

Course Overview:

The A Level Physics course covers a broad range of content from traditional Newtonian Physics, including forces and motion, through to modern physics including nuclear and particle physics. In year 2, the course includes the study of Engineering Physics, which is one of the optional units available. This has led to a number of students going on to pursue engineering careers in places such as aerospace and automotive engineering and the armed forces. Students will develop practical skills through regular practical activities and work towards obtaining a practical endorsement alongside their A Level, which is becoming a requirement from universities to study sciences.

The topics that we study are:

Particles and radiation

Waves

Mechanics and materials

Electricity

Further mechanics and thermal physics

Fields and their consequences

Nuclear physics

Engineering physics

AQA A Level Physics builds upon knowledge from GCSE Physics and Combined Science. The course includes a high level of mathematical demand, so students should be confident in maths and often find that A Level Physics and A Level Maths complement each other well.

Works well with:

- Sciences
- Mathematics
- Physical Education
- Computer Science

Progression Opportunities:

Possible career options with A-level physics include food scientist, climatologist, radiographer, ergonomics expert, medical physicist, geophysicist, chemist, oceanography, naval architect, audio technician and orthoptist, to name but a few. There are a huge range of careers where A-level physics is highly desirable, not to mention the engineering possibilities, such as flight, design, mining, medical, electrical/electronic, mechanical, aeronautical and agricultural