

MODULE DESCRIPTION FORM



DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

16130 INTRODUCTION TO ENGINEERING

Module Registrar: Prof Donald Mackenzie d.mackenzie@strath.ac.uk	Taught To (Course): Cohorts for whom class is elective		
Other Lecturers Involved: Dr Ioannis Kokkinakis	Credit Weighting: 10	Semester: 2	
Assumed Prerequisites: None	Elective class	Academic Level: 1	Suitable for Exchange: Y

Module Format and Delivery (HOURS i.e. 1 credit = 10hrs of study):

Lecture	Tutorial	Laboratory	Groupwork	External	Online	Project	Assignments	Private Study	Total
20							40	40	100

Educational Aim

This module aims to develop students' wider understanding of engineering as a wealth-creating activity and the role of the professional engineer in industry and society.

Learning Outcomes

On completion of the module the student is expected to be able to

LO1 Understand the nature of engineering as an activity, including basic science and engineering concepts involved in modern engineering practice.

LO2 Appreciate the wide range of activities undertaken by professional engineers, understand the contribution of engineers to wealth generation and understand the ethical requirements placed upon them.

Syllabus

The module will teach the following:

- Overview of engineering and engineering disciplines
- Engineering, science and technology
- Engineering materials and design
- Energy, efficiency and sustainability
- Engineering ethics
- Social / ecological/environmental aspects
- Industry case studies

Assessment of Learning Outcomes

Criteria

For each of the Module Learning Outcomes the following criteria will be used to make judgements on student learning:

LO1
C1 Demonstrate understanding of how fundamental science and engineering concepts underpin modern engineering practice with reference to specific applications from the syllabus.

LO2
C1 Ability to describe and critically discuss the role of the engineer in society with reference to technical, societal and economic impact in a clear and concise manner.

The standards set for each criterion per Module Learning Outcome to achieve a pass grade are indicated on the assessment sheet for all assessment.

Principles of Assessment and Feedback

(within Assessment and Feedback Policy at: <https://www.strath.ac.uk/staff/policies/academic/>)

Marked coursework with individual written feedback will be returned to students 3 weeks after the submission date.

Individual students requiring further feedback may arrange a personal meeting with the lecturer.

Assessment Method(s) Including Percentage Breakdown and Duration of Exams

Examination				Coursework		Practical		Project	
Number	Month(s)	Duration	Weighting	Number	Weighting	Number	Weighting	Number	Weighting
				2	100% (50% each)				
*				* LO1, LO2		*		*	

* **L/Os:** Indicate which Learning Outcomes (L01, L02, etc) are to be assessed by exam/coursework/practical/project as required.

NOTE:

Students must attend a minimum of 14 (of 20) lectures. This is a course requirement. Students not meeting this requirement will not qualify for the first assessment of the class and will be recorded as being "Not Qualified" (equivalent to fail with numerical mark of zero). Students failing to meet the attendance requirement will be eligible to sit the resit examination.

Coursework / Submissions deadlines (academic weeks):

Week 5, Week 10

Resit Assessment Procedures:

2 hr examination in August diet

PLEASE NOTE:

Students must gain a summative mark of 40% to pass the module. Students who fail the module at the first attempt will be re-assessed during the August diet. This re-assessment will consist entirely of exam. No marks from any previous attempts will be transferred to a new resit attempt.

Recommended Reading

No set texts used or recommended.

Additional Student Feedback

(Please specify details of when additional feedback will be provided)

Date	Time	Room No

Session: 2020/21

Approved:

Course Director Signature: Dr Stuart Grey

Date of Last Modifications: 10 September 2020

MODULE TIMETABLE

Module Code:

16130

Module Title:

Introduction to Engineering

Brief Description of Assessment:

2 Individual articles/reports (1,200 words) addressing specific course topics.

Assessment Timing:-

Indicate on the table below the start/submission dates for each assignment/project and the timing of each exam/assessment using the dropdowns provided. Dropdowns can be left blank. Add extra notes below the dropdowns.

Please note: Timings can and will change, this should only be used as a guide.

Semester One	W&D Wk	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	Exam Period
	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.

Semester Two	C&D Wk	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	Exam Period
	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Course work Set	Choose an item. Choose an item.	Course work Submit	Choose an item. Choose an item.	Choose an item. Choose an item.	Course work Set	Choose an item. Choose an item.	Course work Submit	Choose an item. Choose an item.