

## Liverpool John Moores University

Title: SUSTAINABLE ARCHITECTURAL TECHNOLOGY  
Status: Definitive  
Code: **5215BEUG** (122810)  
Version Start Date: 01-08-2021

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

Team	Leader
Michael Farragher	Y

**Academic Level:** FHEQ5  
**Credit Value:** 20  
**Total Delivered Hours:** 50  
**Total Learning Hours:** 200  
**Private Study:** 150

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	25
Tutorial	10
Workshop	15

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Building control & analysis	40	
Technology	AS2	Sustainable design & specification	60	

### Aims

*To provide knowledge, awareness and application of building regulations, environmental standards and codes of practice appropriate to the discipline of architectural technology*

*To develop understanding of sustainable design, materials and emerging technology*

*in contrasting environments*

*To evaluate the process of specifying materials and components using various sources of information and evaluating their implications with regard to performance, quality and sustainability.*

*To provide the student with appropriate skills to produce a specification to industry standard practice.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Critically analyse statutory regulations and environmental codes of practice, and evaluate how they apply to the design and detailing of buildings, with particular reference to sustainable buildings
- 2 Evaluate the impact of climate change on building design and technology in contrasting environments
- 3 Specify construction works using industry standards and discuss implications for building quality, sustainability and buildability.

## **Learning Outcomes of Assessments**

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

Building Control & Analysis	1	
Design & Specification	2	3

## **Outline Syllabus**

*Statutory Building Regulations, practice and procedures; design & fire safety*

*Environmental standards and codes of practice*

*Inclusive design*

*Climate change and the built environment; an international perspective on sustainable design and technology*

*Emerging sustainable technologies*

*Researching materials and components, with particular reference to sustainable and low carbon technologies*

*Introduction to the National Building Specification for specification of construction works*

*Common Building Defects, remedial measures, preventative measures*

## **Learning Activities**

Lectures and tutorials

IT workshops using NBS software

## **Notes**

This module provides students' with knowledge, awareness and application of statutory controls, environmental design factors and develops understanding of specifying sustainable technologies.