

Module Specification

Module Summary Information

1	Module Title	Advanced CT Applications and Imaging Science
2	Module Credits	40
3	Module Level	7
4	Module Code	LBR7535

5	Module Overview
Rationale: This module will build upon the study skills you developed at undergraduate level. We will support you in developing advanced knowledge and understanding in radiography, informed by current practice and research in the field of Computed Tomography. Alignment with Programme Philosophy and Aims The programme aims to develop your collaborative skills. Therefore, whilst studying this module, you can expect to work with and learn from students and professionals, both in the classroom and online. Enabling you to become a self-directed learner who takes ownership of your personal and professional development is part of the programme philosophy. This module will enable you to enhance your knowledge and understanding of computed tomography clinical practice, and equip you with the information gathering and study skills appropriate to postgraduate study. You will have the confidence to disseminate this to other colleagues to improve patient pathways and you will act as exemplars to those who wish to advance their knowledge and skills. You will confidently practice within your area of expertise, appraise current thinking and lead by example. Skills acquired while studying this module can be applied to other areas of the programme and indeed your continuing development, as well as informing your practice, in line with the wider programme aim of advancing clinical practice. Employers will be seen as real partners in your learning and we are proud of the links we have with clinical partners, not only enhance your learning, but also to ensure you can apply your knowledge and thus succeed in your chosen career pathway. We will further develop your employability by developing a range of knowledge skills, behaviours and attributes which will enable you to be successful in employment. Learning and Teaching Strategy This module will employ a number of approaches to learning, designed to help you raise the level of knowledge you currently have and share this with your peers. Keynote lectures will introduce literature searching, critique and evaluation of evidence at the start of the module. Further sessions will be delivered using a variety of learning and teaching strategies, such	

as group work, tutorials, on line quizzes and video lectures as well as a formative collaborative presentation. Cross sectional images and image interpretation will be utilised and developed extensively in support of taught content.

Tutorials will be provided to discuss difficult concepts, and/or assignment ideas in more detail, with individuals or small groups. These will be available in person, or using video/phone calls for those not local to Birmingham. Tutorials on literature searching will also be available via the library.

Assessment Strategy

There are two items of assessment within this double (40 credit) module:

Item 1 – Workbook. This consists of a number of activities, most of which should be completed collaboratively.

Item 2 – Assignment.

6	Indicative Content
	This will be delivered by Faculty staff and colleagues who are expert in their field - both consultant radiologists/lead radiographers, and representatives from commercial companies. Emphasis will also be on your use of online resources provided via Moodle to prepare for workshops, seminar groups, and discussions. The technology of CT including recent advances in technology of the latest CT scanners will be taught. The latest CT applications and protocols will be discussed through the workbook tasks including quality assurance, patient care, dose, and cross sectional anatomy appearances..

7	Module Learning Outcomes
	On successful completion of the module, students will be able to:
	1 Critically evaluate CT imaging strategies in relation to anatomy and disease, and be able to differentiate normal and abnormal appearances on CT images.
	2 Make informed clinical judgements in the selection of the most appropriate imaging protocol and technical parameters for a range of examinations.
	3 Demonstrate knowledge and understanding consistent with safe clinical practice.
	4 Critically evaluate current imaging technologies in CT scanning.

8	Module Assessment		
Learning Outcome			
	Coursework	Exam	In-Person
1-4	X		

9	Breakdown Learning and Teaching Activities	
Learning Activities		Hours
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable		100
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE		100
Private Study (PS) includes preparation for exams		200
Total Study Hours:		400