Module Title **Building Technology 2** **Keywords** historic built environment context, masonry construction, structure, servicing,materials & health & safety	Reference AC1005 SCQF Level SCQF 7 SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved July 2005 Amended November 2012 Version No. 8

This Version is No Longer Current

The latest version of this module is available here

Prerequisites for Module

None in addition to course (SCQF7) entry requirements.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

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

Learning Outcomes for Module

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

Basic domestic scale services; Foul drainage; Surface water drainage, heating, water supply. Application and integration of renewable technologies and low carbon equipment.

Indicative Student Workload

Contact Hours	Full Time
Assessment	5
Lectures	15
Practical Workshops	10
Directed Study	
Directed Study	70
Private Study	
Private Study	50

Mode of Delivery

This module is delivered by a blended learning approach focusing

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

on directed student research, online activities, lectures and practical workshops.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1
Component 2	2

Component 2 will be an open book continuous, online summative assessment. This will assess knowledge & understanding of the historic built environment context, timber construction, timber structure, services, health & safety, sustainability and materials.

Component 1 will consist of the production of a semester long refective journal portfolio submitted digitally. This will require the student to undertake directed research of their historic built environment context, timber construction, timber structure, sustainability and materials whilst applying their knowledge in groupwork practical workshops which are logged in the journal.

Indicative Bibliography

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.

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.