

## Therapeutic Radiography and Oncology

BSc (Hons)

#### **COURSE DETAILS**

• A level requirements: **BBB** 

• UCAS code: B822

• Study mode: Full-time

• Length: 3 years

#### **KEY DATES**

Apply by: <u>29 January 2025</u>

Starts: 22 September 2025

### **Course overview**

Our Therapeutic Radiography and Oncology programme allows students the traditional academic and clinical learning opportunities to develop into competent and resilient radiographers, equipped with the necessary skills to flourish in a wide array of professional environments.

#### INTRODUCTION

With an integrated case based approach enabling you to study all aspects of the radiotherapy patient pathway, through connecting your academic lectures, clinical placement experience and clinical simulation.

This programme aims to produce competent, reflective, research active, caring, safe, proactive and progressive Therapeutic Radiographers, through an innovative and authentic teaching and assessment strategy encompassing real world radiotherapy research and radiotherapy clinical simulation.

#### Programme in detail

The programme has been designed using a case based approach, this means that a cancer patient case will bring to life the radiotherapy patient journey and provide a framework to connect content delivered. The programme content is organised into four key themes:

- Radiotherapy physics, technology and radiobiology
- · Radiation oncology and patient care
- Preparation for practice and professionalism
- Research methods in radiotherapy.

You will study a range of profession specific modules, engage in interprofessional learning through activities with fellow students in the School of Allied Health Professions and Nursing and attend clinical placement during academic terms. The clinical placements increase in length from year one through to year three. All placements are arranged in a variety of Radiotherapy Cancer Centres and there is an opportunity to spend an elective period in a radiotherapy department of your choice.

#### WHAT YOU'LL LEARN

- Research gathering techniques
- Critical thinking skills
- Communication skills
- Self-directed learning techniques
- Patient care
- Physics, radiobiology and technology skills relating to Radiotherapy

### **Course content**

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

#### **YEAR ONE**

Year one of the programme is concerned primarily with the acquisition of knowledge, with some integration and application of this knowledge to clinical practice. It provides a comprehensive introduction to the fundamental concepts and principles that underpin therapeutic radiography and its role in the management of cancer.

#### **COMPULSORY MODULES**

#### FOUNDATIONS OF RADIOTHERAPY, ONCOLOGY AND PATIENT CARE I (RADTI18)

Credits: 30 / Semester: semester 1

Using a blended approach, this module will enable students to develop the skills-base needed for safe and effective radiotherapy practice. It will also develop their basic operating skills of a linear accelerator for clinical practice. In addition the students will be introduced to the fundamentals of oncology. The student will be taught and assessed in both University and placement sites in the radonc modules.

#### FOUNDATIONS OF RADIATION ONCOLOGY AND PATIENT CARE 2 (BREAST) (RADT121)

Credits: 30 / Semester: semester 2

To provide learners with knowledge and understanding of breast cancer management and holistic care.

# RADIOTHERAPY PRACTICE I (RADIOTHERAPY CLINICAL LEARNING AND FOUNDATIONS OF PROFESSIONALISM (RADT123)

Credits: 15 / Semester: whole session

The module aim is to provide learners with a range of opportunities to develop foundation level clinical skills and professional knowledge relevant to the therapeutic radiographer.

#### RADIOTHERAPY PHYSICS, TECHNOLOGY AND RADIOBIOLOGY I (RADT114)

Credits: 15 / Semester: semester 1

This module aims to equip learners with the necessary understanding to enable them to use radiation safely. It provides learners with understanding of fundamental terminology, radiobiology, physical concepts and technology relevant to radiotherapy. The module also aims to prepare learners for more advanced application of these physical principles in subsequent radiation physics, technology and radiobiology modules.

#### **RADIOTHERAPY PHYSICS, TECHNOLOGY AND RADIOBIOLOGY 2 (RADT151)**

Credits: 15 / Semester: semester 2

This module develops further the physics concepts introduced in the first semester physics module (RADT114) with specific focus on the clinical application of these concepts. The module will cover physical principles, key components, design, safe use of and clinical application of radiotherapy equipment for localisation, planning and treatment delivery of both radical and palliative pathways. Module learning outcomes are assessed using a written unseen exam.

#### **RESEARCH METHODS IN RADIOTHERAPY (RADT134)**

Credits: 15 / Semester: semester 2

This module introduces learners to the philosophy, principles and methods of radiotherapy research. Learners will gain understanding of the importance of research in modern radiotherapy within the context of evidence-based practice.

Any optional modules listed above are illustrative only and may vary from year to year. Modules may be subject to minimum student numbers being achieved and staff availability. This means that the availability of specific optional modules cannot be guaranteed.

#### **YEAR TWO**

Year two of the programme expands the previously acquired knowledge with an increasing emphasis on the understanding and application of principles to clinical practice. You are encouraged to develop the skills of interpretation and evaluation and to relate them to all areas of the programme.

#### **COMPULSORY MODULES**

#### **APPLIED RESEARCH METHODS IN RADIOTHERAPY (RADT221)**

Credits: 15 / Semester: semester 2

This module aims to support learners as they formulate and articulate a research question relevant to radiotherapy practice and plan a research project to answer the question.

# RADIOTHERAPY PRACTICE 2 (RADIOTHERAPY CLINICAL LEARNING AND DEVELOPING PROFESSIONALISM) (RADT234)

Credits: 30 / Semester: whole session

The module aim is to provide learners with a range of opportunities to develop academic, clinical and professional knowledge and skills relevant to the therapeutic radiographer.

#### PRINCIPLES OF RADIATION ONCOLOGY AND PATIENT CARE 3 (PELVIS) (RADT210)

Credits: 30 / Semester: semester 1

To provide learners with knowledge, understanding and skills in the field of pelvic cancer management and the associated holistic care.

# PRINCIPLES OF RADIATION ONCOLOGY AND PATIENT CARE 4 (HEAD, NECK AND THORAX) (RADT220)

Credits: 30 / Semester: semester 2

To provide students with knowledge and understanding of the diagnosis, treatment and care pathway for patients diagnosed with cancers of the head, neck and thorax.

#### RADIOTHERAPY PHYSICS, TECHNOLOGY AND RADIOBIOLOGY 3 (RADT214)

Credits: 15 / Semester: semester 1

This module aims to equip students with the necessary physics and radiobiology knowledge and understanding of how radiation dose to the patient is standardised and measured, and the biological effects of treatment. The module also aims to prepare students for more advanced radiotherapy practices, such as particle beam therapy

Any optional modules listed above are illustrative only and may vary from year to year. Modules may be subject to minimum student numbers being achieved and staff availability. This means that the availability of specific optional modules cannot be guaranteed.

#### YEAR THREE

Year three of the programme enables you to develop critical analysis of the impact of innovation and technological advances on practice. The greater part of this year is spent in the clinical environment allowing you to consolidate and develop skills enabling you to become clinically competent and safe to practice.

#### **COMPULSORY MODULES**

#### **ADVANCED RADIATION ONCOLOGY AND PATIENT CARE 5 (RADT317)**

Credits: 30 / Semester: semester 1

To provide learners with knowledge and understanding of the management and care involved in treating patients with rare, complex, or challenging cancers including paediatrics and young adults.

# RADTIOTHERAPY PRACTICE 3 (RADIOTHERAPY CLINICAL LEARNING AND ADVANCING PROFESSIONALISM) (RADT334)

Credits: 30 / Semester: whole session

The module aim is to provide learners with a range of opportunities to develop the clinical skills and professional knowledge required to practice as a Therapeutic Radiographer.

#### RADIOTHERAPY PHYSICS, TECHNOLOGY AND RADIOBIOLOGY 4 (RADT318)

Credits: 30 / Semester: semester 1

This module aims to enable students to appraise new radiotherapy technological systems and processes and justify clinical decision making in treatment planning and image-guided radiotherapy.

#### **RADIOTHERAPY RESEARCH DISSERTATION (RADT312)**

Credits: 30 / Semester: whole session

To enable learners to study, in depth, a chosen area of radiotherapy through the application and development of research skills, academic writing and critical appraisal of literaure.

Any optional modules listed above are illustrative only and may vary from year to year. Modules may be subject to minimum student numbers being achieved and staff availability. This means that the availability of specific optional modules cannot be guaranteed.

#### **HOW YOU'LL LEARN**

Learning is promoted through a wide variety of activities that enable students to become autonomous and continuous learners. Interactive lectures, practical and clinical skills group work, simulation, directed study, role play, problem based learning, small group work, student-led seminars, collaborative project work and interactive tutorials are key learning strategies for this programme.

Practical work using our imaging suite digital equipment, 3D virtual reality radiotherapy facility, Clinical Skills Resource Room and the Human Anatomy Resource Centre complement teaching activities.

Face-to-face interactions between all students will occur at shared lectures, tutorials and group work and online interaction will be encouraged and facilitated as are interprofessional education and learning opportunities across all healthcare professions programmes.

#### **HOW YOU'RE ASSESSED**

Using a mixture of coursework and examination, a range of assessment methods can be seen across this programme. These include seen and unseen written examinations, essay assignments with specific word lengths, multiple choice questions, case study presentations and interactive practical examinations.

Assessment of the work-based learning element of all programmes will be an important aspect of your studies. You will be required to communicate your views orally and in written form; analyse, implement and evaluate your practice; and to extend the research and evidence base of your chosen profession.

The various methods of assessments have been chosen to provide a balance that will permit the undergraduates to demonstrate their intellectual abilities in all areas to the full.

#### LIVERPOOL HALLMARKS

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

## Careers and employability

With an ageing population and improved cancer detection techniques, there is a high demand for suitably qualified healthcare professionals to support cancer patients.

As a graduate of the School of Allied Health Professions and Nursing you'll be eligible to apply for registration with the Health and Care Professions Council (HCPC) and you will become a member of the Society of Radiographers.

You can look to explore careers in:

- National Health Service
- Social Services
- Private sector.

99% OF SCHOOL OF ALLIED HEALTH PROFESSIONS AND NURSING STUDENTS FIND THEIR MAIN ACTIVITY AFTER GRADUATION MEANINGFUL.

Graduate Outcomes, 2018-19.

## Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

#### **TUITION FEES**

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)	
Full-time place, per year	£9,535
Year abroad fee	£1,385

International fees	
Full-time place, per year	£29,100
Year abroad fee	£14,550

The UK full-time tuition fee, international course fee and fee for the year abroad for international students shown are correct for 2025/26 entry. We are currently awaiting confirmation of whether the year abroad fee for UK students will change, so the fee shown is for 2024/25. Please note that the year abroad fee also applies to the year in China.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. <u>Learn more about fees and funding</u>.

#### **ADDITIONAL COSTS**

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This may include a laptop, books, or stationery. Additional costs for this course could include professional association fees and travel to placements.

Find out more about the <u>additional study costs</u> that may apply to this course.

We offer a range of scholarships and bursaries that could help pay your tuition and living expenses.

We've set the country or region your qualifications are from as United Kingdom. <u>Change it</u> here

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#### **UNDERGRADUATE GLOBAL ADVANCEMENT SCHOLARSHIP**

• International students

If you're a high-achieving international student starting an undergraduate degree with us from September 2024, you could be eligible to receive a fee discount of up to £5,000. You'll need to achieve grades equivalent to AAA in A levels. Most of our undergraduate degrees are eligible, with the exception of clinical programmes in Medicine and Dental Surgery.

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#### THE LIVERPOOL BURSARY

• Home students

If you're a UK student joining an undergraduate degree and have a household income below £35,000, you could be eligible for a Liverpool Bursary worth up to £2,000 for each year of undergraduate study.

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#### **CARE LEAVERS' OPPORTUNITY BURSARY**

• Home students

If you've spent 13 or more weeks in Local Authority care since age 14, you could be eligible for a bursary of £3,000 per year of study. You'll need to be a UK student joining an eligible undergraduate degree and be aged 28 or above on 1 September in the year you start.

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#### **COWRIE FOUNDATION SCHOLARSHIP**

Home students

Are you a UK student with a Black African or Caribbean heritage and a household income of £25,000 or less? You could be eligible to apply for a Cowrie Foundation Scholarship worth up to £8,000 for each year of undergraduate study.

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#### **ESTRANGED STUDENTS BURSARY**

Home students

If you're a UK student identified as estranged by Student Finance England (or the equivalent UK funding body), you could be eligible for a bursary of £1,000 for each year of undergraduate study.

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#### **GENESYS LIFE SCIENCES SCHOLARSHIP**

Home students

<u>Joining a School of Biosciences degree and have a household income of less than £25,000?</u> <u>If you're a UK student, you could apply to receive £4,500 per year for three years of your undergraduate course.</u>

GRADUATE ASSOCIATION HONG KONG & TUNG UNDERGRADUATE SCHOLARSHIPS

- International students
- Hong Kong

If you're an undergraduate student from Hong Kong who can demonstrate academic excellence, you may be eligible to apply for a scholarship worth £10,000 in partnership with the Tung Foundation.

#### KAPLAN DIGITAL PATHWAYS EXCELLENCE SCHOLARSHIP

International students

Completed a Kaplan Digital Pathways Foundation Certificate? We're offering a £5,000 fee discount off the first year of undergraduate study for a maximum of two high achieving students joining one of our non-clinical degrees from an online Kaplan Foundation Certificate.

#### **NOLAN SCHOLARSHIPS**

Home students

<u>Do you live in the Liverpool City Region with a household income of £25,000 or less? Did neither of your parents attend University? You could be eligible to apply for a Nolan Scholarship worth £5,000 per year for three years of undergraduate study.</u>

#### **RIGBY ENTERPRISE AWARD**

• Home students

Are you a UK student with a household income of £25,000 or less? If you've participated in an eligible outreach programme, you could be eligible to apply for a Rigby Enterprise Award worth £5,000 per year for three years of your undergraduate degree.

#### **ROLABOTIC SCHOLARSHIP**

Home students

Are you a UK student with a household income of £25,000 or less? Did neither of your parents attend University? You could be eligible to apply for a ROLABOTIC Scholarship worth £4,500 for each year of your undergraduate degree.

#### SPORT LIVERPOOL PERFORMANCE PROGRAMME

Home and international students

<u>Apply to receive tailored training support to enhance your sporting performance. Our athlete support package includes a range of benefits, from bespoke strength and conditioning training to physiotherapy sessions and one-to-one nutritional advice.</u>

**TECHNETIX BROADHURST ENGINEERING SCHOLARSHIP** 

Home students

<u>Joining a degree in the School of Electrical Engineering, Electronics and Computer Science? If you're a UK student with household income below £25,000, you could be eligible to apply for £5,000 a year for three years of study. Two awards will be available per academic year.</u>

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UNIVERSITY OF LIVERPOOL INTERNATIONAL COLLEGE EXCELLENCE SCHOLARSHIP

International students

Completed a Foundation Certificate at University of Liverpool International College (UoLIC)? We're offering a £5,000 fee discount off the first year of undergraduate study to some of the highest achieving students joining one of our non-clinical degrees from UoLIC.

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UNIVERSITY OF LIVERPOOL INTERNATIONAL COLLEGE FIRST CLASS SCHOLARSHIP

International students

We're offering a £1,000 fee discount for years 2 and 3 of undergraduate study to eligible students progressing from University of Liverpool International College. You'll need to be studying a non-clinical subject and get an average of 70% or above in year 1 of your degree.

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# UNIVERSITY OF LIVERPOOL INTERNATIONAL COLLEGE IMPACT PROGRESSION SCHOLARSHIPS

• International students

If you're a University of Liverpool International College student awarded a Kaplan Impact Scholarship, we'll also consider you for an Impact Progression Scholarship. If selected, you'll receive a £3,000 fee discount off the first year of your undergraduate degree.

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#### **VALERIE CARR AWARD**

• Home students

<u>Joining our Therapeutic Radiography and Oncology BSc degree? If you've been a support worker for cancer services, or worked or been in social care and volunteered for a cancer charity, you could be eligible to apply for full payment of your UK tuition fees.</u>

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### **YOUNG ADULT CARER'S (YAC) BURSARY**

• Home students

If you're a young adult and a registered carer in the UK, you might be eligible for a £1,000 bursary for each year of study. You'll need to be aged 18-25 on 1 September in the year you start your undergraduate degree.

## **Entry requirements**

The qualifications and exam results you'll need to apply for this course.

NHS Values will be assessed in all areas of an application including UCAS Personal Statement and at interview. For more details, please download our explanation of <u>Value Based</u>

<u>Recruitment</u>.

Your qualification	Requirements  About our typical entry requirements
	A2 Level at BBB from three A2 Levels with at least one Science subject.
	Applied Science will only be considered when accompanied by another Science A-Level, not Applied.
	Higher grades may be required from resit students.
A levels	You may automatically qualify for reduced entry requirements through our <u>contextual offers scheme</u> .
	If you don't meet the entry requirements, you may be able to complete a foundation year which would allow you to progress to this course.
	Available foundation years:
	Foundation to Human and Animal Health Professions     (Therapeutic Radiography & Oncology) (Year 0) BSc (Hons)
GCSE	5 GCSEs at Grades A* - C which must include English Language, Mathematics and Science. Where numerical grading is introduced these subject me be offered at a minimum of Grade 5. English Language, Biology/Human Biology, Mathematics or Physics MUST be offered at Grade C. (Science Dual Award is acceptable). Applied GCSEs will not be considered.
Subject requirements	For applicants from England: Where a science has been taken at A level (Chemistry, Biology or Physics), a pass in the Science practical of each subject will be required.

Your qualification	Requirements About our typical entry requirements
	BTEC Nationals are considered in addition to 5 GCSEs grades  A* – C, which must include English Language, Maths and a  Science. Where numerical grading has been introduced,  English Language, Maths and a Science will be required at  Grade 5 or above. Please note that Science dual award is  acceptable but Core Science and Applied GCSEs will not be  considered.
	BTEC National Extended Certificate
BTEC Level 3 National Extended Diploma	We will accept one subject at a minimum of Distinction. This must be accompanied by two A2 subjects at Grade B, of which one subject should include Biology/Human Biology, Physics, Maths or Chemistry. Three separate subjects must be taken between the two qualifications.
	BTEC National Diploma
	We will accept Health and Social Care or Applied Science/ Medical Science graded at DD. This must be accompanied by one A2 subject at grade B. In total, between the two qualifications, two separate subjects must be taken.
	BTEC National Extended Diploma
	We will accept Health and Social Care or Applied Science/Medical Science at DDD.
International Baccalaureate	Applicants should normally present with 30 points including 3 Higher Level subjects at minimum Grade 5.
	Higher Level subjects must include Mathematics and Biology or Physics.
European Baccalaureate	74% overall with a minimum mark of 8 in Biology and no other subject less than a 6.
Irish Leaving Certificate	2 subjects at H2 or above to include a science subject (Maths, Physics, Biology, Chemistry) and 4 subjects at H3 or above to include a further science subject and/or Maths.
Scottish Higher/Advanced	Scottish Certificate of Education

Your qualification	Requirements  About our typical entry requirements
Higher	Advanced Higher/Higher Level  Accepted in addition to five national 5's graded upper A -C, which must include English Language, Mathematics and a Science subject. A minimum of five B's from any combination of Advanced Higher/Higher Level. Consideration will only be given to Advanced Highers in different subjects to those of Highers level subjects offered.
Welsh Baccalaureate Advanced	Accepted
Cambridge Pre-U Diploma	Will be considered
Graduate application	We welcome applications from graduates holding a minimum of a 2:2 classification. If your degree is not in a Science related subject please contact the admission unit for further information. If it is 5 years or more since you last studied you may be advised to study an A level in Biology / Human Biology. The degree qualification should be supported by a strong academic background, with a minimum of 5 GCSEs A* – C to include English Language, Mathematics and a Science subject.
Access	Essential: 45 credits at Level 3 (all should be new learning, ie. GCSE awards cannot be APL'd against the Diploma). 30 credits passed at distinction (which must include a minimum of 15 credits in modules relating to Biology, Maths and Physics). The remaining 15 credits must be passed at merit or higher. 2 GCSEs in English Language and Maths at grade 4/C. We will also accept Functional Skills in Maths at a pass.
Academic Reference	An academic reference must be included within the UCAS application. If the applicant is a graduate and has been working since graduating (within three years), an employer reference is acceptable.

Your qualification	Requirements  About our typical entry requirements
Profession-specific knowledge and skills required	The UCAS Personal Statement, must demonstrate an understanding of the Therapeutic Radiography & Oncology role. Applicants should also consider visiting a Diagnostic Radiography Department to give them an awareness of the differences between the Diagnostic and Therapeutic Radiography professions. Applicants should have an appreciation of the demands of the programme and a realistic understanding of what is required when on clinical placement.  Having experience of working with the general public, children, the elderly or people with disabilities, in a paid or voluntary capacity will strengthen an application.
Declaration of criminal background	You will understand that as an allied health professions and nursing student, and when you qualify, you will be asked to treat children and other vulnerable people. We therefore need information about any criminal offences of which you may have been convicted, or with which you have been charged. The information you provide may later be checked with the police.  If selected for interview you will be provided with the appropriate form to complete.
Health screening	The University and the School of Allied Health Professions and Nursing has an obligation to undertake health screening on all prospective healthcare students. Any offer of a place to study is conditional on completion of a health questionnaire and a satisfactory assessment of fitness to train from the University's Occupational Health Service. This will include some obligatory immunisations and blood tests.
International qualifications	The IELTS requirement is an overall score of 7.0 with no component less than 6.5.  Please note – whilst we do accept <b>IELTS</b> qualifications, we do not accept IELTS qualifications that have been sat and

Your qualification	Requirements  About our typical entry requirements
	gained <b>online</b> . We only accept qualifications that have been sat and gained <b>in person</b> .

### **ALTERNATIVE ENTRY REQUIREMENTS**

- If your qualification isn't listed here, or you're taking a combination of qualifications, <u>contact us</u> for advice
- <u>Applications from mature students</u> are welcome.

### THE ORIGINAL

**REDBRICK** 

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