

Module Specification

Module Summary Information

1	Module Title	Structures and Materials
2	Module Credits	15
3	Module Level	4
4	Module Code	ARC4014

5 Module Overview

Understanding the context of technological choices is important to introducing the linkage between technology and space/form. At level 4 students are introduced to three principal strands of technology: Structures; Environment and Materials. Curriculum in these three strands is delivered in two modules that set technological developments in their historical context.

This module introduces materials and structure within the built environment. We will consider the properties of materials and how they have been employed in creating buildings using examples from various periods of history. The development of structural systems for building will also be set in its historical context alongside the introduction of key structural concepts.

6 Indicative Content

Through lectures, readings and discussion we will consider both the qualitative and quantitative aspects of materials and structural design. Using practical exercises, drawings and diagrams we will gain insights into the way that material and structural systems work in buildings. Beyond the idea of material and structural systems as a means to an end, we will explore ideas about technology as a driver for design and a key aspect of architectural expression.

7	M	Module Learning Outcomes		
	On successful completion of the module, students will be able to:			
	1	Demonstrate awareness of structural and material technologies used in the built environment through the technical vocabulary and graphic techniques used to describe and analyse these aspects.		
	2	Demonstrate awareness of the impact of structural and material principles on the design aesthetics of buildings through case studies.		
	3	Demonstrate use of appropriate academic conventions of research, literature review, structure, referencing and bibliography.		
	4	Explore collaborative working through the preparation of a group assignment.		



8	Module Asse	Assessment				
Learn						
Outco	ome					
		Coursework	Exam	In-Person		
1 & 4		Х				
1, 2, 3	& 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	24
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	96
Private Study (PS) includes preparation for exams	30
Total Study Hours:	150