

## Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY 2  
Status: Definitive  
Code: **5612BECC** (128161)  
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment  
Teaching School/Faculty: Coleg Cambria

Team	Leader
Spencer Kelly	Y

**Academic Level:** FHEQ5  
**Credit Value:** 20  
**Total Delivered Hours:** 56  
**Total Learning Hours:** 200  
**Private Study:** 144

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	27
Tutorial	10
Workshop	19

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	2500 Word	50	
Report	AS2	2500 Word	50	

### Aims

*To assess and apply knowledge of the various methods, processes, and techniques associated with moderately complex civil and structural engineering structures and associated service requirements for a residential development of medium-rise structures.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Assess the different types of civil engineering/infrastructure methods, processes and techniques used in support of residential development
- 2 Compare and contrast different design solutions and methods, processes and techniques for the construction of medium-rise buildings.
- 3 Analyse the systems used to distribute services to residential estates and describe their characteristics.
- 4 Analyse the systems used to provide disposal systems for a residential estate and describe their characteristics

## Learning Outcomes of Assessments

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

Structural Design Report	1	2
Services Report	3	4

## Outline Syllabus

- *Soil remediation*
- *Groundwater control methods*
- *Steel sheet piling*
- *Temporary techniques*
- *Concrete diaphragm walls*
- *Culverts*
- *Frame Construction*
- *Erection sequence*
- *Detailing*
- *Foundations – replacement and displacement.*
- *Cladding*
- *Service connections*
- *Heating systems*
- *Electrical Installations*
- *Hot and Cold Water supply*
- *Gas insulation.*
- *Fire Detection and Fire Suppression Systems*
- *Surface and foul water drainage systems*

## Learning Activities

This module will utilise blended learning which will combine e-learning with more traditional teaching strategies. In addition, students will be encouraged to monitor

their own learning on this module. Workshops and online learning materials will be used to provide an overview of each topic.

The lectures will be delivered by the module team and on occasion, guest speakers from different relevant professional backgrounds with particular expertise in aspects of the curriculum.

Workshops will be used as a space for students to explore and discuss issues in small groups and for tutors to identify the individual learning needs of students.

## **Notes**

This module has a key focus on civil and structural engineering projects for residential medium-rise developments. As part of this module services provided for civil and structural engineering projects will also be explored.