

## Physics

### Course Details

Physicists explore the fundamental nature of almost everything. They probe the further reaches of the earth to study the smallest pieces of matter.

When you study Physics you enter a world deep beneath the surface of normal human experience.

### Topics for Study and Assessment

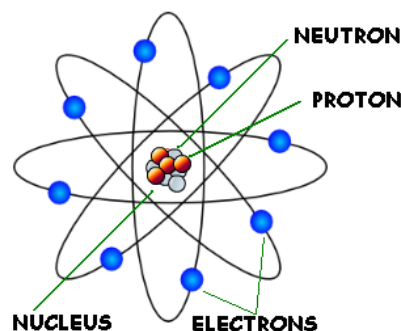
A-level Physics lasts two years, with exams at the end of the second year.

First year	Second year
<ul style="list-style-type: none"> <li>• Measurements and their errors</li> <li>• Particles and radiation</li> <li>• Waves</li> <li>• Mechanics and materials</li> <li>• Electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Further mechanics and thermal Physics</li> <li>• Fields and their consequences</li> <li>• Nuclear Physics</li> <li>• Astrophysics</li> </ul>

Physics is a practical subject. Throughout the course you will carry out practical activities including:

- Investigating interference and diffraction of laser light
- Measuring acceleration due to gravity
- Investigating oscillating systems
- Investigating the links between temperature, volume and pressure
- Safe use of ionising radiation
- Investigating magnetic fields

These practicals will give you the skills and confidence needed to investigate the way things behave and work. It will ensure you are equipped to carry out successful experiments in a Physics degree.



There is no coursework on this course; however your performance during practical sessions will be assessed.

Assessment is by three written papers taken at the end of Year 2:

Paper 1 - 2 hours - 34% of A-level

Paper 2 - 2 hours - 34% of A-level

Paper 3 - 2 hours - 32% of A-level

## Background Requirements

The specification stipulates a minimum B grade in GCSE Additional Science, and you will need to be extremely competent in Mathematics (grade B in GCSE). Written communication is also important so you'll need to be a strong writer.

## Future Career Prospects

According to [bestcourse4me.com](http://bestcourse4me.com), the top seven degree courses taken by students with A-level Physics are:

- Mathematics
- Physics
- Mechanical Engineering
- Computer Science
- Civil engineering
- Economics
- Business

Studying A-level Physics offers an infinite number of amazing career opportunities including: geophysicist/field seismologist; healthcare scientist, medical Physics; higher education lecturer; radiation protection practitioner; research scientist (physical sciences); scientific laboratory technician; secondary school teacher; meteorologist; operational researcher; patent attorney; product/process development scientist; systems developer; technical author. You can also move into engineering, astrophysics, chemical Physics, nanotechnology and more, the opportunities are endless.

## For More Information

Students interested in following the A Level Physics course, should contact the Coordinator of Learning or the Head of Department.

### Subject Staff

Ms D Woodland BSc (Hons)

Mr M Dunn BEng (Hons)

### Head of Department

Miss L Forster BSc (Hons), MSc

### Syllabus

Physics

*Specification Code: 7404/7408*

### Exam Board

AQA

### Website

Further details of this course can be found on the exam boards' website.

[www.aqa.org.uk](http://www.aqa.org.uk)