
Physics

AQA A Level in Physics



Course Description

The course is split up into 8 main units of study. These include particles and radiation, waves, mechanics and materials, electricity, thermal physics, fields and their consequences and nuclear physics. For example, in particles and radiation students will have the opportunity to learn sub-atomic particles, beyond electrons, protons and neutrons. They learn how matter can have a wave-particle duality. The final unit of study is one of 4 options ranging from Astrophysics to Turning points in physics. Each module contains approximately several sub-topics that students study throughout the two years and are assessed in. Students are taught the concepts through varied activities and are encouraged to become independent learners and critical thinkers. They will build on their knowledge of Physics from GCSE and their scientific skills such as analysis and evaluation.

Methods of Assessment

Three exams at the end of Year 13, 2 hours long. Paper 1 and 2 have a total of 85 marks each and Paper 3 has a total of 80 marks. Specific concepts to be examined on different papers.

CPAC Assessment - Students work towards their certificate of practical competency by carrying out a minimum of 12 practical activities as advised by the examination. This is assessed by their teacher and will demonstrate their ability to carry out scientific practical skills.

Progression

Physics is especially helpful for jobs that involve building things and developing new technologies, including engineering, astronomy, robotics, renewable energies, computer science, communication, space exploration, sports and game technology, research and nanotechnology.

Physics A-level is usually required for degree courses in engineering (general, aeronautical, civil, electrical, mechanical) and physics. It is often recommended or useful for biochemistry, medicine, dentistry, nursing, architecture, materials science, sports science, surveying, psychology and teaching.

Student Testimonial - Riley



Physics has always deeply fascinated me, being able to understand why things are the way they are with our ever-expanding knowledge of the world around us. It encompasses everything on a scale starting from the smallest subatomic particles to the entire universe and beyond. I enjoy the complex problem solving of physics and the eureka moment when you finally understand why something works the way it does. Pursuing physics will support me in achieving my dream job of becoming an aerospace engineer helping apply my newfound understanding into aircraft design.

Class of 2024-25



SIXTH FORM
Where are they now?

Oliver I-T.
University of Hertfordshire
Astrophysics



SIXTH FORM
Where are they now?

Ardi J.
University of Warwick
Engineering



SIXTH FORM
Where are they now?

Tyler R.
Cardiff University
Maths



SIXTH FORM
Where are they now?

Blu A.
University of Brighton
Mechanical Engineering



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Where are they now?

Joseph E.
University of Huddersfield
Sound Engineering



SIXTH FORM
Where are they now?

Anisa A.
University of Hertfordshire
Business