								
S8: Recognise that relationships with service users, carers and others should be based on mutual respect and trust, and maintain high standards of care in all circumstances.								
S9: Obtain valid consent, which is voluntary and informed, has due regard to capacity, is proportionate to the circumstances and is appropriately documented.								
S10: Exercise a duty of care.								
S11: Apply legislation, policies and guidance relevant to own profession and scope of practice.								
S12: Recognise the power imbalance which comes with being a health care professional, and ensure it is not for personal gain.								
S13: Practise in accordance with current legislation governing the use of ionising and non-ionising radiation for medical and other purposes.								
S14: Identify own anxiety and stress and recognise the potential impact on own practice.								
S15: Develop and adopt clear strategies for physical and mental self-care and self-awareness, to maintain a high standard of professional effectiveness and a safe working environment.								
S16: Recognise that they are personally responsible for, and must be able to, justify their decisions and actions.								
S17: Use own skills, knowledge and experience, and the information available, to make informed decisions and/or take action where necessary.								
S18: Make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasoning appropriately.								
S19: Make and receive appropriate referrals, where necessary.								
S20: Exercise personal initiative.								
S21: Demonstrate a logical and systematic approach to problem solving.								
S22: Use research, reasoning and problem-solving skills when determining appropriate actions.								
S23: Respond appropriately to the needs of all different groups and individuals in practice, recognising this can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences.								

S24: Recognise the potential impact of own values, beliefs and personal biases, which may be unconscious, on practice and take personal action to ensure all service users and carers are treated appropriately with respect and dignity.								
S25: Make and support reasonable adjustments in own and others' practice.								
S26: Actively challenge barriers to inclusion, supporting the implementation of change wherever possible.								
S27: Adhere to the professional duty of confidentiality.								
S28: Respond in a timely manner to situations where it is necessary to share information to safeguard service users, carers and/or the wider public and recognise situations where it is necessary to share information to safeguard service users, carers and/or the wider public.								
S29: Use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others								
S30: Communicate in English to the required standard for the profession								
S31: Work with service users and / or own carers to facilitate the service user's preferred role in decision making, and provide service users and carers with the information they may need where appropriate								
S32: Modify own means of communication to address the individual communication needs and preferences of service users and carers, and remove any barriers to communication where possible								
S33: Use information, communication and digital technologies appropriate to own practice								
S34: Formulate and provide information and support for service users about their treatment and/or imaging process and procedures, with regular reappraisal of their information needs as appropriate								
S35: Advise other healthcare professionals about the relevance and application of imaging modalities to the service user's needs								
S36: Provide appropriate information and support for service users throughout their diagnostic imaging examinations								
S37: Keep full, clear and accurate records in accordance with applicable legislation, protocols and guidelines								
S38: Manage records and all other information in accordance with applicable legislation, protocols and guidelines								
S39: Use digital record keeping tools, where required								
S40: Work in partnership with service users, carers, colleagues and others								
S41: Contribute effectively to work undertaken as part of a multi-disciplinary team								
S42: Identify anxiety and stress in service users, carers and colleagues, adapting own practice and providing support where appropriate								
S43: Identify own leadership qualities, behaviours and approaches, taking into account the importance of equality, diversity and inclusion								
S44: Demonstrate leadership behaviours appropriate to own practice								
S45: Act as a role model for others								
S46: Promote and engage in the learning of others								

S47: Demonstrate awareness of the need to empower service users to participate in the decision-making processes related to their profession								
S48: Demonstrate awareness of the need to encourage, support and mentor staff at all practitioner levels								
S49: Demonstrate awareness of roles and responsibilities where work is delegated and how this applies in practice								
S50: Interpret and act upon information from other healthcare professionals and service users, in order to maximise health gain whilst minimising risks to the service user (such as from radiation dose)								
S51: Engage in evidence-based practice								
S52: Gather and use feedback and information, including qualitative and quantitative data, to evaluate the responses of service users to own care								
S53: Monitor and systematically evaluate the quality of practice, and maintain an effective quality management and quality assurance process working towards continual improvement								
S54: Participate in quality management, including quality control, quality assurance, clinical governance and the use of appropriate outcome measures								
S55: Evaluate care plans or intervention plans using recognised and appropriate outcome measures, in conjunction with the service user where possible, and revise the plans as necessary								
S56: Demonstrate awareness of the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process								
S57: Demonstrate awareness of the philosophy and the development of the profession of diagnostic radiography to inform understanding of current practice								
S58: Apply the principles of ionising radiation production, interaction with matter, beam modification, administration of radionuclides and radiation protection								
S59: Distinguish between normal and abnormal appearances on images								
S60: Recognise and respond to adverse or abnormal reactions to medications used in relation to their profession								
S61: Demonstrate awareness of the current developments and trends in the science and practice of diagnostic radiography								
S62: Demonstrate awareness of the principles of Artificial Intelligence (AI) and deep learning technology, and its application to practice								
S63: Change own practice as needed to take account of new developments, technologies and changing contexts								
S64: Gather appropriate information								
S65: Analyse and critically evaluate the information collected								
S66: Select and use appropriate assessment techniques and equipment								
S67: Undertake and record a thorough, sensitive, and detailed assessment								
S68: Undertake or arrange investigations as appropriate								
S69: Conduct appropriate assessment or monitoring procedures, treatment, therapy or other actions safely and effectively								
S70: Critically evaluate research and other evidence to inform own practice								

S71: Engage service users in research as appropriate								
S72: Formulate specific and appropriate management plans including the setting of timescales								
S73: Assess, monitor and care for the service user across the pathway of care relevant to their profession								
S74: Undertake and record a thorough, sensitive and detailed clinical assessment, selecting and using appropriate techniques and equipment								
S75: Use physical, graphical, verbal and electronic methods to collect and analyse information from a range of relevant sources including service user's clinical history, diagnostic images and reports, pathological tests and results, dose recording and treatment verification systems								
S76: Interrogate and process data and information gathered accurately in order to conduct the procedures most appropriate to the service user's needs								
S77: Appraise image information for clinical manifestations and technical accuracy, and take further action as required								
S78: Manage complex and unpredictable situations including the ability to adapt planned procedures								
S79: Operate diagnostic imaging equipment safely and accurately								
S80: Check that equipment is functioning accurately and within the specifications, and to take appropriate action in the case of faulty functioning and operation								
S81: Select and explain the rationale for radiographic techniques and immobilisation procedures appropriate to the service user's physical and disease management requirements								
S82: Position and immobilise service users correctly for safe and accurate procedures								
S83: Authorise and plan appropriate diagnostic imaging examinations								
S84: Calculate radiation doses and exposures and record and understand the significance of radiation dose								
S85: Perform a broad range of standard imaging techniques, including examinations requiring contrast agents for relevant modalities across a variety of diagnostic or screening care pathways								
S86: Assist with a range of more complex diagnostic imaging techniques and interventional procedures providing radiographic support to the service user and other members of the multidisciplinary team								
S87: Provide appropriate care for the range of service users and their carers before, during and after imaging examinations, minimally invasive interventional procedures and contrast agent examinations								
S88: Perform a range of imaging examinations where the service user's individual characteristics require examinations to be carried out using nonstandard techniques								
S89: Perform a range of techniques using mobile imaging equipment outside of a dedicated imaging room								
S90: Manage and assist with imaging techniques performed on anaesthetised or unconscious individuals								
S91: Adjust ionising radiation exposures and image recording parameters to achieve required image quality at optimal dose for children and adults								
S92: Perform a range of imaging techniques and interventions on children								

S93: Use to best effect the processing and related technology supporting imaging systems								
S94: Manage and assist with fluoroscopic diagnostic and interventional procedures, including those that are complex and involve the use of contrast agents								
S95: Perform a broad range of computed tomographic (CT) examinations, including standard head CT examinations, and assist with CT examinations of the spine, chest and abdomen in acute trauma, and to contribute effectively to other CT studies								
S96: Perform standard magnetic resonance imaging procedures								
S97: Assist with ultrasound imaging procedures								
S98: Assist with imaging procedures involving the use of radionuclides including PET tracers and particle emitters								
S99: Critically analyse clinical images for technical quality and suggest improvement if required								
S100: Distinguish disease trauma and urgent and unexpected findings as they manifest on diagnostic images and take direct and timely action to assist the referrer								
S101: Demonstrate awareness of relevant health and safety legislation and comply with all local operational procedures and policies								
S102: Work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation								
S103: Select appropriate personal protective equipment and use it correctly								
S104: Establish safe environments for practice, which appropriately manages risk								
S105: Apply appropriate moving and handling techniques								
S106: Ensure the physical safety of all individuals in the imaging/ therapeutic work environment, especially with regard to radiation safety and high-strength magnetic fields								
S107: Use basic life support techniques and deal with clinical emergencies								
S108: Empower and enable individuals (including service users and colleagues) to play a part in managing own health								
S109: Engage in occupational health, including being aware of immunisation requirements								
Behaviours								
B1: Demonstrate a calm demeanour with empathy, compassion and underpinning emotional resilience to manage day-to-day pressures in unpredictable, emergency and distressing situations, e.g. individuals in cardiac arrest, suffering life changing injuries and/or disease diagnosis.								
B2: Confident, flexible and adaptable within own scope of practice.								
B3: Demonstrate emotional intelligence.								
B4: Act with professionalism, honesty, integrity and respect in all interactions. Maintain good character as outlined in their professional Code of Conduct and not bring their profession or organisation into disrepute.								
B5: Reflect on own impact on others, take responsibility and be accountable for own actions. Sensitively challenge others and raise issues when appropriate.								
B6: Actively reflect on own practice and accept and respond to constructive criticism. Be proactive in implementing improvements in order to improve service delivery and patient care.								

B7: Be aware of and take responsibility for their own fitness in context of physical and/or mental health issues which may affect performance. Seek help and/or guidance as appropriate. Inform Health and Care Professions Council and employer of any change of circumstance that may affect the right to practise.

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Appendix 5

Academic Programme Delivery Structure: First Top up cohort only (28.03.2022 start)						
The standard delivery arrangements are shown above, this map is specific to the very first cohort of top up apprentices and has been developed to align to the actual start date of the UDip which is 08.11.2021						
Module Code	Module Title	Number of Delivery Hours	Delivery Pattern	Method of Delivery	Method(s) of Assessment	Approximate Assessment Deadline
			Bespoke to March 2022 start only	Block Release / Day Release / Distance Learning / Work-based Learning		
HMSD6018	Focussed Radiological Practice 1 (Theory)	200	March - July	Block Release / Day Release / Distance Learning	OSCE	Week 37
HMSD6024	Preparation for Professional Practice - The radiographer in the wider context of healthcare	200	March - September	Block Release / Day Release / Distance Learning	Poster Assignment	Week 47
HMSD6011	Applying Research to Enhance Professional Practice	200	July - December	Block Release / Day Release / Distance Learning	Research Project	Week 61
HMSD6020	Image Evaluation (Core Radiography Module)	200	March - February	Block Release / Day Release / Distance Learning	Presentation & OSCE	Week 68

HMSD6019	Focussed Radiological Practice 2 (Work Based)	201	April - March	Block Release / Day Release / Distance Learning / Work-based Learning	Portfolio and Written Assignment.	Week 70
HMSD6022	Applied Clinical Radiography	412	April - March	Block Release / Day Release / Distance Learning / Work-based Learning	Clinical Portfolio	Week 70

Apprentices with 120 credits having completed the entire programme and met all the clinical competence requirements (as demonstrated by completion of the Clinical Portfolio) will be eligible for the target award of BSc (Hons) Diagnostic Radiography