

Module Information

2022.02, Approved

Summary Information

Module Code	3101FNDET
Formal Module Title	Engineering and Technology Practice
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 3
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

Learning Methods

Learning Method Type	Hours
Practical	33
Workshop	33

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 develop the practical skills of students by applying what they learn in their mathematics and physics modules. It will provide an experience of experimental planning, execution and report writing, as well as activities aimed at developing problem solving skills. It also embeds the study skills which are required for students to become effective and independent learners.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Answer questions on a laboratory exercise which they have planned and executed
MLO2	2	Research a topic in engineering or technology, and write a properly referenced report on their findings
MLO3	3	Apply principles of mathematics and science to solve a problem in an engineering and technology context
MLO4	4	Demonstrate that they have the academic skills required to be an effective and independent learner in a higher education environment.

Module Content

Outline Syllabus	The list below provides an indicative list of topics which may be covered in this module: Study Skills• Read effectively and identify appropriate resources to study topical engineering problems• Identify their study needs and plan their study effectively• Work effectively in a group• Present information in an appropriate style Experimental Measurement• Random and systematic errors in measurements• Precision, repeatability, resolution and accuracy of measurements• Uncertainty in measurement• Representing uncertainty 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.
Module Overview	This module aims to develop your practical skills by applying what you learn in your mathematics and physics modules. It will provide an experience of experimental planning, execution and report writing, as well as activities aimed at developing problem solving skills.
Additional Information	This year long module supports students in developing the academic and experimental skills needed to become effective and independent learners. It included regular contact with personal tutors, encouraging a smooth transition into Higher Education.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Portfolio	Academic Skills	50	0	MLO2, MLO4
Portfolio	Practical Skills	50	0	MLO1, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Michael Stringfellow	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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