

Construction Technology 2

Module Information

2022.01, Approved

Summary Information

Module Code	5500BEQR
Formal Module Title	Construction Technology 2
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Oryx Universal College WLL

Learning Methods

Learning Method Type	Hours
Lecture	40
Workshop	20

Module Offering(s)

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

Aims and Outcomes

Aims	To explain and analyse the construction techniques of framed multi-storey buildings. To enable students to evaluate the relative merits of the various construction forms in any given situation. To introduce the technology of building services installations for commercial and industrial buildings.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Analyse and explain a range of processes and techniques involved in the construction of the substructure for single storey and multi storey framed buildings.
MLO2	2	Analyse and explain a range of processes and techniques involved in the construction of the superstructure for single storey and multi storey framed buildings.
MLO3	3	Explain the principles and operation of a range of building services for industrial and commercial buildings.

Module Content

Outline Syllabus	<ul style="list-style-type: none"> • Substructure – pile foundations, displacement and replacement, pile caps and ground beams, pad foundations. Basement excavation and construction. Reinforced concrete ground floor slabs. • Superstructure – Single storey framed buildings of portal frame and lattice girder construction in steel concrete and timber. Multi storey structural frames in steel in-situ concrete and precast concrete. Cross laminated timber multi storey structures. Tunnel form and Slip form construction. Cladding to single storey and multi storey buildings. Roofing to single and multi-storey buildings. Structural concrete floors,- metal deck, precast concrete and in-situ concrete. Suspended Ceilings, Access Floors and Internal Partitions. • Services – Heating Ventilation and Air conditioning plant to industrial and commercial buildings. Electrical installations to industrial and commercial buildings. Lifts and escalators installation. Firefighting and suppression systems to multi storey buildings. Pumped systems of water supply to multi storey buildings.
Module Overview	
Additional Information	Provides an advanced knowledge of construction technology through more complex building types and systems. Students are able to explore construction technology through more analytical methods. The concept of services is also introduced.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	SCENARIO BASED ASSIGNMENT	50	0	MLO2
Test	TIMED OPEN BOOK TEST	50	0	MLO1, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings

Tasnim Ahmed	Yes	N/A
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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