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## MODULE DESCRIPTOR

### Module Title

Building Technology 2

Reference	AC1005	Version	10
Created	May 2017	SCQF Level	SCQF 7
Approved	July 2005	SCQF Points	15
Amended	September 2017	ECTS Points	7.5

### Aims of Module

To enable the student to understand the construction, servicing and structure of existing and newbuild domestic buildings.

### Learning Outcomes for Module

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

- 1 Analyse and apply learning of materials, structure, servicing and construction of masonry domestic buildings
- 2 Demonstrate knowledge and understanding of the materials, construction and structure of masonry domestic buildings

### Indicative Module Content

Strategic site analysis considering basic principles of sustainable design, site specific design, design precedent, opportunities for renewable technologies and the impact of buildings on their immediate environment. Basic structural theory in relation to tension, compression, bending, shear and deflection of steel and concrete beams; Reinforcement, Basic principles of load bearing masonry construction; Introduction to foundation typology; Integration of structural principles with construction methods. Historic development of masonry construction techniques; Material characteristics and properties; Masonry building fabric; Principles of thermal performance; Use and specification of building components; Internal finishes and fittings, Environmental considerations of construction techniques and specification choices; moisture performance, Basic principles of measuring fabric performance. Basic domestic scale services; Foul drainage; Surface water drainage, heating, water supply. Application and integration of renewable technologies and low carbon equipment.

### Module Delivery

This module is delivered by lectures, practical workshops, directed student research and online activities.

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

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

**Component 1**

Type:	Coursework	Weighting:	60%	Outcomes Assessed:	1
Description:	Over the course of the semester students are asked to compile a 'Journal' of coursework exercises, site visits, records of workshop exercises & lecture notes which incorporate analytical graphic, written and technical design tasks.				

**Component 2**

Type:	Examination	Weighting:	40%	Outcomes Assessed:	2
Description:	In an open book exam setting where students can use the 'Journal' that they have produced over the semester, students are requested to answer questions covering material presented in lectures and/or tutorials.				

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

Architecture: In order to pass the module students must achieve 40% or greater in each component.

Architectural Technology, Surveying and Construction Management: In order to pass the module students must achieve 35% or greater in each component and 40% or greater overall.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	70% or better
<b>B</b>	60% or better
<b>C</b>	50% or better
<b>D</b>	40% or better
<b>E</b>	35% or better
<b>F</b>	Less than 35%
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	None in addition to course (SCQF7) entry requirements.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 Borer P. & Harris C., 2005. The Whole House Book. 2nd Edition. Centre for Alternative Technology Publications.
- 2 Ching F D K., 2008. Building Construction Illustrated. 4th Edition. John Wiley & Son.
- 3 Deplazes A., 2013 3rd edition. Constructing Architecture: Materials, Processes, Structures; A Handbook. Birkhauser Verlag AG.
- 4 McMullan R., 2007. Environmental Science in Building. 6th Edition, Palgrave Macmillan.
- 5 Riley M., Cotgrave A., 2013. Construction Technology I: House Construction. 3rd Edition Palgrave Macmillan.