



# PHYSICS A-LEVEL

## WHY SHOULD I STUDY A-LEVEL PHYSICS?

Physics is the ultimate subject to study if you wish to investigate the how our universe works – from the forces and energy that drive everything, to the matter that makes up stars and people, to the waves that allow us to communicate. The scales range from the Quantum Physics of the tiny to the astrophysics and gravitation of the immense. Physics explores the fundamental concepts underlying other scientific disciplines and allows the scientific method to be practised and applied to many experiences and challenges.

## WHAT WILL I LEARN ABOUT?

The A-level course is divided into six sections: Development of practical skills in physics; Foundations of physics; Forces and motion; electrons, waves and photons; Newtonian world and astrophysics; particles and Medical Physics. As well as a comprehensive set of practical experiments and investigations.

## HOW WILL I BE ASSESSED?

Assessment is carried out at the end of the course through three written papers:

- Paper 1 – Modelling physics 37%;
  - Paper 2 – Exploring physics – 37%;
  - Paper 3 – Unified physics – 26%;
- Practical Endorsement in physics.

## WHAT SKILLS WILL I DEVELOP?

Physicists will develop and use a range of skills during the course, including: numeracy, data analysis, communication, concluding and evaluating, data logging, ICT, planning, manipulative skills, time management, problem solving, teamwork, research. These skills are developed through academic progress in the subject as well as through the investigative and practical approach taken to develop, understand and apply concepts.

## WHERE COULD THIS SUBJECT TAKE ME IN THE FUTURE?

Physics is a key subject for Engineering, Architecture, Medical Physics, Geoscientists, Meteorology, Oceanography, Teaching, Communications etc. The skills and concepts covered allow a physicist to approach many subject areas due to the ability to apply the underlying principles and skills to new challenges.

**Exam Board:** OCR Physics

