

# Physics [Level 3: A2]

EDEXCE

## **INTRODUCTION:**

Physics is the study of matter, energy, and the interaction between them. Physics is about asking fundamental questions and trying to answer them by observing and experimenting.

Physicists ask big questions like; how did the Universe begin?

How will the Universe change in the future? What are the building blocks of matter?

## **ENTRY REQUIREMENTS / SUITABILITY:**

GCSE Physics grade 6 or Combined Science grade 6/6. Grade 6 or above in Mathematics is also essential.

Physics course is ideal for anyone who is interested in why the universe is the way that it is and how the universe works from the smallest subatomic particles to the furthest reaches of space. Students should not be content with the usual "because it does" sort of answers. Instead they should enjoy thinking for themselves and analysing complex issues.

# **CONTENT:**

#### **Year 12:**

Mechanics • Electric circuits • Experimental methods • Electric and magnetic fields • Nuclear and Particle Physics • Materials • Space

## Year 13:

Wave and the particle nature of light • Thermodynamics • Nuclear radiation • Gravitational fields • Oscillations • Experimental methods

# **LEADS TO:**

It's not just rocket science:

Physics is the route to so many careers, from predicting climate change to designing computer games. Students take up university courses in such fields of study as Engineering, Architecture, Materials Technology, Design & Production, Finance, Telecommunications, Medicine, Astronomy & Astrophysics, Meteorology, Archaeology and Education.

Graduates in STEM can expect to receive amongst the highest salaries of all new recruits.

## **ASSESSMENT:**

Year 13 Paper 1: Advanced Physics 1

External written exam (weighting: 30%) Length of exam: 105mins

Year 13 Paper 2: Advanced Physics 2

External written exam (weighting: 30%) Length of exam: 105mins

Year 13 Paper 3: General & Practical Principles In Physics

External written exam (weighting: 40%) Length of exam: 150mins

Your practical skills will also be assessed over the course of year 12 and 13.

