

## Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY 2  
Status: Definitive  
Code: **5537BEKL** (123417)  
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: Imperia College

Team	Leader
Spencer Kelly	Y

**Academic Level:** FHEQ5      **Credit Value:** 20      **Total Delivered Hours:** 72  
**Total Learning Hours:** 200      **Private Study:** 128

### Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	42
Workshop	28

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	SCENARIO BASED ASSIGNMENT	50	
Exam	AS2	EXAMINATION	50	2

### 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.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 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.
- 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.
- 3 Explain the principles and operation of a range of building services for industrial and commercial buildings.

## **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

SCENARIO BASED ASSIGNMENT	2	
EXAMINATION	1	3

## **Outline Syllabus**

- *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.*

## **Learning Activities**

Lectures, Workshops, Industry Speakers

## **Notes**

Provides an advanced knowledge of construction technology through more complex

building types and systems.