# Physics

# **General Course Information**

What falls fastest: a bowling ball, cat or an apple? How did the Universe begin? Does lightning travel up or down? In A-level physics we ask questions of what we find around us. The discovery of why, what and how things work, as well looking at the biggest questions in the universe. The lessons are about exploration and are student-led, creating independent learners who question the world around them.

### How is the course assessed?

We follow the AQA Physics syllabus A (7408): details can be found on the AQA website <u>www.aqa.org.uk.</u>

The content is as follows:

#### Year 12

- 1. Measurement and their errors
- 2. Particles and radiation
- 3. Waves
- 4. Mechanics and materials

#### 5. Electricity

# Year13

- 6. Further mechanics and thermal physics.
- 7. Fields
- 8. Nuclear physics
- 9. Astrophysics

The full A-level qualification has three terminal examinations which will cover the content of the whole two-year course and assess the twelve required practical's. In order to progress to A-level Physics, you must achieve a grade 6-6 or higher in GCSE Combined Science: Trilogy (Double).

Practical assessment will be covered by maintaining a lab book of the required experimental tasks. A complete lab book is a requirement of passing the practical skills assessment. The theory of practical skills and data analysis is assessed within the examinations.

# Who's it for?

What do I need to start a Physics AS level course?

- Enthusiasm!
- At least 5 GCSE's grade 4 or higher, including English Language at Grade 5 and Mathematics at a Grade 6.
- Grade GCSE Combined Science: Trilogy (Double)
- Grade 6 in Physics GCSE and 6-6 in the other two sciences
- Choosing Mathematics at A-level as well is strongly advised.

There is overlap between Physics and the other sciences, especially Chemistry. There are also obvious links with Mathematics, and it is strongly advised students take this course in addition to their Physics studies. However, we will be happy for students to take Physics out of pure interest, yet this could limit progress in some areas of the course.

#### Progression

Physics A-level is one of the most well-respected qualifications available to you providing a wide range of problem solving skills. Therefore, this course will help you in almost all career choices.

Physics is usually required for University courses in any engineering discipline, Electronics, Ophthalmic, Telecommunication's and Medical physics.

Physics is of great value when applying for many other courses, including ICT based subjects, Medicine and related subjects, Architecture, Industry design and any other subject with scientific or technical elements. Law and other subjects which demand high thinking and problem solving skills.

# A - Level AQA

