



## Course Requirements

Sixth Form Entry Requirement  
GCSE Physics – Grade 6 plus one  
other Science Grade 6  
or  
GCSE Combined Science Grade 66

Essential Additional Requirement:  
GCSE Mathematics Grade 6

**Syllabus**  
AQA

**Who to Contact**  
Mr L English  
Course Leader

## Overview

This course gives students the opportunity to develop their existing knowledge and understanding of Physics acquired at GCSE. Students will develop their understanding of familiar topics as well as being introduced to new concepts.

During Year 12, students will study familiar topics such as forces, motion, energy, waves and electricity, as well as being introduced to particle physics.

In Year 13, there is further work on mechanics as well as major studies on fields and nuclear physics. Students study "Turning Points in Physics" which links key concepts in Physics with their historical significance.

Throughout the Physics course, students follow a practical skills course which enables them to develop their laboratory skills. Assessment of skills takes place throughout the course as well as in the final written examinations.

Physical concepts, models and processes are often explained more fully using Mathematics. It is highly recommended that you also study A Level Mathematics in order to support your learning on the Physics course.

You will be examined at the end of the 2 year course.

## Structure

**Year 1** (Examined by 2 x 90 minute Mock examinations)

Topics include:

- Measurements and their errors
- Particles and radiation
- Waves
- Mechanics and materials
- Electricity

### A-Level

Topics (examined by 3 x 2 hour written examinations)

The exams assess the Year 12 - 1st year material (above) as well as the Year 13 topics shown below.

- Further mechanics and thermal physics
- Fields and their consequences
- Nuclear Physics
- Turning Points in Physics

## You

You should enjoy solving problems by practical and mathematical means. Those students who succeed well at this level tend to have a natural interest in the many applications of Physics in everyday life and are prepared to support this with rigorous study.

You will be given pre-session tasks to complete at the start of each fortnight, as well as follow up homework questions. However, as with any course at this level, background reading is essential.