Physics

THE PARK ACADEMIES TRUST SIXTH FORM

Don't be anonymous...
...be remarkable

A level Physics is the study of the world around us. You will learn about the structure of the universe, from the very small particles that form protons and neutrons, to the fusion reactions that power stars and the fate of the universe. This includes the way we use our knowledge of matter and anti-matter to diagnose medical conditions in MRI and PET scanners. It will also ensure that you have a thorough grounding in scientific techniques and the ability to analyse data and evaluate experiments.

A Level

56 UCAS points available

Student Profile

A successful student will need:

Grade 6 in GCSE Physics or 6-6 in Combined Science.

Grade 6 in GCSE Mathematics.

A scientifically inquisitive mind, constantly questioning what is happening in the world around them.

To be determined, self-motivated and prepared to work hard.

To work well independently and as part of a group.

Course content (OCR)

Year 1:

Forces and Motion : The study of how and why things move and the forces involved, from everyday objects to modelling in computer games.

Electrons, Waves and Photons : Electrical circuits, the nature of waves and the properties of the electromagnetic spectrum and quantum physics.

Year 2:

The Newtonian World and Astrophysics : The physics of the universe, thermal physics and more complex motion.

Particles and Medical Physics : Quarks, antimatter, X-rays and MRI.

Skills gained

The ability to:

- follow methods, plan and conduct practical work and draw conclusions.
- analyse data, looking for patterns that explain the world around us.
- explain complex phenomena in a way that demonstrates understanding.
- solve complex problems, both practical and mathematical.
- evaluate methods and results.

Trips / Cultural Experiences

CERN Laboratory, Switzerland

The Future - What Next?

Physics A level will prepare students for a career or further study in Physics, Engineering or other Science related areas. Students who attain A level Physics are highly sought after by universities and employers and end up in a wide range of highly paid careers from finance to architecture.

Simon Small

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Head of Physics

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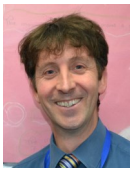

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