

# **Module Specification**

# **Module Summary Information**

1	Module Title MRI Specialist Techniques	
2	Module Credits	20
3	Module Level	7
4	Module Code	LBR7552

#### 5 Module Overview

#### Rationale

MRI Specialist Techniques is designed to enhance your MRI knowledge by raising your awareness and developing your understanding of the various specialist and emerging techniques in MRI. MRI is a rapidly-changing technology and the focus of this module is the state-or-the-art, thus encouraging the exploration of current thinking and emergent practice. Your ability to present information in a manner suitable for use by others is assessed in this module – thus enhancing your ability to disseminate your knowledge. The module is suitable for study by any professional with an interest in this area who wishes to enhance their knowledge, although a sound understanding of the physical principles of MRI is advantageous.

## **Alignment with Programme Philosophy and Aims**

The content is designed to encourage evaluation of the emerging specialist techniques in MRI. It underpins the programme philosophy by facilitating the development of practitioners who are confident to appraise current thinking, thus providing evidence-based care. The content and assessment are designed to produce a professional who is expert in their field, with the ability to inspire others and think critically regarding their 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.

The recognition of our qualifications on an international stage means your skills will be able to contribute to the healthcare of the global community. We have developed relationships with overseas institutions and welcome international students.

## **Learning and Teaching Strategy**

A variety of learning and teaching methods are employed on the module both during the attended session and in the form of e-learning when you will be expected to engage with activities outside of formal teaching time. During attendance at the university there will be traditional lecture sessions alongside group activities and image viewing sessions. These activities are designed to help you realise the level of knowledge you currently have and share this with your peers. The online activities will involve the participation in discussion forums, the viewing of pre-session learning material and the completion of anatomy quizzes to assess your own learning.



## **Assessment Strategy**

The assessment is designed to allow you to explore an area of your own interest within the scope of the module. You will be asked to produce a poster evaluating the current thinking and emerging technologies in your chosen area. The taught content of the module is designed to directly support the production of your poster, and tutor guidance is available to you throughout the duration of your studies.

# 6 Indicative Content

The following subjects will be covered in this module:

Basic MRI physical principles revision session

Cardiac MRI – physical principles

Cardiac MRI – scan technique and service delivery

Cardiac MRI – clinical applications

Pathology recognition session

Paediatric MRI

MRI – the anaesthetist's perspective

Foetal MRI

Post mortem MRI

Advance MRI techniques for neuro

Quantitative MRI

Tutor-led session to provide guidelines on producing poster

**Breast MRI** 

MRI in Dementia

PET-MRI

7		Module Learning Outcomes  On successful completion of the module, students will be able to:		
	1	Evaluate the physical principles and limitations of MRI for a chosen specialist technique;		
	2	Demonstrate a clear critical awareness of emerging technology or technique;		
	3	Critically appraise the clinical applications of MRI.		

8	Module Asse	ssessment				
Learning						
Outcome						
		Coursework	Exam	In-Person		
1, 2 and 3				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	32			
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	40			
Private Study (PS) includes preparation for exams	128			
Total Study Hours:	200			