

Liverpool John Moores University

Title: DESIGN AND ENVIRONMENTAL PROCEDURES
Status: Definitive
Code: **4224BEUG** (124919)
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment
Teaching School/Faculty: Civil Engineering and Built Environment

Team	Leader
Spencer Kelly	Y

Academic Level: FHEQ4
Credit Value: 20
Total Delivered Hours: 44
Total Learning Hours: 200
Private Study: 156

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	18
Tutorial	4
Workshop	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Portfolio including building design drawings and justification	100	

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.

Learning Outcomes

After completing the module the student should be able to:

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

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Portfolio	1	2	4	3
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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.

Learning Activities

Lectures, tutorials and workshops

Notes

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.