

## Liverpool John Moores University

Title: Electrical Engineering Practice 2  
Status: Definitive  
Code: **5306CIT** (125305)  
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering  
Teaching School/Faculty: Changshu Institute of Technology

Team	Leader
Mahamoud Ahmed	Y

**Academic Level:** FHEQ5      **Credit Value:** 20      **Total Delivered Hours:** 32  
**Total Learning Hours:** 200      **Private Study:** 168

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	8
Practical	24

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Project Development	60	
Report	AS2	Individual literature review and project plan	40	

### Aims

*To enable students to develop the skills required to practice as a professional engineer. This module provides a broad range of experiences with an emphasis upon the systematic thinking, planning and execution required of engineers in a modern professional environment. The students will be required to design build and test an electronic product to a given specification. The product will incorporate elements covered elsewhere on the course, including analogue electronics and a*

*programmable device such as a microcontroller.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Design, build and test an electronic product to a given specification.
- 2 Demonstrate a commitment to conduct engineering activities in a professional manner.
- 3 Research a topic, find relevant literature and produce a critical review.
- 4 Demonstrate an awareness of the importance of management in the context of engineering projects. Apply principles of project management to the allocation of tasks and resources.

## **Learning Outcomes of Assessments**

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

Project Development	1	2
Lit Review/project plan	3	4

## **Outline Syllabus**

### *1. Experimental Practice*

- *Complete a set of laboratory experiments*
- *Observation, measurement and recording of experimental results*
- *Data handling*
- *Presenting and reporting of results*

### *2. Professional Development*

- *World of Work: Silver Award*
- *Health & Safety*
- *Ethics*
- *Institutional Code of Conduct*

### *3. Research Methods*

- *Research & Library Skills*
- *Report Writing*
- *Critical Thinking*

### *4. Engineering Management*

- *Project Planning*
- *Project Management*

## **Learning Activities**

Students will be split into two groups and undertake a supervised laboratory sessions every week, lectures and tutorials will take place in each week between lab sessions.

### **Notes**

The professional development portion of the module is assessed on a pass/fail basis. Students must complete the assessment exercises to a satisfactory standard in order to achieve a pass grade in this module.