

Liverpool John Moores University

Title: Sustainable Structure and Fabric
Status: Definitive
Code: **7109BEUG** (120606)
Version Start Date: 01-08-2016

Owning School/Faculty: Built Environment
Teaching School/Faculty: Built Environment

Team	Leader
Fiona Borthwick	Y
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Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 48
Total Learning Hours: 200 **Private Study:** 152

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	48

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report 1		50	
Report	Report 2		50	

Aims

To enable the students to critically analyse and evaluate the various different technologies and materials that can be used within a construction structure using real life projects.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically evaluate alternative technological solutions on a variety of construction projects.
- 2 Critically analyse the use of materials and technology used within alternative construction projects.
- 3 Apply construction management and technology solutions to an industry project considering current industry issues such as sustainability and Building Information Modelling.
- 4 Critically analyse the decision making processes in the selection and use of materials and systems within construction projects.

Learning Outcomes of Assessments

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

Technical Report 1	1	2
Technical Report 2	3	4

Outline Syllabus

Technology and material selection related to superstructure: frames, walls, roofs. internal fixtures and fittings and mechanical and electrical fixings.

Regulatory framework for selection of materials and technology

Sustainability issues including assessment tools, sustainable development and design considerations, renewable technologies.

Current issues that impact on the selection of material and technology including regulatory framework, Building Information Modelling, Lean Construction and Supply Chain.

Learning Activities

Lectures, seminars and workshops. Video's, guest lectures and site visits will be used where possible and appropriate.

Electronic databases should be used to supplement the resources provided as they contain current manufacturer and research organisation information.

Notes

This module will provide the students with an in depth understanding of materials and technology selection and application within construction projects.