# Course Specification

| Course Summary Information | | |
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| 1 | **Course Title** | BSc (Hons) Therapeutic Radiography |
| 2 | **Course Code** | US1446 / US1447 |
| 3 | **Awarding Institution** | Birmingham City University |
| 4 | **Teaching Institution(s)** (if different from point 3) | |
| 5 | **Professional Statutory or Regulatory Body (PSRB) accreditation** (if applicable) | Health and Care Professions Council (HCPC)<br>College of Radiographers (CoR) |

| 6 | **Course Description** |
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| | Therapeutic Radiography is a rewarding career that is challenging and has a combination of science, technology and patient care. Our radiotherapy course will teach you to work with patients of all ages, to help relieve and/or cure the symptoms of their cancer. As the only training centre for therapeutic radiography in the West Midlands region, our BSc (Hons) Therapeutic Radiography course will prepare you to be a fully qualified Therapeutic Radiographer once you have graduated. On qualification, you will be entitled to apply for registration with the regulator, the Health and Care Professions Council (the HCPC), to gain registered practitioner status and be able to practice in the UK either within the NHS or the private sector.<br><br>As a Therapeutic Radiographer, you will be responsible for preparing and administering radiation to cancer patients, operating highly technical radiation equipment, imaging patients with the latest technology, monitoring patients' progress and giving advice as they progress through radiotherapy treatment.<br><br>You will develop specialist skills by spending time on clinical placements within hospital cancer centres, providing you with plenty of experience to develop professionally and gain valuable employability skills. Your academic studies will take place at our City South Campus, which features a radiotherapy treatment couch with laser alignment system, a Virtual Environment for Radiotherapy Training (VERT) and advanced treatment planning facilities. With use of these dedicated facilities, you will confidently develop essential skills within a safe educational environment.<br><br>You will learn the science behind radiotherapy practice, as well as human anatomy and physiology, radiation science and radiobiology. You will also study the social and psychological aspects of cancer care and the needs of patients to ensure that you leave with all the skills needed to be a professional and expert Therapeutic Radiographer. This course prepares you for moving into the world of work as a practitioner radiographer, and ensures you are equipped with the skills and knowledge. Clinical expertise, leadership, and mentorship theory provide a foundation that will enable you to develop your career.<br><br>As you advance your knowledge of radiotherapy practice and the science of oncology, you will develop analytical skills and will explore the research evidence that forms the basis of current and emergent practices. You will apply research strategies to health and care practice and merge your clinical skills and knowledge. |

| 7 | Course Awards | | |
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| **7a** | **Name of Final Award** | **Level** | **Credits Awarded** |
| | Bachelor of Science with Honours Therapeutic Radiography | 6 | 360 |
| | Bachelor of Science with Honours in Cancer Studies<br>(Where clinical components are not included and does not confer eligibility to apply for registration as a therapeutic radiographer) | 6 | 360 |
| **7b** | **Exit Awards and Credits Awarded** | | |
| | Certificate of Higher Education Studies in Health Care | 4 | 120 |
| | Diploma of Higher Education Studies in Health Care | 5 | 240 |
| | Bachelor of Science Studies in Health Care | 6 | 300 |

| 8 | Variations from the University Academic Regulations |
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| | This course has approved variations to the University's Academic Regulations. These can be accessed via the student contract page: https://www.bcu.ac.uk/student-info/student-contract. |

| 9 | Delivery Patterns | | | |
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| **Mode(s) of Study** | **Location(s) of Study** | **Duration of Study** | **Code(s)** |
| Full Time | City South | 3 years | US1446 |
| Part Time | City South | 6 years | US1447 |

| 10 | Entry Requirements |
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| The admission requirements for this course are stated on the course page of the BCU website at https://www.bcu.ac.uk/ or may be found by searching for the course entry profile located on the UCAS website. | |

| 11 | Course Aims |
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| | The BSc (Hons) Therapeutic Radiography course will develop competent autonomous, compassionate, patient focussed and reflective therapeutic radiographers capable of problem solving and critical thinking with an adaptive approach to their focus and highly developed interpersonal skills capable of promoting high quality care tailored to the needs of service users and their carers.<br><br>The course will: |

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| | 1) Provide students with a supportive and engaging environment in which they can develop academic and professionally with the focus on providing exemplary patient focussed care which is highly skilled, evidence based and compassionate.<br><br>2) Develop the clinical and research skills and professional attributes of a student's professional practice enabling them to demonstrate a level of competence as demanded by both the Health and Care Professions Council and the College of Radiographers.<br><br>3) Provide an environment and opportunities for students to develop their collaborative skills and effectiveness for working together with and learning from, a range of healthcare workers, fellow professionals, patients, their carers and other stakeholders within both the clinical and academic setting.<br><br>4) Enhance employability of our students, developing them into highly respected, caring, competent and autonomous graduates who are eligible for registration with the Health and Care Professions Council and who through their professional expertise are able to influence future healthcare provision.<br><br>5) Ensure that therapeutic radiography graduates are responsive to the needs of diverse cultures and have the necessary knowledge, understanding and skills to enable them to practice and contribute effectively to a global workforce.<br><br>6) Equip students so that they join the radiography workforce as competent and effective practitioners and can deploy their practice skills as the basis their future career through opportunities for specialism and advance practice development to the benefit of themselves, cancer services and patients in their care. |

| **12** | **Course Learning Outcomes** |
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| | **Knowledge and Understanding** |
| 1 | Apply the knowledge, skills and professional competence of a qualified practicing therapeutic radiographer |
| 2 | Examine and evaluate the application of radiation sciences, radiotherapy technologies and radiobiology |
| 3 | Apply knowledge of radiation to maintain safety of self, service users and others within the radiotherapy environment |
| 4 | Examine extensive theoretical knowledge of cancer and its management. |
| 5 | Critically appraise and be able to explain the rationale for use of different radiotherapy modalities and techniques including how radiotherapy technique may be adapted to meet the specialised needs of the patient |
| 6 | Identify the structure of career pathways available to therapeutic radiographers and how practitioner level roles articulate with opportunities for specialism and advanced practice |
| | **Skills and other attributes** |
| 7 | Foster a highly skilled, patient focussed and compassionate approach with highly effective interpersonal, communication skills, teamwork and leadership competence to establish a career within therapeutic radiography practice |
| 8 | Develop reflective skills and motivation to foster a pro-active lifelong approach and commitment to learning, support and advocate for patients and others with diverse needs and from diverse cultures enabling you to provide consistent service user focussed care, and adapt and support the implementation of changes within an ever-changing healthcare environment |

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| 9 | Develop effective collaborative working within and between a variety of healthcare teams |
| 10 | Develop problem solving and critical thinking skills |
| 11 | Incorporate and embrace leadership strategies and to promote collaboration in both traditional and emerging health care settings |
| 12 | Practice as a reflective, critical, evaluative and evidence-based therapeutic radiographer |
| 13 | Practice within the legal and ethical boundaries of therapeutic radiography and practice safely and effectively within your own scope of practice |
| 14 | Develop into a highly respected, caring, competent and autonomous graduate who meets the Health and Care Professions Council (HCPC) Standards of Proficiency, Standards of Conduct Performance and Ethics and is eligible to apply for registration as a therapeutic radiographer with the HCPC. (For students completing all clinical competencies) |

| **13** | **Level Learning Outcomes** |
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| | **Upon completion of Level 4 / the Certificate of Higher Education, students will be able to:** |
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| | Discuss the underlying concepts and principle key scientific concepts that underpin radiotherapy practices |
| | Explain why high levels of professionalism underpin safe and effective clinical practices |
| | Identify the key features of high-quality patient care |
| | Recognise their own learning needs with respect studying at level 4 and beyond |
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| | **Upon completion of Level 5 / the Diploma of Higher Education, students will be able to:** |
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| | Apply underlying concepts and principles within and beyond the field of therapeutic radiography, and forge links between clinical practice and underlying theoretical knowledge |
| | Employ qualities necessary for employment in situations requiring the exercise of personal responsibility and decision-making. |
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| | **Upon completion of 120 credits at Level 6 / the Bachelor's Degree (with Honours), students will be able to:** |
| | Meet the Health and Care Professions Council (HCPC) Standards of Proficiency, Standards of Conduct, Performance and Ethics, and be eligible to apply for registration as a therapeutic radiographer with the HCPC.<br>(For students successfully completing all clinical components of the course) |
| | Identify and critically review relevant literature/methodologies and complete a chosen Therapeutic Radiography research task |
| | Demonstrate a systematic understanding of key aspects of the field of therapeutic radiography |

| **14** | **Course Learning, Teaching and Assessment Strategy** |
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| | Each of the three years of full-time study is comprised of 120 credits of study alongside clinical placements.<br><br>We utilise a variety of methods within our learning and teaching strategy to encourage a reflective and critical thinking enabling students to become confident and autonomous learners with sound academic and clinical knowledge, so they are readily employable and well equipped for lifelong learning. |

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| | The year plan is designed to integrate theory and practice using a modular approach with alternate blocks of academic studies and clinical practice across all three years so that students can forge connections between their developing professional knowledge and practical skills as a developing therapeutic radiographer. Delivery of academic elements of the therapeutic radiography course are predominantly at the university via face-to-face activities, although some activities are delivered online through a blended approach to learning. Clinical experience is gained through attending clinical placement rotation and is reinforced within the university environment through the use of our dedicated skills suite and simulation activities. The course integrates a variety of learning technologies into its structure. In particular we make regular and varied use of the Virtual Environment for Radiotherapy (VERT) system which allows students to explore geometric concepts, treatment techniques and human anatomy within a virtual reality space. We also aim to articulate these activities with the use our dedicated treatment planning system and alongside 'hands on' activities using our Linear Accelerator treatment couch.<br><br>Our approach to teaching has been to embed fundamentals of professional knowledge within the first phases of the course so that students have a firm foundation in the science of radiotherapy practice and the basis of provision of high standards of patient care. From these, students will study increasingly more complex aspects of radiotherapy practice and undertake analysis of the evidence base that underpins recent developments in cancer care. As students progress through their course of study, the course content reflects the radiotherapy patient journey from initial diagnosis to follow up, and students will develop skills and understanding of each respective step of the radiotherapy workflow process. During the final stages of the course, students are encouraged to adopt self-critical and analytical approaches to their developing professional identity and their role as a therapeutic radiographer within the wider multidisciplinary cancer care team.<br><br>Students will be assessed using a range of methods including examinations, assignments, presentations, case studies and clinical assessments and competencies.<br>Formative assessment opportunities exist within all modules and throughout the course, and help students prepare for their associated summative assessments. Following completion of any formative assessment students will receive feedback on how they have performed as well as guidance on how they should proceed with their learning. |

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| **15** | **Course Requirements** |
| **15a** | **Note - all course modules are to be considered as core requirements**<br><br>**Level 4:**<br><br>**In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):** |

| Module Code | Module Name | Credit Value |
|---|---|---|
| RAD4058 | Radiotherapy Science and Technology 1 | 40 |

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| RAD4056 | Radiotherapy and Oncology Studies 1 | 40 |
| RAD4054 | Academic Skills and Knowledge | 20 |
| RAD4055 | Professionalism and Patient Care 1 | 20 |
| RAD4057 | Radiotherapy Clinical Practice 1 | 0 |

**Level 5:**

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

| Module Code | Module Name | Credit Value |
|---|---|---|
| RAD5061 | Radiotherapy Science and Technology 2 | 40 |
| RAD5058 | Radiotherapy and Oncology Studies 2 | 40 |
| RAD5057 | Further Academic Skills and Knowledge – preparing for research | 20 |
| RAD5059 | Professionalism and Patient Care 2 | 20 |
| RAD5060 | Radiotherapy Clinical Practice 2 | 0 |

**Level 6:**

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

| Module Code | Module Name | Credit Value |
|---|---|---|
| RAD6076 | Radiotherapy Science and Technology 3 | 20 |
| RAD6073 | Radiotherapy and Oncology Studies 3 | 40 |
| RAD6072 | Professionalism and Patient Care 3 | 20 |
| RAD6074 | Advanced Academic Skills and Knowledge – Research | 40 |
| RAD6075 | Radiotherapy Clinical Practice 3 | 0 |

| 15b | Structure Diagram |
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**Level 4**

| SEMESTER ONE | SEMESTER TWO |
|---|---|
| Radiotherapy Clinical Practice 1 (0C) | |
| Radiotherapy Science and Technology 1 (40C) | |
| Radiotherapy and Oncology Studies 1 (40C) | |
| Academic Skills and Knowledge (20C) | Professionalism and Patient Care 1 (20C) |

**Level 5**

| SEMESTER ONE | SEMESTER TWO |
|---|---|
| Radiotherapy Clinical Practice 2 (0C) | |
| Radiotherapy Science and Technology 2 (40C) | |
| Radiotherapy and Oncology Studies 2 (40C) | |
| Professionalism and Patient Care 2 (20C) | Further Academic Skills and Knowledge – Preparing for Research (20C) |

**Level 6**

| SEMESTER ONE | SEMESTER TWO |
|---|---|
| Radiotherapy Clinical Practice 3 (0C) | |
| Radiotherapy and Oncology Studies 3 (40C) | |
| Advanced Academic Skills and Knowledge – Research (40C) | |
| Radiotherapy Science and Technology 3 (20C) | Professionalism and Patient Care 3 (20C) |

| 16 | Overall Student Workload and Balance of Assessment |
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Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

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

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

**Level 4**

**Workload**

**19% time spent in timetabled teaching and learning activity**

| Activity | Number of Hours |
|---|---|
| Scheduled Learning | 224 |
| Directed Learning | 235 |
| Private Study | 741 |
| **Total Hours** | 1200 hrs |

**Balance of Assessment**

| Assessment Mode | Percentage |
|---|---|
| Coursework | 17 / 34 (student choice) |
| Exam | 33 |
| In-Person | 50 / 34 (student choice) |

**Level 5**

**Workload**

**17% time spent in timetabled teaching and learning activity**

| Activity | Number of Hours |
|---|---|
| Scheduled Learning | 208 |
| Directed Learning | 266 |
| Private Study | 726 |
| **Total Hours** | 1200 hrs |

**Balance of Assessment**

| Assessment Mode | Percentage |
|---|---|
| Coursework | 50 |
| Exam | 16.7 |
| In-Person | 33.3 |

**Level 6**

**Workload**

**14% time spent in timetabled teaching and learning activity**

| Activity | Number of Hours |
|---|---|
| Scheduled Learning | 164.5 |
| Directed Learning | 191.5 |
| Private Study | 844 |
| **Total Hours** | 1200 hrs |

**Balance of Assessment**

| Assessment Mode | Percentage |
|---|---|
| Coursework | 43.9 |
| Exam | 0 |
| In-Person | 57.1 |