

Construction Technology 1

Module Information

2022.01, Approved

Summary Information

Module Code	4200BEUG
Formal Module Title	Construction Technology 1
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Civil Engineering and Built Environment

Learning Methods

Learning Method Type	Hours
Lecture	40
Workshop	20

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To introduce the student to construction techniques associated with domestic dwellings including building regulations and building services. To develop an understanding of the performance of buildings and the influence of materials and workmanship specification on performance.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Describe and compare a range of processes and techniques involved in the construction of the substructure work of domestic buildings.
MLO2	2	Describe and compare, including illustrations, a range of processes and techniques involved in the construction of the primary elements of the superstructure of domestic buildings.
MLO3	3	Describe and compare a range of processes and techniques involved in the construction of the secondary elements and finishes of domestic buildings.
MLO4	4	Describe and compare a range of building services systems used in domestic buildings.

Module Content

Outline Syllabus	<ul style="list-style-type: none"> • Substructure – domestic foundations of the forms of strip, raft and pile foundations for domestic buildings. Mechanical plant used in substructure work. Excavations. Health and Safety in excavation work. Site investigations for housing sites. (Dealing with trees on site, high water tables, contaminated land etc.) • Superstructure – Ground floor construction – suspended and solid floors. External Cavity Wall Construction. Timber Frame Construction. Timber upper floors. Pitched roofs – trussed rafters and purlin roofs. Flat Roofs – warm deck and cold deck in timber. • Secondary Elements and Finishes – stair construction. Door and Window construction and fixing. Internal partitions. Dry lining of walls. Plaster boarding of ceilings. Sand and cement and asphalt screeds. Timber floor finishes. Floor and wall tiling. Painting timberwork. External cladding and rendering. • Building Services – above and below ground drainage systems. Hot and Cold water supply and distribution. Internal environment control (heating/cooling). Electrical supply and distribution.
Module Overview	This module introduces you to construction techniques associated with domestic dwellings including building regulations and building services. It develops your understanding of the performance of buildings and the influence of materials and workmanship specification on performance.
Additional Information	This module introduces the student to construction techniques associated with domestic dwellings including building regulations and building services and develops an understanding of the performance of buildings and the influence of materials and workmanship specification on performance. On the Building Services Engineering Degree Apprenticeship programme, the knowledge learning outcomes are K4 and K5 and the skills learning outcomes are S1, S2 and S3. On the Quantity Surveying Degree Apprenticeship programme, the knowledge learning outcomes are K6 and K7. On the Construction Management Degree Apprenticeship programme, the knowledge learning outcomes are K6 and K7.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Dissertation	SENARIO BASED	50	0	MLO1, MLO2
Centralised Exam	EXAMINATION - CLOSED BOOK	50	2	MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Ali Rostami	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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