

Sustainable Construction and Innovation

Module Information

2022.01, Approved

Summary Information

Module Code	7505BEGP
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	28 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.

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
Essay	Essay	40	0	MLO1, MLO2
Report	Report	60	0	MLO1, MLO2, MLO3, MLO4, MLO5

Module Contacts

Module Leader

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

ntact Name	Applies to all offerings	Offerings
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