

**Summary Information**

<b>Module Code</b>	3525IFESG
<b>Formal Module Title</b>	Physics 1
<b>Owning School</b>	Engineering
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 3
<b>Grading Schema</b>	40

**Module Contacts**
**Module Leader**

Contact Name	Applies to all offerings	Offerings
Lonnie Radioff	Yes	N/A

**Module Team Member**

Contact Name	Applies to all offerings	Offerings
Mohamed Kara-Mohamed	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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**Teaching Responsibility**

<b>LJMU Schools involved in Delivery</b>
LJMU Partner Taught

## Partner Teaching Institution

Institution Name
Study Group

## Learning Methods

Learning Method Type	Hours
Lecture	26
Seminar	39

## Module Offering(s)

Offering Code	Location	Start Month	Duration
APR-PAR	PAR	April	12 Weeks
SEP-PAR	PAR	September	12 Weeks

## Aims and Outcomes

<b>Aims</b>	To provide students with the necessary knowledge and understanding of the principles of oscillations, waves, atomic structure and data analysis for progression onto undergraduate engineering courses. To provide students with the necessary knowledge and understanding of the principles of electricity, waves, atomic structure for progression onto undergraduate engineering courses.
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## Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Demonstrate an understanding of the theoretical concepts of Electricity, Materials, Waves and Atomic Physics.
MLO2	Solve basic problems associated with Electricity, Materials, Waves and Atomic Physics.
MLO3	Demonstrate an understanding of the practical concepts of Electricity, Materials, Waves and Atomic Physics through simple experiments.

## Module Content

### Outline Syllabus

Waves: Including Properties, reflection and refraction, electromagnetic waves, interference and the photoelectric effect. Atomic Physics: Including properties of the nucleus and radiation. Materials: Understand the properties of metals, polymers, ceramics and composite materials Electricity: Understand Ohms' Law, Current and Potential difference, as well as resistivity and solve problems involving resistance of conductors. They will also Learn and apply Kirchhoff's Laws.

### Module Overview

### Additional Information

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Exam	Examination	60	1.5	MLO1, MLO2
Presentation	Experiments	40	0	MLO3