

Liverpool John Moores University

Title: Technology and Practice 2
Status: Definitive
Code: **5131IA** (126737)
Version Start Date: 01-08-2021

Owning School/Faculty: Liverpool School of Art & Design
Teaching School/Faculty: Liverpool School of Art & Design

Team	Leader
Simon Tucker	Y

Academic Level: FHEQ5 **Credit Value:** 20 **Total Delivered Hours:** 37
Total Learning Hours: 200 **Private Study:** 163

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	25
Workshop	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Design Project Technical Report	70	
Essay	AS2	2,000 word practice essay	30	

Aims

The aim of this module is to methodically inform students in the topics of environmental design, structural design, materials choice and properties, Computer Aided Design, and the construction and modification of buildings. The module builds on the broad introduction given at Level 4, by focussing on the technical realisation of buildings through analysis, design, detailing, and site construction and supervision.

Learning Outcomes

After completing the module the student should be able to:

- 1 Outline the proposed project in the context of comparable fields of investigation. (GC4.3)
- 2 Contextualise their project with reference to relevant precepts of sustainability. (GC5.2)
- 3 Articulate succinctly through writing, drawings and diagrams an evaluation of their technological inquiry/ies. (GC8.1 / 9.1)
- 4 Demonstrate understanding of the role of the architectural designer, other professionals and legislation in the procurement of buildings. (GC6.1 / 6.2)
- 5 Describe the key issues in the management of design practice and building projects. (GC11.1 / 11.2 / 11.3)

Learning Outcomes of Assessments

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

Report	1	2	3
Essay	4	5	

Outline Syllabus

Lectures series are presented on the technology of environmental design including energy supply, mechanical systems and building services, and on artificial lighting, and on acoustics. Basic structural mechanics theory is introduced including structural rules of thumb. Additional lectures on the detailed design of structural elements in timber, brick, concrete and steel are included.

A series of construction lectures is given continuing from the lectures in Level 4 and dealing with the 'making' of architecture. The course is structured according to the 'Common Arrangement', to allow a smooth progression into practice. The lectures are intended to aid the technical realisation of work being produced in the design studio.

The module also has a number of Professional Studies lectures. The aim is to introduce students to the framework of professional procedures and legal responsibilities within which architectural designers work in England and Wales. CAD Workshops give students the key skills necessary to represent their design ambitions. The syllabus covers techniques in presentation, architectural drafting, 3d modelling using both CAD and graphics methods, as well as the interface with CAD/CAM and rapid prototyping technology. A range of software is used in the key categories of CAD, BIM, environmental analysis and graphics.

Learning Activities

Lectures and CAD workshops are delivered throughout the semester. The assessment tasks of this module relate directly to design work undertaken in module

5124AR.

Notes

This module supports the design modules, challenging students in the technical aspects of their design development.