

## Module Information

2022.01, Approved

### Summary Information

Module Code	4223BEUG
Formal Module Title	Construction Technology and Materials
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	22
Practical	10
Tutorial	12

### Module Offering(s)

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

### Aims and Outcomes

Aims	To provide an overview and develop understanding of techniques and materials associated with the construction of low-rise domestic dwellings.
------	---

**After completing the module the student should be able to:**

**Learning Outcomes**

Code	Number	Description
MLO1	1	Describe, detail and compare a range of processes and techniques involved in the site investigation and construction of the substructure work of low rise buildings.
MLO2	2	Describe and compare a range of construction methods in relation to the primary elements of the superstructure of low rise buildings.
MLO3	3	Specify and compare a range of processes and techniques involved in the construction of the secondary elements and finishes of low rise buildings.
MLO4	4	Understand and identify the properties of common building materials used in the construction of low rise buildings.

**Module Content**

Outline Syllabus	Substructure – Domestic foundations of the forms of strip, raft and pile foundations for low rise buildings.- Mechanical plant used in substructure work. - Excavations. - Site investigations for housing sites; dealing with trees on site, high water tables, contaminated land etc.- Site set up.Superstructure– Ground floor construction; suspended and solid floors. - External cavity wall construction. - Timber frame construction. - Upper floors in timber and precast concrete.- Pitched and flat roofsSecondary Elements and Finishes– Stair construction. - Door and Window construction and fixing. - Internal partitions in masonry and timber. - Typical finishes for domestic buildings.Building Materials– Concrete specification and testing, Clay brickwork and mortar specifications, Concrete blockwork specification and testing, timber properties of hardwoods and softwoods, manufactured timber boards, Plasters and plasterboard, corrosion and protection of metals. Thermal insulation materials.Construction drawings and illustrations.
Module Overview	<p>This module develops your understanding of techniques and materials associated with the construction of low-rise domestic dwellings. You will learn how to:</p> <ul style="list-style-type: none"> <li>• Describe, detail and compare a range of processes and techniques involved in the site investigation and construction of the substructure work of low rise buildings</li> <li>• Describe and compare a range of construction methods in relation to the primary elements of the superstructure of low rise buildings</li> <li>• Specify and compare a range of processes and techniques involved in the construction of the secondary elements and finishes of low rise buildings</li> <li>• Understand and identify the properties of common building materials used in the construction of low rise buildings.</li> </ul>
Additional Information	This module provides an overview and develops understanding of techniques and materials associated with the construction of low-rise domestic dwellings.

**Assessments**

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

**Module Contacts**

**Module Leader**

Contact Name	Applies to all offerings	Offerings
Tom Hogarth	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------