

# Construction Technology 1

## Module Information

2022.01, Approved

### Summary Information

Module Code	4543BEKL
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
LJMU Partner Taught

### Partner Teaching Institution

Institution Name
International College IMPERIA

### Learning Methods

Learning Method Type	Hours
Lecture	44

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks
SEP-PAR	PAR	September	12 Weeks

## Aims and Outcomes

Aims	<p>To introduce the student to construction techniques associated with domestic dwellings including building regulations and building services.</p> <p>To develop an understanding of the performance of buildings and the influence of materials and workmanship specification on performance.</p>
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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, and superstructure of domestic buildings.
MLO2	2	Identify range of processes and techniques involved in the construction of the secondary elements and finishes of domestic buildings.
MLO3	3	Review a range of building services systems used in domestic buildings.
MLO4	4	Describe contemporary construction techniques and building services to attain sustainable development goals.
MLO5	5	Recognise health and safety risks related to various construction techniques used for domestic buildings.

## Module Content

Outline Syllabus	<ul style="list-style-type: none"> <li>• 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.)</li> <li>• 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.</li> <li>• 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.</li> <li>• Building Services – above and below ground drainage systems. Hot and Cold water supply and distribution. Internal environment control (heating/cooling). Electrical supply and distribution.</li> </ul>
Module Overview	
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.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	AS1	50	0	MLO1, MLO4, MLO5
Exam	AS2	50	2	MLO2, MLO3, MLO4, MLO5

## 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