# **Physics**

#### Course overview

How does the universe work? What is everything made of? How do matter and the fundamental forces behave? If you are interested in these questions then Physics is the course for you. This is a gateway course for careers as varied as architecture, engineering and medicine, telecommunications and sound engineer.

The AQA A-Level course covers all of topics central to an understanding of physics, and a grounding for further education. These range from classical mechanics, electricity, waves, and radioactivity, to particle physics and quantum theory. In the second year, students will choose an area of study which includes astrophysics, engineering, electronics and medical physics. They will also learn essential research and practical skills.

# **Exam / Coursework**

The course consists of 8 core units:

- 1: Measurements and their errors
- 2: Particles and radiation
- 3: Waves & optics
- 4: Mechanics and materials
- 5: Electricity
- 6: Further mechanics and thermal physics

- 7: Fields and their consequences
- 8: Nuclear physics

The A-Level course is examined by three papers of 2 hours, assessing units 1-8, the optional unit, and written practical skills.

There is also ongoing practical assessment, which results in a standalone "pass/fail" qualification, in addition to the A-Level.

### **Qualification gained**

A-Level in Physics AQA - www.aqa.org.uk

# **Entry requirements**

5 x 4-9 grades at GCSE including 2 x 6 grades in combined science or physics and one other science and a 6 grade in maths.

#### **Career opportunities**

Ranging from scientific careers, such as astrophysicist and nuclear physicist, to related disciplines such as energy management and electrical / mechanical engineering, to more tangential careers such as lawyer and surgeon.

"Hove Park Sixth Form teachers cater to students" individual needs; they understand that education doesn't come in a one size fits all. "

First Year Student