# KS5 GCE Physics

## What will I learn?

Physics is a challenging and rewarding subject with the ambition to understand the fundamental behaviour of matter in terms of its properties and behaviour. Through the study of this course, students will explore classical mechanics, thermodynamics, electromagnetism, waves and quantum mechanics.

The OCR Physics A specification is designed to inspire learners. The course will develop interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with Physics. Content is split into six teaching modules:

- Module 1: Development of practical skills in Physics
- Module 2: Foundations of Physics
- Module 3: Forces and Motion
- Module 4: Electrons, Waves and Photons
- Module 5: Newtonian world and Astrophysics
- Module 6: Particles and Medical Physics

## How will I be assessed?

- Paper 1 assesses content from Modules 1, 2, 3 and 5.
- Paper 2 assesses content from Modules 1, 2, 4 and 6.
- Paper 3 assesses content from Modules 1 to 6.
- Practical endorsement.
- Paper 1: Modelling Physics is a 135 minute paper; is worth 37% and comprises two sections. Section A is a 15 mark multiple choice paper and Section B is an 85 mark paper composed of structured questions.
- Paper 2: Exploring Physics is a 135 minute paper; is worth 37% and comprises two sections. Section A is a 15 mark multiple choice paper and Section B is an 85 mark paper composed of structured questions.
- Paper 3: Unified Physics is a 90 minute paper; is worth 26% and is a single 70 mark paper.

## What are the entry requirements?

English GCSE at grade 5 or above.

Maths GCSE at grade 6 or above.

Combined Science GCSE or Physics GCSE at grade 6 or above.

Students must also be studying A level Mathematics.

## What are the costs?

There are no mandatory costs to study Physics. The textbook is freely available online as are all of the resources used in lessons.

## The demands of the course

This course requires students to consistently work hard, complete classwork, homework, independent study and practise past paper questions. Furthermore, students studying Physics must also study A level Mathematics as there are many concepts in Physics (such as simple harmonic motion) that are easier to understand with the aid of mathematics and calculus. In addition, any further study in Physics beyond A level will require students to have studied A level Mathematics.

## Future opportunities

Physics is a versatile subject that allows students to access many areas of future study and professions. In addition to the study of Physics, students could go on to study and then work in fields such as engineering, mathematics, computer science, economics, finance and many more!