Physics A Level



Exam Board: AQA

Why A Level Physics?

Physics is an exploration of rules describing the behaviour of matter and energy on every scale – from the interaction of subatomic particles such as quarks, to the motion of objects, to the evolution of stars, galaxies and the universe. Discoveries and inventions have transformed our lives, fuelling the modern technological revolution. In physics, the sky is certainly not the limit: the potential is limitless!

Thinking and Life Skills you will develop:

- Problem-solving and logical reasoning skills presented in a coherent way
- Proficiency with technical equipment to test ideas and theories, including IT
- Producing reports according to scientific conventions requiring data handling and processing
- Applying knowledge and understanding to areas of investigation
- Researching areas of interest.

Entry requirements:

Minimum grade 6 in the Physics paper for GCSE Combined Science or Triple Science Physics.

Grade 7 in GCSE Mathematics due to high maths content and grade 6 in English Language.

What will you study?

Mechanics (Newtonian laws), materials and waves, electrons and photons, particles, quantum phenomena, electricity and astrophysics or engineering physics. Data handling, use of formulae and numerical relationships.

University degrees that require or often prefer Physics include:

Physics, Mathematics, Engineering, Chemistry, Environmental Science, Optometry, Geology, Materials Science, Medicine, Veterinary Science, Dentistry, Physiotherapy and Computing.

Possible careers:

Directly related: All forms of engineering: civil, mechanical, electrical, aeronautical, satellite, sound, nuclear ..., therapeutic or diagnostic radiologist, medical physicist, research scientist, geophysicist, nanotechnologist – the list is very long.

Further afield: Meteorologist, product development scientist, technical author, defence industry, manufacturing, business management.

