



Physics

Why study Physics?

Physics will allow you to develop your understanding of the world, whether it is the fundamental phenomena of the smallest imaginable particles, the wonder and vastness of the universe at large or the everyday behaviour that happens around us. You will begin to see the links between these seemingly unconnected scales and explore these regions in greater depth and complexity. You will also gain a greater knowledge of how the fields of medicine, engineering, electronics, computing, the military, chemistry, sport and many others all rely on the use Physics.

What skills will I gain from studying Physics?

You will develop your ability to solve problems through developing a more logical approach. You will gain and develop analytical skills, which will help you to investigate, predict and analyse a range of different data. You will learn how to experiment accurately to find out new ideas and test theoretical predictions as well as consider and account for uncertainty in data. You will be challenged to develop a greater accuracy and precision, both experimentally but also when communicating your ideas, which will stand you well when you move onto degree level study.

Having studied Physics what opportunities will be open to me?

Physics is a respected A level which is held in high esteem by employers offering apprenticeships and universities. Physics can be used to enter careers in the following: experimental and theoretical physics research, astronomy and astrophysics, engineering, computer games developers, geosciences including meteorology, medicine imaging techniques, pilot, economics (Physicists help large financial institutions model the complex behaviour of financial systems), architecture and construction, patent law and forensic science.

Entry requirements

6 in Triple Science Physics or 6-6 in Combined Science and 5 in Maths on higher tier paper.

Exam Board - AQA

Specification code/no. - 7408

Topics covered in Year 12

Particle physics, Electricity, Waves, Mechanics and Material physics

Topics covered in Year 13

Gravitational fields, Electric fields, Magnetic fields, Oscillating systems, Circular motion, Thermal physics, Nuclear physics and the Astrophysics Option Topic