

### Summary Information

<b>Module Code</b>	4608IYO
<b>Formal Module Title</b>	Professional Practice and the Environment
<b>Owning School</b>	Engineering
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 4
<b>Grading Schema</b>	40

### Module Contacts

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Lonnie Radioff	Yes	N/A

#### Module Team Member

Contact Name	Applies to all offerings	Offerings
Mohamed Kara-Mohamed	Yes	N/A

#### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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### Teaching Responsibility

<b>LJMU Schools involved in Delivery</b>
LJMU Partner Taught

## Partner Teaching Institution

Institution Name
Study Group

## Learning Methods

Learning Method Type	Hours
Lecture	12
Off Site	8
Practical	44
Seminar	2

## Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-PAR	PAR	January	12 Weeks
SEP-PAR	PAR	September	28 Weeks

## Aims and Outcomes

<b>Aims</b>	<p>To enhance knowledge and understanding of electrical and electronic circuits by completing a set of practical experiments;</p> <p>To gain experience in practical design of electronic circuits including prototyping and PCB design and manufacture;</p> <p>To develop professional practical skills;</p> <p>To undertake experimental laboratory work;</p> <p>To analyse and critically evaluate technical issues;</p> <p>To present and document ideas and results;</p> <p>To develop the ability in data manipulation and sorting;</p> <p>To develop a personal development plan and understand the impact that engineering has on the environment.</p>
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## Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Safely carry out a range of basic laboratory procedures using standard processes.

MLO2	Process data collected during an experiment, use CAD tools for design and simulation, and produce a formal written report with conclusions.
MLO3	Demonstrate their commitment to undertake the on-going personal development required to become a professional engineer. Identify and reflect upon the following aspects of personal development: strengths and weaknesses, motivations and values, ability to work with others.
MLO4	Work as a team to gather data analyse the results and discuss the benefits and issues of various renewable energy systems.

## Module Content

### Outline Syllabus

Laboratory and Practical workshop skills, Health, safety and risk assessment, Reading schematic drawings, Use of Instruments and taking measurement  
 Personal Development, Ethical responsibilities, Team working, Introduction to research skills of Professional body requirements  
 Experimental Methods, Report writing, Handling experimental data, Graphical representation, Errors, Analysis of results, and the formulation of conclusions  
 Experimental Practice, Complete a series of experiments, Keeping a logbook to record notes, Measurements and observations, Product prototyping

## Module Overview

### Additional Information

This is a practical module that develops your professional skills.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Portfolio	Fieldwork and Lab Activities	50	0	MLO1, MLO2
Reflection	Personal Development	10	0	MLO3
Presentation	Prototype Product	40	0	MLO4