**A Level Physics**

**What will I need to study this course?**

Students should have a good understanding of Physics, either from a standalone GCSE course or Combined Science GCSE. Ideally, they should have achieved at least a grade 6 in Physics, or a grade 6-6 in Combined Science along with at least a grade 5 in GCSE Maths.

**What will I study?**

This exciting Advancing Physics course, developed with the Institute of Physics, offers innovative learning opportunities:

 **Year 12:**

* Exploring new communication technologies and the production of sensors.
* Studying materials and their behaviour under stress, understanding processes, and experimenting with data handling.
* Learning about wave behaviour, including light and sound, and delving into the nature of matter, including quantum physics.
* Investigating projectile motion in space and time.

 **Year 13:**

* Further modules cover gravity, the origins of the universe, and matter at extreme temperatures.
* Exploring atomic structure and behaviour and studying electromagnetic machines.

Over two years, students will conduct practical experiments, which contribute to their exam assessments and a separate "practical endorsement" grade.

**How is the course assessed?**

At A Level, assessment includes three exam papers:

Fundamentals of Physics 2hrs 15mins multiple choice and structured response questions.

Scientific literacy in Physics 2hrs 15mins Structured and extended response questions including an advanced notice article.

Practical Skills in Physics 1hr 30mins Structured and extended response questions.

 There is also a Practical Endorsement for Physics:

* Students must complete a minimum of 12 practical activities to demonstrate practical competence, reported separately as a pass or fail alongside the A Level grade.

**Where next?**

This A Level course fosters skills in independent learning, teamwork, research, and analysis. It prepares students for university study in Physics, Engineering, Medicine, and other science-based courses.

Where could physics take you? Could it be to a game studio, designing the next Minecraft? Or to the Met Office, creating computer models to predict climate change? Perhaps into education, to inspire the next generation? Or to a hospital, using physics to help to save lives? The options are endless with an A level in Physics.

**Further information**

* From cancer treatment to tackling climate change, gaming to robotics and artificial intelligence, physics and physicists are on the front line, helping to shape the future. At a time when jobs are changing, physics offers a vast and expanding range of career paths.
* And it’s not only science and technology. What many people don’t realise is how valued and respected physics skills and ways of thinking are in other, often well-paid, industries – like finance and law.
* Whether you’re a young person thinking about your future or a parent or carer wanting to understand the careers physics can unlock – check out our website for more details. [Your future with physics: A guide for young people | Institute of Physics (iop.org)](https://www.iop.org/careers-physics/your-future-with-physics)

[What can I do with a physics degree? | Prospects.ac.uk](https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/physics)

*Exam Board: OCR*

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