

## Module Information

2022.01, Approved

### Summary Information

Module Code	7503UCEPG
Formal Module Title	Sustainable Construction and Innovation
Owning School	Civil Engineering and Built Environment
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

### Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

### Partner Teaching Institution

Institution Name
Unicaf

### Learning Methods

Learning Method Type	Hours
Online	33

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

### Aims and Outcomes

Aims	To identify and critically appraise how the principles of sustainable and innovative construction practices can be incorporated into a more contemporary construction industry.
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**After completing the module the student should be able to:**

**Learning Outcomes**

Code	Number	Description
MLO1	1	Identify and critically assess the effects of construction on the natural environment.
MLO2	2	Examine current research and knowledge to develop a critical understanding of sustainable construction and innovation.
MLO3	3	Evaluate the various sustainable and innovative construction technologies in the context of modern industrial practices
MLO4	4	Critically evaluate the application of innovative and pragmatic sustainable solutions within the construction industry context.
MLO5	5	Communicate in an academically and professionally appropriate manner using various media.

**Module Content**

Outline Syllabus	Sustainable development Climate Change and Energy Use Impact of Construction on the Natural Environment Sustainable Technologies Digital Construction and Modelling Innovative Systems and Models (Lean, Buildings as Material Banks, Circular Economy, Reverse logistics and Supply Chains)
Module Overview	
Additional Information	The module provides a wide ranging study of sustainability and lean principles affecting a modern construction sector.

**Assessments**

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Portfolio	Portfolio Case Study Based	100	0	MLO1, MLO2, MLO3, MLO4, MLO5

**Module Contacts**

**Module Leader**

Contact Name	Applies to all offerings	Offerings
Damian Fearon	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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