

## AS/A2 Physics



“If I have seen further than others, it is by standing upon the shoulders of giants”

*Isaac Newton*

### **What is the course about?**

Physics is the study of forces and why they cause everything to happen; we study a range of topics from giant stars to the smallest particle. You will learn how to solve problems and to think outside the box.

### **What sort of work will I be doing?**

Physics is a mixture of a practical subject and theoretical subject, you will need to carry out experiments with precision and try to understand the reason for the outcome. You will learn about the infinitesimally large as in the universe and the unimaginably small as the tiniest particle.

#### AS level

Mechanics  
Electrons, Waves and Photons  
Practical Skills in Physics

#### A2 level

Newtonian World  
Fields, Particles and Frontiers of Physics  
Practical Skills in Physics 2

### **What qualifications are needed to take this course?**

You will need a minimum of 5 A\* - C grades in 5 different subjects including English as students will need to be able to communicate effectively and research information from a variety of sources and also be able to handle and interpret data. A B grade or above in Maths is necessary.

Students who have studied Additional Science or the Triple Sciences are suitable candidates for A -Level Physics. It is expected that students will have achieved a Grade B or above in Additional Science (taken at the Higher Tier) or at least a B grade in the chosen discipline for Triple Science

### **What do the students say?**

“Physics lets you explore the universe – how great is that!”

### **Progression and Career Opportunities**

Physics is such an important subject today. Understanding Physics is important in all kinds of careers from being a fighter pilot to working to design apps for phones and games for consoles and PC's. Physics is a course that opens a lot of options when applying to university as it is seen as a rigorous academic qualification. You can find further information by searching for careers using physics on the web and sites such as *Physics.org*.

### **Text books and Revision Guides**

Essential AS Physics for OCR Author: Jim Breithaupt Nelson Thornes  
Essential A2 Physics for OCR Author: Jim Breithaupt Nelson Thornes  
Revise AS Physics for OCR Author: David Sang Heinemann