

Summary Information

Module Code	7412BEPG
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

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Volkan Ezcan	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery
Civil Engineering and Built Environment

Learning Methods

Learning Method Type	Hours
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Lecture	22
Workshop	11

Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-CTY	CTY	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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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Identify and critically assess the effects of construction on the natural environment.
MLO2	Examine current research and knowledge to develop a critical understanding of sustainable construction and innovation.
MLO3	Evaluate the various sustainable and innovative construction technologies in the context of modern industrial practices.
MLO4	Critically evaluate the application of innovative and pragmatic sustainable solutions within the construction industry context.
MLO5	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
This module provides you with a wide ranging study of the sustainability and lean principles affecting the modern construction sector. It aims to identify and critically appraise how environmental sustainability and lean principles can be incorporated into a more modern and innovative construction organisation and industry.

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)	Learning Outcome Mapping
Portfolio	Portfolio Case Study Based	100	0	MLO5, MLO1, MLO3, MLO2, MLO4