

### Summary Information

Module Code	4224BEUG
Formal Module Title	Design and Environmental Procedures
Owning School	Civil Engineering and Built Environment
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

### Teaching Responsibility

LJMU Schools involved in Delivery
Civil Engineering and Built Environment

### Learning Methods

Learning Method Type	Hours
Lecture	18
Tutorial	4
Workshop	22

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

### Aims and Outcomes

Aims	To develop understanding of design and environmental considerations for low-rise building construction and refurbishment. To develop practical skills in producing simple building designs using appropriate software.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Identify and apply the principles of successful design.
MLO2	2	Understand the requirements of building regulations and the impact of regulations and guidance on building design.
MLO3	3	Research and develop sustainable design solutions taking into consideration building performance and energy efficiency.
MLO4	4	Produce simple building designs using appropriate software.

### Module Content

Outline Syllabus	Developments in building design; design concepts and design terminology. Building regulations and design guidance. Internal layouts and features of 'buildability' in terms of safety, cost and quality standards. Environmental factors affecting building design; the indoor environment and energy efficiency; environmental assessment systems for residential construction. Application of scientific principles and concepts such as fluid flow, heat transfer and acoustics to building design. Design and environmental challenges of modification and refurbishment of older buildings. Producing simple building designs; architectural drawing requirements and conventions. Introduction to Revit and presentation of architectural drawings.
Module Overview	This module develops your understanding of design and environmental considerations for low-rise building construction and refurbishment. It develops your practical skills in producing simple building designs using appropriate software.
Additional Information	This module develops understanding of design and environmental considerations for low-rise building construction and refurbishment and develops practical skills in producing simple building designs using appropriate software.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Artefacts	Portfolio	100	0	MLO1, MLO2, MLO4, MLO3

### Module Contacts

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Spencer Kelly	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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