

Physics

Examination Board: AQA

Qualification: A level

Teacher Contact: Mr Richardson and Mr Reeves

Entry Requirements: A grade 6 in Mathematics and at least a 6 in GCSE Physics or 6-6 Science.

What will I study and how will I be assessed?

The first year course is comprised of the following topics:

Measurements and their errors

Particles and radiation

Waves

Mechanics and materials

Electricity

The first year course is assessed in two papers of 1 1/2-hours, each contributing 50% of the grade and involving questions from any of the five topics. Students must also take part in six practical investigations to develop their skills and understanding of experimentation.

The second year course is comprised of the five Year 1 topics, plus:

Further mechanics and thermal physics

Fields and their consequences

Nuclear physics.

and one additional topic from the following options:

Astrophysics

Medical physics

Engineering physics

Turning points in physics

Electronics.

A level Physics is assessed in three 2-hour exams. Papers 1 and 2 have content from topics 1 to 6 and 6 to 8 respectively. Paper 3 has questions on practical experiments, data analysis and questions on the optional topic. Students take part in 12 practical investigations to develop their skills and understanding of experimentation.

Am I suited to this course?

You would be well-suited to studying A level Physics if you:

- have enjoyed studying Science at GCSE level
- have a good mathematical ability and an eye for detail
- enjoy conducting experiments
- can think logically and apply knowledge to unfamiliar situations
- are willing to persevere with new concepts and to work hard throughout the course
- enjoy a challenge!

What other subjects does it complement?

Physics combines well with other Science subjects, Mathematics and Psychology. Combining Physics with Languages or Business Studies adds breadth for students considering degree courses such as Law. To assist the study of Physics, it is recommended that you also study Mathematics at A level, but it is not essential.

Where can it lead?

Physics leads to a wide range of courses and careers. These include Engineering, Medicine, Veterinary Science, Astrophysics, Computing and Mathematics, Radiography, Materials Science and Physics itself. Physics is also suitable for combined Arts Science degrees or other subjects such as Physics and French, Philosophy and Law. Physics is held in extremely high regard by employers and higher education institutions as it is a highly academic subject.