

## Course Level

A Level

## Awarding Body

AQA

## Entry Requirements

2 Grade 6's in GCSE Double Science or Triple Science including Physics and Maths

## Assessment

100% externally examined modules, including 15% of the total A level marks will be for practical knowledge and understanding.

The A Level consists of three written 120 minute papers assessing all content from both years of teaching.

## Course Description

This course will try to give students the skills and understanding to determine the way Physics affects everyday life by applying concepts into real life situations such as: car crashes, temperature probes and timekeeping.

In addition, a GCE in Physics allows students to develop a range of highly desirable skills requested by both employers and universities. For instance, a successful GCE level Physicist will be an effective problem-solver using a wide range of maths based calculation methods as well as applying methodical practical skills to a problem. Students will learn to use fundamental principles of Physics to explain more complex real life phenomena. They will also learn to communicate these ideas efficiently both orally and with the written word. Handling data will be a key part of their work, allowing them to demonstrate information retrieval skills as well as the use of numeracy and IT. Students will build up a range of practical skills that require creativity and accuracy as well as developing a firm understanding of health and safety issues. As students become more skilled they will take responsibility for selecting appropriate qualitative and quantitative methods, recording their observations and findings accurately and precisely as well as critically analysing and evaluating the methodology, results and impact of their own and others' experimental and investigative activities. The course also includes an option topic of Astrophysics which allows students to learn about the stars and the universe in depth as part of the A level course.

### Where can the study of Physics at A level take students?

Whilst many job opportunities specifically using Physics require higher qualifications, the mathematical and problem solving skills used in Physics can benefit a huge range of jobs. Many employers view success at A Level Physics as a clear indication of sound academic ability.

UK Higher Education institutions currently offer many courses where Physics is the primary subject. Often these courses can include an additional year's study, either in industry or at a university abroad. Some courses can include study in other related areas. Examples include:

- Physics with Astrophysics
- Physics with Biophysics
- Physics with Audio and Optical Physics
- Medical Physics
- Astronomy

In addition a large number of other courses either specifically require or find it desirable to have a A Level in Physics. These include courses that cover all fields of Engineering, Mathematics and Architecture.

### Is this the right subject for me?

To be suitable you need to:

- Have an interest in, and a love of Physics
- Want to find out about how things work in the real world
- Enjoy applying your mind to solving complex problems
- Have gained two Grade B's in GCSE Double Science or Triple Science including Physics
- Be a confident mathematician with an excellent understanding of GCSE Maths

### What does Birchwood do to support you?

The A level course is very practical and students will spend a lot of time in labs developing their practical skills in a structured way. The teaching staff provide help as required both in person and by email or even using collaborative tools on line.

### Link to syllabus

<http://www.aqa.org.uk/subjects/science/as-and-a-level/physics-7407-7408>