Module Title **Building Technology 2** **Keywords** Masonry, Timber-Panel, Construction, Foundations, External envelope, Concepts of sustainability, Health and Safety, Human wellbeing, Basic building services.	Reference AC1005 SCQF SCQF Level 7 SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved July 2005 Amended August 2009 Version No. 6

This Version is No Longer Current

The latest version of this module is available here

Prerequisites for Module

None.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide the student with the ability to understand and apply the key principles of building superstructures and their construction.

Learning Outcomes for Module

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

Mode of Delivery

This is a lecture-based module supplemented with workshops and practical work, which includes laboratory experiments and site visits. Directed study to core texts and resource material will be encouraged.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2,3,4
Component 2	1,2,3,4

Component 2 - The examination will assess understanding of technology.

1. Apply principles of heat transfer, insulation and condensation to building construction.
2. Explain and apply the principles of masonry and timber frame construction.
3. Discuss and reproduce key technical details of buildings.
4. Explain and apply an understanding of the main advantages and disadvantages of different construction techniques for buildings of a domestic scale.

Indicative Module Content

The principle of layered construction (Timber panel and Masonry) will be explored through case studies and specialist lectures as well as through workshops and laboratory work.
In depth case studies will be used to explain how buildings act as systems.
The principles of humidity, condensation and natural ventilation are explored and applied. Basic domestic services are explored including utilities connections and distribution; hot water and central heating installation.

Indicative Student Workload

	Full Time	Part Time
Contact Hours		
Assessment	6	6
Lectures	20	20
Tutorials/Workshops/Studio	20	20
Directed Study		
Directed Study	70	70

Component 1 - The coursework is in the form of a portfolio consisting of technical glossary and detailed annotated construction drawings documenting site visits, experiments, construction principles and case studies. The coursework may be assessed by time controlled studio assessment.

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.

Private Study

Private Study	34	34