

Course Information



A Level Physics

What is A Level Physics?

Physics is the cornerstone for many of the advancements in engineering and technology that power the modern world. A Level Physics offers students an insight into that world, providing them with the scientific knowledge and skills to appreciate the inter-relationships between matter, energy and forces.

What does the course involve?

During the course, students will develop their scientific, mathematical, investigative and problem solving skills. Alongside taught components students will need to be able to demonstrate the ability to carry out research and self-study.

What themes are studied?

AS Units:

Unit 1 - Measurements and errors

Unit 2 - Particles and Radiation

Unit 3 - Waves

Unit 4 - Mechanics

Unit 5 - Materials

Unit 6 - Electricity

A2 Units:

Unit 7 - Further mechanics

Unit 8 - Thermal Physics

Unit 9 - Gravitational and Electric fields

Unit 10 - Capacitors

Unit 11 - Magnetic fields

Unit 12 - Nuclear Physics

Unit 11 - Option Unit (1 of 4)

How is it assessed?

There may be a formal external examination of the AS year or an internally run exam, the outcome of which will help to judge suitability to progress to A2 Physics. The examinations at the end of Year 13 will assess knowledge learnt over both years. Students will also complete a range of "Required Practicals" which will enable them to receive a practical skills endorsement as part of their qualification.

Extra information

As in all A Level subjects, students are expected to work hard and complete approximately four hours of self-study per week. Successful candidates will look to support their learning inside of class by carrying out wider research/reading. A variety of educational visits are arranged to support students' learning and to highlight potential career paths.

What next?

Careers for students interested in Physics are diverse and rewarding. They include, but are not limited to, the following: Astrophysics, Laser Fusion Scientist, Solicitor, Science Communicator, Surgeon, Coastal Scientist, DJ, Sound Engineer, Weather Forecaster, Architect, Satellite Engineer and many more.

For more information about the course, your suitability for it, and possible career paths for students with science A Levels, see the displays in the Science faculty area and talk to Mr Sheldrick, Mr Cecil or Mr Brooks. Also visit <https://www.aqa.org.uk/subjects/science/as-and-a-level/physics-7407-7408>