

Summary Information

Module Code	4339BEUG
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

Module Contacts

Module Leader

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

Module Team Member

Contact Name	Applies to all offerings	Offerings
Spencer Kelly	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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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)

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

Aims and Outcomes

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

After completing the module the student should be able to:

Code	Description
MLO1	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	Describe and compare a range of construction methods in relation to the primary elements of the superstructure of low rise buildings.
MLO3	Specify and compare a range of processes and techniques involved in the construction of the secondary elements and finishes of low rise buildings.
MLO4	Understand and identify the properties of common building materials used in the construction of low rise buildings.

Module Content

Outline Syllabus
<p>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.Comparison of traditional and contemporary construction techniques Construction drawings and illustrations.</p>

Module Overview

Additional Information

This module provides an overview and develops understanding of traditional and contemporary techniques and materials associated with the construction of low-rise domestic dwellings.

Assessments

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