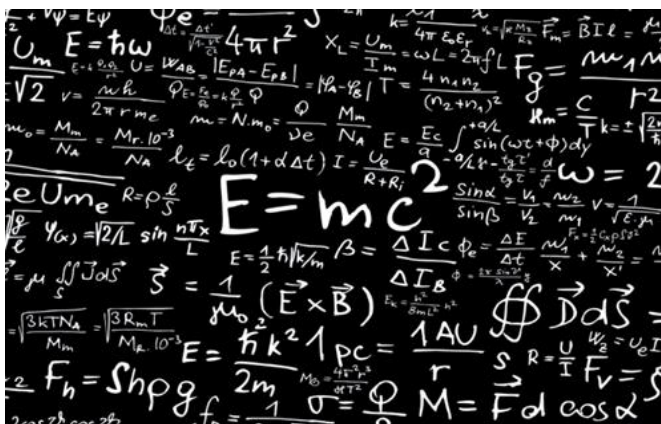


# AS/A Level Physics



## Entry Criteria:

- You will need to achieve the pathway criteria, please see the prospectus for further information
- You will need to achieve a Grade 5 or above in GCSE Mathematics
- You will need to achieve a Grade 5 or above in Core Science and Additional Science.

## Coursework/Examination Requirements:

AS Assessment Two written examinations (each worth 50%)

A Level Assessment Three written examinations (each worth 33%) and completion of the CPAC assessment.

## Awarding Body/Specifications: AQA

**Advanced Level (A Level):** Physics is the science of understanding and explaining the natural world, from the very small, for example subatomic particles to the very largest of all, for example the universe. Physics can make you more employable. It opens doors to many courses and careers from Medicine to Economic Modelling in the City, Engineering and Astronomy. The latest and best computer games have Physics at their core. Without Physics and Physicists, the modern world would stop. **The following units will be followed on this course:**

## AS/Year 12 Unit

### Unit 1

- Measurements and their Errors
- Particles and Radiation
- Waves
- Mechanics and Materials
- Electricity
- Periodic Motion

## A Level/Year 13 Units

### Unit 2

- Gravitational Fields
- Electric Fields
- Magnetic Fields
- Electromagnetic Fields
- Thermal Physics
- Nuclear Physics

### Unit 3

- Practical skills
- Data analysis
- A unit of Medical Physics

**Advanced Subsidiary (AS):** If you choose to study this subject for one year you will be awarded the AS Level. You will cover the AS unit content and sit public examinations in Year 12.

**Progression:** Physics opens many doors, firstly into Higher Education and then into a range of careers including: Medicine, Banking, Accountancy, Engineering, Research, Computer Programming or Space Exploration.

**Opportunities:** The Physics Department is involved in an annual visit to CERN, home of the world's largest experiment whose data confirmed the existence of the Higgs Boson, one of the missing pieces in the Standard model of Particle Physics. The department also has good links with the Norfolk and Norwich University Hospital Radiotherapy and Nuclear Medicine Departments and a Medical Physics visit is offered in Year 13.