

# A Level Physics

## **Entry Requirements**

**GCSE grade required:** grade 7 in GCSE Physics or Combined Science and a grade 7 is preferred in GCSE Maths.

## Exam Board

AQA

## Course Content

A Level Physics 7408

#### 1. Particles and Radiation

Matter and radiation Quarks and leptons Quantum phenomena

#### 2. Wave and Optics

Waves Optics

#### 3. Mechanics and Materials

Forces in equilibrium On the move Newton's law of motion Force and momentum Work, energy and power Materials

#### 4. Electricity

Electric current DC circuits

### 5. Further Mechanics and Thermal Physics

Motion in a circle Simple harmonic motion Thermal physics Gases

#### 6. Fields

Gravitational fields
Electric fields
Capacitors
Magnetic fields
Electromagnetic induction

#### 7. Nuclear Physics

Radioactivity Nuclear Energy

## 8. Turning Points in Physics

The discovery of the electron Wave particle duality
Special relativity

The Practical Endorsement assesses the practical skills gained during the two years of study.

# Future Pathways

An A level in Physics will enable you to access a future in all types of engineering, radiology, astronomy, oceanography, optometry, climatology, environmental health cartography, colour technology, food science, forensic science, archaeology, marine science, pilot, naval architecture, medicine, dentistry.

