Physics

Subject content

In the first year you will learn about the core ideas of dynamics, wave theory and materials. This is always a challenging part for new students but underpins what follows on, such as the topic of quantum phenomena, where you'll enter the world of the small and the weird! We explore electricity, where you will learn about circuits, how we use control electrons and ions, and consider how we have been making electricity work for us since 1887. We will concentrate on developing your skills around data, problem solving and researching; all of which are fundamental to studying physics. Topics in the second year include fields and further mechanics, looking at imaginary lines of force that apply across the entire universe, how they work and why they are so important, and explaining all types of motion. You will also study nuclear, thermal and cosmological physics. This course is an award of OCR. Visit the OCR website to read the course specification. [https://www.ocr.org.uk/qualifications/as-and-a-level/physics-a-h156-h556-from-2015/]

Specific entry requirements

GCSE Grade 6 or above in Physics and another science or two Grade 6s or above in Combined Science. Plus GCSE Grade 6 or above in Mathematics. Given the fundamental underpinning of Maths, you will need to take A Level Mathematics alongside Physics.

Assessment

Assessment is by examination. The Practical Endorsement is teacher-assessed.

Progression opportunities

Studying Physics can be a springboard to a number of careers and you could progress into Higher Education to study astronomy, dentistry, engineering, forensic science, medicine, sound recording, veterinary science or finance. Career possibilities include architect, biotechnologist, communications worker, computer technician, electrician, energy sector worker, engineer, medical physicist, patent lawyer, science journalist or teacher. A Level Physics shows a university admissions tutor, or an employer, that you have a keen logical mind and are mathematically very capable, skills that are highly sought after. Subjects that prove useful for progression to technical Higher Education course when taken alongside Physics include computing, chemistry, further Maths and geography.

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Want to apply?

Visit **https://www.barnsleysixthformcollege.co.uk/apply** to get started
Call us on **01226 216 123**