

# Physics

A-Level

Exam Board: **OCR** 



## ENTRY REQUIREMENTS

**7+**

in GCSE  
Biology

or

**7-7+**

In Combined  
Science

**6+**

in GCSE  
Maths and  
English

## SUBJECT OVERVIEW

Physics explores fundamental questions about the material world through observation and experimentation, such as "How did the universe begin?" and "Where does lightning come from?". A-level Physics offers excellent career opportunities and is essential, alongside Mathematics, for degree courses in Physics and Engineering. Even outside physics-related fields, it develops problem-solving skills valued by top universities and employers.

Understanding Physics requires a solid grasp of Mathematics, so studying both subjects together is highly recommended. Practical work is key for understanding relationships between physical quantities, while strong written communication skills are necessary for reporting experiments and answering exam questions.

### TOPICS/UNITS/MODULES

Development of practical skills

Foundations in Physics

Motion and Materials

Electrons, waves and photons

Newtonian world and astrophysics

Particles and medical physics

### Skills Learnt

- Critical thinking
- Data Analysis and interpretation
- Research Skills
- Scientific Literacy
- Ethical awareness
- Technical skills
- Problem Solving

## EXAMINATION/ASSESSMENT


**37%**

**37%**

**26%**

 Paper 1: Modelling physics

 Paper 2: Exploring physics

 Paper 3: Unified Physics

## Careers

- Engineer
- Physicist
- Data analyst
- Mathematical Modeller
- Research Scientist
- Astronomer
- Renewable Energy consultant
- Patent examiner
- Project Manager in Technology and engineering