

**Summary Information**

<b>Module Code</b>	4560NCCG
<b>Formal Module Title</b>	Sustainability in Buildings
<b>Owning School</b>	Civil Engineering and Built Environment
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 4
<b>Grading Schema</b>	40

**Module Contacts**

**Module Leader**

Contact Name	Applies to all offerings	Offerings
Graham Sherwood	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**

<b>LJMU Schools involved in Delivery</b>
LJMU Partner Taught

## Partner Teaching Institution

Institution Name
Nelson and Colne College Group

## Learning Methods

Learning Method Type	Hours
Lecture	48

## Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	28 Weeks

## Aims and Outcomes

<b>Aims</b>	The aim of this module is to support students to gain understanding on how the practices involved in design, construction and operation within the built environment will contribute towards the delivery of sustainable building. On completion of the module the students will have knowledge and skills to undertake sustainable building design underpinned by informed lifecycle thinking of whole construction project cycle, from design, build, operate, maintain and dispose of buildings.
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## Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Evaluate the key principles and practices of sustainable design and construction
MLO2	Appraise the sustainability assessment tools landscape, demonstrating an ability to select the appropriate tool for a particular context
MLO3	Appreciate the potential offered through sustainable management principles and processes, related to the effective coordination of planning, design, materials selection, site management, facilities management and reuse/ demolition of building
MLO4	Discuss and apply key project management methodologies related to development of sustainable building
MLO5	Analyse and discuss best practices of sustainable design and construction

## Module Content

### Outline Syllabus

Introduction to sustainability United Nations Sustainability Development Goals (UN SDGs) Applying sustainability  
Three pillars of sustainability Sustainable agenda – built environment within the imagining future sustainable  
cities Climate change Sustainable design and construction processes Waste management Environmental Law  
Renewable energy and energy efficiency Sustainability assessment, e.g., BREEAM and LEEDS Sustainable  
building materials Energy requirements and the role of resource efficiency in buildings Understanding the  
environment-economy relationship Trade-offs between environmental management and competitiveness

### Module Overview

### Additional Information

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Case Study	50	0	MLO1, MLO2
Report	Report	50	0	MLO4, MLO3, MLO5