

Summary Information

Module Code	7500PGSL
Formal Module Title	Sustainable and Lean Principles Within Construction
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
Damian Fearon	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
LJMU Partner Taught

Partner Teaching Institution

Institution Name
International College of Business and Technology

Learning Methods

Learning Method Type	Hours
Lecture	24
Workshop	12

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

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.
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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	Critically evaluate the application of innovative and practical solutions within the construction industry context.
MLO3	Define and use various environmental performance measurement tools.
MLO4	Examine the developments and characteristics of lean-based approaches to managing construction projects.
MLO5	Critically appraise the benefits and barriers to implementing lean in construction project environments.
MLO6	Apply a lean based approach to a specific project management situation.

Module Content

Outline Syllabus

Sustainable development - historical context
Climate change and energy use
Construction waste and industrial ecology
Performance measurement/business process innovation
Lean principles - historical context
Lean based approaches, barriers and benefits
Lean and project management
Lean and green - synthesis

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)	Learning Outcome Mapping
Essay	Case study	100	0	MLO2, MLO3, MLO5, MLO1, MLO6, MLO4