

Physics

Course Details

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

When you study Physics, you enter a world deep beneath the surface of normal human experience. The course is designed to ensure that the subject content is relevant to real world experiences.

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">• Measurements and errors• Particles and radiation• Waves and optics• Mechanics• Materials• Electricity•	<ul style="list-style-type: none">• Further mechanics• Thermal physics• Fields and their consequences• Nuclear physics• Astrophysics

Physics is fundamentally an experimental subject. Throughout the course there are numerous opportunities to carry out practical work 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 practical sessions will give you the skills and confidence needed to investigate the way things behave and work. It will ensure you are prepared to conduct successful experiments in a Physics degree.



There is no coursework requirement; however, your performance during practical sessions will be assessed through a laboratory book.

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

Paper One - 2 hours - 34% of A-level
Paper Two - 2 hours - 34% of A-level
Paper Three - 2 hours - 32% of A-level

Background requirements

The specification stipulates a minimum of grade 6 in GCSE Science, and you will need to be extremely competent in Mathematics (grade 6 in GCSE). Written communication is also important, so you will need to be a strong writer.

Future career prospects

According to 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 either Ms Woodland, Mr Hickman, or Miss Forster.

Subject Staff

Ms D Woodland BSc (Hons)

Mr T Hickman BSc

Head of Department

Miss L Forster BSc (Hons), MSc

Syllabus

Physics

Specification Code: 7408

Exam Board

AQA

Website

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

www.aqa.org.uk