

# Engineering Practice 1

## Module Information

2022.01, Approved

### Summary Information

Module Code	4106MECH
Formal Module Title	Engineering Practice 1
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

### Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

### Learning Methods

Learning Method Type	Hours
Lecture	16
Practical	84

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	28 Weeks

### Aims and Outcomes

Aims	This module aims to introduce students to a range of general engineering practices and standards.
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**After completing the module the student should be able to:**

## Learning Outcomes

Code	Number	Description
MLO1	1	Create engineering drawings using Computer Aided Design (CAD) software to current British Standards.
MLO2	2	Undertake on-going personal development required to become a professional engineer.
MLO3	3	Carry out experimental procedures in a range of different engineering disciplines, process the data collected, and produce a formal technical report.

## Module Content

Outline Syllabus	<p>Engineering Graphics:• British Standard (BS) for technical product documentation and specification (BS 8888:2011)• Orthographic projections and oblique / isometric drawings• Drawing layouts, sections views and dimensioning• Geometric tolerancing, datums, limits and fits• Generating engineering drawings from 3D CAD models• Reading engineering drawings• Introduction to general engineering components (e.g. shafts, bearings, gears, keyways, fasteners) and associated standards</p> <p>Personal and Professional Development:• Residential field trip• Environmental and ethical responsibilities• Team working• Career planning workshop (Career Smart)• Professional body requirements• Health and safety</p> <p>Experimental Methods and Practice:• Introduction to experimental methods• Performing experiments, keeping a logbook to record notes, measurements and observations• Handling and processing experimental data• Graphical representation• Errors, uncertainty, accuracy and precision• Analysis of results and the formulation of conclusions• Introduction to research skills• Technical report writing</p>
Module Overview	This module aims to introduce you to a range of general engineering practices and standards.
Additional Information	Students must attempt all assessment components and obtain an overall module average of 40 % or above in order to achieve a pass grade in this module.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Engineering Graphics	20	0	MLO1
Centralised Exam	Personal Development	20	0	MLO2
Portfolio	Experimental Methods	60	0	MLO3

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Jack Mullett	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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