

Liverpool John Moores University

Title: Engineering Practice 1
Status: Definitive
Code: **4510ENGSBC** (120205)
Version Start Date: 01-08-2016

Owning School/Faculty: Maritime and Mechanical Engineering
Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Russell English	Y

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 96
Total Learning Hours: 200 **Private Study:** 104

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	12
Practical	24
Tutorial	12
Workshop	48

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Workshop Practice	25	
Portfolio	AS2	Personal Development	25	
Portfolio	AS3	Laboratory Logbook	25	
Report	AS4	Formal Laboratory Report	25	

Aims

This module aims to introduce students to a range of standard engineering practices.

Learning Outcomes

After completing the module the student should be able to:

- 1 Safely carry out a range of basic workshop procedures using standard processes.
- 2 Demonstrate their commitment to undertake the on-going personal development required to become a professional engineer.
- 3 Carry out an experimental procedure in a range of different engineering disciplines.
- 4 Process data collected during an experiment, and produce a formal written report with conclusions.

Learning Outcomes of Assessments

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

Workshop Practice	1
Personal Development	2
Laboratory Logbook	3
Formal Laboratory Report	4

Outline Syllabus

The list below provides an indicative list of topics which may be covered in this module:

Workshop

- *Practical workshop skills*
- *Reading engineering drawings*
- *Tolerances & fits*
- *Measurement*

Personal Development

- *Developing Self Awareness (based on LJMU WOW Bronze Award)*
- *Residential Trip*
- *Environmental & ethical responsibilities*
- *Health & safety*
- *Team working*
- *Introduction to research skills*
- *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.*

Learning Activities

Laboratory experiments, tutorials, online tests

Notes

The personal 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.