Module Proforma

Approved, 2022.02

Summary Information

Module Code	3518IFESG
Formal Module Title	Applied Mathematics 1
Owning School	Engineering
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 3
Grading Schema	40

Module Contacts

Module Leader

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

Module Team Member

Contact Name	Applies to all offerings	Offerings

Partner Module Team

Contact Name	Applies to all offerings	Offerings

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Study Group

Learning Methods

Learning Method Type	Hours
Lecture	13
Seminar	26

Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-PAR	PAR	January	12 Weeks
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

Aims	To introduce students to the principles of Applied Mathematics and to give students the grounding necessary to progress to an Engineering degree programme.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Identify the appropriate functions, physical quantities and units involved in the mathematical description of a problem.
MLO2	Produce mathematical formulations and plots of vector quantities as well as calculate sums and products involving two or more different vectors.
MLO3	Predict the effects of forces on particles and the effect of moments on simple three-dimensional objects as a result of Newton’s laws of motion.

Module Content

Outline Syllabus
Basic mathematical concepts:- Working with physical quantities, units and significant figures- Introduction to trigonometric functions- Vectors: Mathematical and graphical representationsForces and Moments- Newton's laws of motion- Moments of forces"

Module Overview

Additional Information
None

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Exam	Examination	100	1.5	MLO1, MLO2, MLO3