

Physics

Why study Physics?

Physics is for *everyone*. It helps us to understand the world we live in, from the tiniest particles to the vastness of space. It powers the incredible technology that shapes our lives.

Want to help fight climate change? Physics is behind green energy and sustainable innovation.

Interested in medicine? Physics is at the heart of life-saving technologies, such as MRI scanners and radiotherapy.

Fancy yourself as an engineer? Physics provides the knowledge to create safe, efficient structures and machines.

But you don't have to aspire to work in a science field to study GCSE Physics. You may just be curious about everyday things - like how noise-cancelling headphones work, why some clothes keep you warmer than others despite being thinner or how your mobile phone connects you to friends around the world.

Whether you dream of a career in science or just want to satisfy your curiosity, GCSE Physics gives you the answers and the power to ask even better questions. The world *needs physicists* with fresh perspectives who challenge outdated assumptions and help shape the future.

What does the course involve?

You will have started the study of GCSE Physics in Year 9 with the introductory topics of static electricity, conduction, radioactivity, astrophysics, and the electromagnetic spectrum.

In Years 10 and 11, you will go on to study those topics in more detail, in addition to:

- Forces and Motion
- Electricity and Electromagnetism
- Energy and Power
- Waves and Light
- Matter and the Universe

How is the course assessed?

The Pearson Edexcel International GCSE in Physics is a linear qualification. Two written examinations are taken at the end of the course of study. Both papers comprise a mixture of different question styles, including multiple-choice questions, short-answer questions, calculations and extended open-response questions.

Paper 1 (2 hours) is worth approximately 60% of the overall marks.

Paper 2 (1 hour 15 minutes) is worth approximately 40% of the total marks.

What can a GCSE in Physics lead to?

GCSE Physics is a prerequisite for anyone planning to deepen their knowledge through A Level Physics. However, studying GCSE Physics also provides a strong foundation for A Levels in overlapping subjects, such as Chemistry, Biology, Geography, and Mathematics.

A qualification in Physics is highly respected by universities and employers across a range of industries, because those who study it demonstrate strong analytical skills and problem-solving abilities.

While a firm grounding in GCSE Physics benefits most careers, it is especially valuable in fields like medicine, environmental and Earth sciences, renewable energy, engineering, forensic science, communication technology, science journalism and various physics-related specialisms including lasers, astrophysics, and quantum computing.

What skills does the Physics course develop?

Studying Physics helps improve transferable skills like problem-solving, analysis, numeracy and communication, alongside valuable qualities like resilience and the determination to overcome challenges.

“Studying Physics is interesting because it helps you understand how everything works in real life, not just in theory. We learn through practicals and demonstrations which make ideas much easier to understand. The teachers are always available and willing to support you if you get stuck.”

At a Glance

Exam Board

Pearson Edexcel International GCSE

Assessment Type

The course is assessed by two exams:

Exam 1: 2-hours (60%)

Exam 2: 1-hour 15 minutes (40%)

Head of Department

Ms S Wilson