

# **Civil Construction Technology**

# **Module Information**

2022.01, Approved

# **Summary Information**

Module Code	5502ICPDQS
Formal Module Title	Civil Construction Technology
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	15
Academic level	FHEQ Level 5
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

#### Partner Teaching Institution

Institution Name	
International College of Business and Technology	

### **Learning Methods**

Learning Method Type	Hours
Lecture	15
Tutorial	30

### Module Offering(s)

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

# Aims and Outcomes

Aims	Aim(s) of the module is to introduce modern building construction technology, forms of buildings structures, building structural element design, internal special planning, finishing & related services and to demonstrate an understanding of environmental friendly building design principles to meet regulatory standards. This module focuses on the technology of low-rise & multi-storey residential, commercial & institutional buildings designed for both private and public use.

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

### Learning Outcomes

Code	Number	Description
MLO1	1	Identify & explain the technology of various types & forms of civil engineering structures & principles of structural planning, designing & integration.
MLO2	2	Demonstrate the knowledge on the use of specifications and standards for civil engineering works of various types of civil engineering structures.
MLO3	3	Appraise the principles of various structural designs & elements to achieve functional requirements of various types of civil engineering structures.
MLO4	4	Examine various problems & complexities of civil engineering design & integration and alternative design solutions to overcome such complexities.

# **Module Content**

Outline Syllabus	Note: Tutor must address below indicative content applies to various type of buildings such as low-rise & multi-storey residential/commercial & institutional buildings designed for both private and public use; Site evaluation and investigation for foundation designSteel form of structures: Introduction to concrete structural elementsConcrete form of structures: Introduction to concrete structural elementsConcrete form of structures: HVAC, Electrical systems and distribution, Mechanical transportation, Fire safety, Disposal systems (Sanitary & Solid waste)Building service integration Introduction to Standard material specifications (BS Codes/ Euro Code)Building external works: Installation of exterior glazing & claddings, access road, landscape work (Hard & Soft)Landscape design: Basic principles of Softscape and HardscapeEco-friendly & low energy building designs, environmental systems and controlsLEED green rating system: Introduction to green rating criteria
Module Overview	
Additional Information	

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Coursework	100	0	MLO1, MLO2, MLO3, MLO4

### **Module Contacts**

#### Module Leader

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

Alison Cotgrave Yes N/A	
-------------------------	--

#### Partner Module Team

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