

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 - Working as a Physicist

Unit 2 - Mechanics

Unit 3 - Electrical Circuits

Unit 4 - Materials

Unit 5 - Waves and Light

A2 Units:

Unit 6 - Further mechanics

Unit 7 - Gravitational, Electric and Magnetic Fields

Unit 8 - Nuclear & Particle Physics

Unit 9 - Nuclear radiation

Unit 10 - Thermodynamics

Unit 11 - Space

Unit 12 - Oscillations

How is it assessed?

There will be no formal external examination of the AS year. However, an internal exam will be taken to help 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. All these career opportunities are open to women as well as men!

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 Mrs Permain, Mr Sheldrick, or Mr Foster.

Also visit <https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/physics-2015.html>