



A LEVEL Physics Edexcel

WHAT DO I NEED TO KNOW OR BE ABLE TO DO BEFORE TAKING THIS COURSE?

Students should have achieved 2 grade 6s in Science and a grade 6 in Mathematics; and be selecting Mathematics at A-Level or be prepared to put in extra work on Mathematics. This course is suitable for students who:

- have an interest in and enjoyment of Physics and problem solving
- want to find out how and why things work
- enjoy carrying out investigations which involve imaginative and logical thinking
- want to use Physics to support other qualifications (eg Mathematics, Further Mathematics, Chemistry, Geography, Technology) or progress onto further studies or employment

want a grounding in a relevant worthwhile qualification of recognised value want to broaden their educational experience

WHAT WILL I LEARN ON THIS ADVANCED GCE COURSE?

Paper 1 Advanced Physics I: written paper 1hour 45 minutes examined in the summer of Year 13 (30% of qualification)

Paper 2 Advanced Physics II: written paper 1hour 45 minutes examined in summer of Year 13 (30% of qualification)

Paper 3 General and Practical Physics Principles: written paper 2.5 hours examined in the summer of Year 13 (40% of qualification) - containing synoptic questions and assessment of practical skills. Students will complete 16 core practicals during the course which are linked to questions in paper 3.

Students will be awarded a practical skills endorsement to their A level if they show sufficient practical competency in the core practical work. This endorsement or lack of it will not affect the A level grade.

MATHEMATICS

In this qualification, 40% of the quantitative skills will require mathematics at level 2 or above. It is therefore highly desirable that students take A Level Mathematics.

Students are not required to learn all formulae and will be given a data sheet and formula sheet for use in the exam. They must however know what the symbols mean and know the SI units for each quantity.

TRIPS

We do our best to ensure each year group visits a particle accelerator facility to support learning of Particle Physics.

A Level Physics 1 (Year 12)	A Level Physics 2 (Year 13)
<p>Working as a Physicist - This involves learning how to work scientifically and apply physics principles to applications and practicals</p> <p>Mechanics- 'suvat' equations, energy and projectiles</p> <p>Electric circuits</p> <p>Materials - fluids and solids</p> <p>Waves and the particle nature of light</p> <p>Further mechanics (momentum, circular motion and energy)</p>	<p>Gravitational Fields</p> <p>Electric and Magnetic Fields</p> <p>Nuclear and Particle Physics</p> <p>Thermodynamics</p> <p>Space</p> <p>Oscillations</p> <p>Nuclear Radiation</p>

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