

### Summary Information

<b>Module Code</b>	4300BEUG
<b>Formal Module Title</b>	Construction Technology I
<b>Owning School</b>	Civil Engineering and Built Environment
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 4
<b>Grading Schema</b>	40

### Module Contacts

#### Module Leader

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

#### Module Team Member

Contact Name	Applies to all offerings	Offerings
Wilfred Matipa	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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### Teaching Responsibility

<b>LJMU Schools involved in Delivery</b>
Civil Engineering and Built Environment

### Learning Methods

Learning Method Type	Hours
Online	11
Workshop	44

## Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	September	12 Weeks

## Aims and Outcomes

<b>Aims</b>	To introduce construction techniques associated with domestic dwellings including building regulations and building services considering sustainable development goals. To develop an understanding of the performance of buildings and the influence of materials and workmanship specification on the building performance.
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## Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Describe and compare a range of processes and techniques involved in the construction of the substructure of domestic buildings.
MLO2	Describe and compare a range of processes and techniques involved in the construction of the superstructure of domestic buildings.
MLO3	Identify the range of processes and techniques involved in the construction of the secondary elements and finishes of domestic buildings.
MLO4	Review a range of building services systems used in domestic buildings considering sustainable targets.

## Module Content

Outline Syllabus
<p>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 intimber. Secondary Elements and Finishes – stairs, doors and windows construction. Internal partitions. Finishes to different types of construction e.g. walls and ceilings, internal and external. Building Services – above and below ground drainage systems. Hot and Cold water supply and distribution. Internal environment control (heating/cooling). Electrical supply and distribution. Modern Methods of Construction and Sustainable technologies are introduced in the above areas where relevant.</p>

## 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)	Learning Outcome Mapping
Report	Scenario Based Report	60	0	MLO3, MLO2, MLO1
Centralised Exam	Examination – Closed Book	40	1	MLO4, MLO3, MLO2, MLO1