ABBEYGATE
Sixth Form College

PHYSICS

Entry requirements: a minimum of 5 GCSEs at Grade 4-9; minimum Grade 6 Physics or Core and Additional Science; minimum Grade 6 Maths and average GCSE Score 5.5*

STUDENT PROFILE

This course will appeal to those students who:

- would like to find out about how things in the physical world work
- enjoy applying their mind to solving problems
- enjoy carrying out investigations through the application of imaginative, logical thinking
- would like a grounding in a relevant, worthwhile qualification of recognised value are taking A-levels in the other Sciences and/or Mathematics (or other relevant courses such as Design and Technology) and would like to take a course which will support their studies.

PROGRESSION

Physics supports a wide range of courses and careers and is an important aspect of many careers:

- Mathematics
- Medicine
- Biotechnology
- Radiography
- Mechanical, Electrical, and Civil Engineering.

Physics also develops sharp thinking skills that are recognised in fields as diverse as law, IT, computing and banking.

*Information on how to calculate your average GCSE Score can be found at www.abbeygatesfc.ac.uk/courses

STUDENT VIEW

"Experimentation and analysis is an important part of Physics and one which is catered for well in the course, with some exciting experiments along the way."

COURSE CONTENT

Module 1 - Development of Practical Skills in Physics
Skills of planning, implementing, analysis and evaluation.

Module 2 - Foundation of Physics
This unit includes physical quantities and units, scalars and vectors and measurements.

Module 3 - Forces and motion
This unit includes motion, forces in action, work, energy and power, materials; Newton's laws of motion and momentum.

Module 4 - Electrons, waves and photons
This unit includes charge and current, energy, power and resistance, electrical circuits, waves and quantum physics.

Module 5 - Newtonian world and astrophysics
This unit includes thermal physics, circular motion, oscillations, gravitational fields and astrophysics.

Module 6 - Particles and medical physics
This unit includes capacitors, electric fields, electromagnetism; nuclear and particle physics and medial imaging.