

Module Details	
Module Title	Advanced CT Techniques
Module Code	RAD7017-C
Academic Year	2022/3
Credits	30
School	School of Allied Health Professions and Midwifery
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	10
Online Lecture (Synchronous)	6
Online Lecture (Asynchronous)	4
Tutorials	5
Online Tutorials (Synchronous)	3
Project Supervision	2
Seminars	6
Interactive Learning Objects	15
Directed Study	104
Independent Study	145

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Non-Standard Academic Year

Module Aims
The module is designed to enable Computed Tomography (CT) radiographers to enhance their current knowledge and understanding of advanced CT techniques and their applications. It gives you the opportunity to challenge and critically evaluate your professional practice.

Outline Syllabus

You will gain understanding of the physical principles underpinning conventional and emerging advanced sequences, and their potential applications. The module will cover a range of CT specialist areas including but not limited to; Cardiac CT, CTC, MSK, PET-CT, Patient care and Safety in the context of Advanced Imaging.

Learning Outcomes

Outcome Number	Description
1	Critically evaluate the fundamental and physical concepts of advanced CT techniques and assess appropriate optimisation methods.
2	For a range of examinations, demonstrate the ability to integrate theory and practice through critical evaluation of advanced techniques' current and emerging applications.
3	Demonstrate initiative, reflective practice, self-direction, evaluate complex issues, propose new developments, and apply these where appropriate.
4	Critically review and analyse the evidence base relevant to current and future developments.
5	Demonstrate ethical, inclusive practice and professional effective communication skills.

Learning, Teaching and Assessment Strategy

Concept will be introduced using formal lectures, tutorials and invited lectures from the CT industries. Deeper and better understanding will be developed during tutorial by solving practical scenarios and problems. The module will be taught using a blended learning approach by academic staff and clinical specialists with expertise in Advanced Techniques. Taught sessions will be conducted using a combination of synchronous and asynchronous lectures and tutorials. Online activities will be completed electronically using the VLE (Canvas). Weekly contact with your Personal Academic Tutor will be facilitated via email and Canvas.

Achievement of the learning outcomes will be demonstrated through the completion of a seminar presentation allowing demonstration of their underpinning knowledge base and critical thinking (learning outcomes 3, 4, 5), and a formal examination (learning outcomes 1, 2).

Mode of Assessment

Type	Method	Description	Weighting
Summative	Presentation	30 minutes Individual Seminar presentation (PASS AT 40%, MUST PASS)	50%
Summative	Computerised examination	75 minutes Computerised Online Exam (PASS AT 40%, MUST PASS)	50%
Formative	Classroom test	Peer and Tutor discussions on exam style questions.	N/A
Formative	Self and Peer Assessment	Tutor feedback and supervision related to presentation	N/A

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

© University of Bradford 2022

<https://bradford.ac.uk>