

Approved, 2022.02

Summary Information

| Module Code | 7512ICBTPM | |
|---------------------|---|--|
| 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 |
|---------------------|--------------------------|-----------|
| | | |
| Partner Module Team | | |

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

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 | 22 |
| Workshop | 11 |

Module Offering(s)

| Offering Code | Location | Start Month | Duration |
|---------------|----------|-------------|----------|
| MAY-PAR | PAR | Мау | 12 Weeks |
| 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. |

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 contextClimate change and energy useConstruction waste and industrial ecologyPerformance measurement/business process innovationLean principles - historical contextLean based approaches, barriers and benefitsLean and Project managementLean 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 |
|---------------------|-------------------------------|--------|-----------------------------|--|
| Report | Portfolio Case Study Based | 100 | 0 | MLO6, MLO4, MLO1, MLO5, MLO2, MLO3 |