



## Entry Requirements

Math's GCSE at grade 7 or above.  
Combined Science GCSE or Physics GCSE at grade 6 or above.  
English Language or Literature at grade 5 or above.

# Physics

## Course Leader

Paddy Downes

## Assessment

Written examinations

Practical skills assessment

## What interests should I have if I want to follow this course?

If you like mathematical problem solving and looking at the world analytically, physics is probably a subject that will interest you. Interests in how things work from electronic circuits or car crashes to the fundamental nature of the universe are important. In addition researching and explaining complex ideas are important in physics. An enjoyment and competency in mathematics is essential to allow you to use these skills in answering those fundamental questions about the universe. If you are the type of person that likes to question things and find out why and how things work – physics is a good subject choice.

## What you will study?

- Learning about the atom in greater detail.
- Finding out about Particle Physics.
- Wave properties. Building on the GCSE knowledge to study diffraction and interference phenomena.

- Developing our knowledge of Mechanics to include Projectile Motion.
- Properties of Materials, Young Modulus.
- Electricity
- Learning about Periodic motion which is generally known as Simple Harmonic Motion.
- Finding out more about Thermal Physics and how it links to the Kinetic Theory of Gases.
- Learning about Electric and Gravitational Fields, their similarities and differences.
- Studying the exponential nature of Capacitor discharge and Radioactive Decay.
- Magnetic field phenomena such as Induction and Eddy Currents are studied in great depth.

## Future Pathways

There is a shortage of people in the UK going into jobs which require physics skills. As such there are a lot of opportunities for those people that are interested in this area. Employers are looking for people who can think rationally and objectively, with technical knowledge and practical skills. Higher Education opportunities include degrees in Physics, Natural Sciences, Engineering, Design, Medicine, Archaeology, Geophysics, Forensics, Banking, Accounting, Theoretical Physics, Mathematics, Astrophysics, Cosmology, Economics, to name but a few.