

Module Specification

Module Summary Information

1	Module Title	Acoustic Applications
2	Module Credits	20
3	Module Level	5
4	Module Code	DIG5124

5	Module Overview
<p>This module will develop students' understanding of psychoacoustics through critique and analysis of academic work. Students will understand how to provide critical assessment of existing research work.</p> <p>This module will provide a practical insight into acoustic consultancy by assessing through theory and practice. It will cover building, interior and environmental acoustics in a way that aids employability by utilising methods that are typical of industrial practice.</p> <p>Through this module you will understand the factors involved in the development of a building project specifically from an acoustic standpoint, using calculation and testing to influence the final design.</p>	

6	Indicative Content
<p>Psychoacoustics / Physiology of hearing The human hearing system Perception and frequency resolution Masking and loudness perception</p> <p>Room and Building Acoustics BS/ISO Standards and legislation Measuring reverb and room acoustics Room modes, the Schroeder frequency and absorption Mix room theories and diffusion Design of acoustic treatment Isolation techniques for walls, floors, doors and windows</p>	

7	Module Learning Outcomes
On successful completion of the module, students will be able to:	
1	Assess and critically evaluate psychoacoustic theory.
2	Analyse and calculate acoustic properties of an environment.
3	Investigate and evaluate legal implications of environments for acoustic noise control.
4	Develop building designs based on an understanding of acoustic theory and practice.
5	Communicate a clearly defined final year project proposal

8	Module Assessment		
Learning Outcome			
	Coursework	Exam	In-Person
1			X
2-5	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	48	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	30	
Private Study (PS) includes preparation for exams	122	
Total Study Hours:	200	