

# **Engineering Practice 1**

# **Module Information**

2022.01, Approved

## **Summary Information**

Module Code	4506USST
Formal Module Title	Engineering Practice 1
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

#### Teaching Responsibility

JMU Schools involved in Delivery	
JMU Partner Taught	

#### Partner Teaching Institution

Institution Name	
University of Shanghai For Science and Technology	

## **Learning Methods**

Learning Method Type	Hours
Lecture	16
Practical	116

## 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 standard engineering practices.

#### After completing the module the student should be able to:

#### Learning Outcomes

Code	Number	Description
MLO1	1	Test and appraise a range of basic workshop procedures using standard processes including the production and interpretation of CAD drawing.
MLO2	2	Demonstrate commitment to on-going personal development required to become a professional engineer.
MLO3	3	Experiment on a range of different engineering disciplines.
MLO4	4	Analyse, process and interpret data collected during an experimental procedure.

### **Module Content**

Outline Syllabus	The list below provides an indicative list of topics which may be covered in this module:Workshop & Engineering GraphicsWorkshop• Practical workshop skills• Reading engineering drawings• Tolerances & fits• Measurement• Health & safetyEngineering Graphics:This block of the module will provide students with a first course in engineering graphics, and particularly engineering drawing according to current British Standards. Topics will include:• BS 8888:2011 (British Standard for technical product documentation & specification)• Orthographic Projections and Oblique / Isometric drawing• Drawing Layouts, Sections views, Dimensioning• Geometric Tolerancing and Datums, Limits & Fits• Generating Engineering Drawings from 3D CAD models• Introduction to general Engineering Components including Shafts, Bearings, Gears, Keyways, Fasteners, StandardsPersonal Development• World of Work: Bronze Award• Professional body requirementsExperimental Methods and Practice• Introduction to research skills• Report writing• Handling experimental data• Graphical representation• Errors• Analysis of results, and the formulation of conclusions• Complete a series of experiments, keeping a logbook to record notes, measurements and observations.
Module Overview	
Additional Information	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.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	Workshop Practice & CAD	40	0	MLO1
Essay	Formal Laboratory Report/Logbo	40	0	MLO3, MLO4
Reflection	Self Awareness Statement	10	0	MLO2
Reflection	Refective interview	10	0	MLO2

### **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