MODULE DESCRIPTOR

Module Title

Introduction to Building Technology

Reference	SU1502	Version	2
Created	March 2024	SCQF Level	SCQF 7
Approved	January 2024	SCQF Points	30
Amended	July 2024	ECTS Points	15

Aims of Module

To enable the student to analyse and understand the structural and environmental principles that underlie the construction of domestic buildings.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Acquire knowledge and understanding of the materials, structure and construction of domestic buildings.
2	Apply learning of performance, environment, servicing and life cycle of material for domestic buildings
3	Take account of the pathology, performance, materials, construction and structure of existing buildings
4	Identify sustainable approaches to new build domestic buildings and retrofit to existing buildings

Indicative Module Content

The module introduces the basic requirements of structures and the principles of structural design, loads and overall stability. Fundamental structural forms will be explored. Structural elements and their functions are explained as are the internal effects of loads on structures. Students will learn to recognise structural forms, arrangements and components in domestic buildings and explain how they behave. The concepts of building performance and material specification will be introduced and applied. The concepts and principles of environmental comfort are introduced and their impact on building performance will be explored. At the end of the module a student should be able to understand domestic buildings historically and their build up, new buildings including timber frame and masonry and their construction as well as understanding the needs of future housing and alternatives structures and materials including modern methods of construction.

Module Delivery

This is a module predominantly involving practical work in relation to a project supported by lectures, practical workshops, directed student research and online activities, and where appropriate site visits. Directed study to core texts and resource material will be encouraged.

Module Ref:	SU1502 v2

Indicative Student Workload	Full Time	Part Time
Contact Hours	77	N/A
Non-Contact Hours	223	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	300	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4
Description:	Project based coursework based on group work and individual work. Coursework submitted as a single portfolio comprising graphic content, virtual models and/or physical models.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The overall module grade is based on 100% weighting (Coursework). A grade D is required to pass the module. Non submission will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

Module Ref:	SU1502 v2

INDICATIVE BIBLIOGRAPHY

1	Ching F D K., 2020. Building Construction Illustrated. 6th Edition . John Wiley & Son.
2	Deplazes A., (2022) Constructing Architecture: Materials, Processes, Structures; A Handbook. Birkhauser Verlag AG.5th Edition
3	Seward D, (2014) Understanding Structures : Analysis, Materials, Design 5th edition.
4	Walshaw, E. (2022) Understanding Architectural Details : Residential Architecture. First In Architecture. 5th Edition.
5	Walshaw, E. (2018) Understanding Architectural Details : Commercial Architecture. First In Architecture. 2nd Edition.