Liverpool John Moores University

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Title: Engineering Practice 1

Status: Definitive

Code: **4509ENGIYO** (120279)

Version Start Date: 01-08-2016

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

Team	Leader
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Academic Credit Total

Level: FHEQ4 Value: 20 Delivered 96

Hours:

Total Private

Learning 200 Study: 104

Hours:

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	15	
Portfolio	AS3	Laboratory Logbook	25	

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Report	AS4	Formal Laboratory Report	25	
Self	AS5	Bronze WoW Report	10	
Awareness				
Statement				

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

Bronze WoW Award 2

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

- · World of Work: 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.