

# Physics

## Subject content

In the first year you will learn about particles, quantum phenomena and electricity, as well as fundamental particles, from protons to photons. This is always an exciting part for new students and underpins what you do next. The next topic is quantum phenomena where you will enter the world of the small and the weird! We will explore electricity where you will learn about circuits, how we use electricity, explore electrons and ions, and consider how we have been making electricity work for us since 1887. 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. OCR Physics course specifications [<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, both skills that are highly sought after. Subjects that prove useful for progression to technical Higher Education courses when taken alongside Physics include Computing, Chemistry, Further Maths and Geography.

**Last updated:** 23rd October 2019

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