

Engineering Practice 1

Module Information

2022.01, Approved

Summary Information

Module Code	4506MECBHG
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
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Beaconhouse Group

Learning Methods

Learning Method Type	Hours
Lecture	16
Practical	84

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	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	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 standardsPersonal and Professional Development:• Field trip / industrial visit• Environmental and ethical responsibilities• Team working• Career planning workshop • Professional body requirements• Health and safetyExperimental 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
Module Overview	
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
Practice	Engineering Graphics	20	0	MLO1
Reflection	Personal Development	20	0	MLO2
Practice	Experimental Methods	60	0	MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Russell English	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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