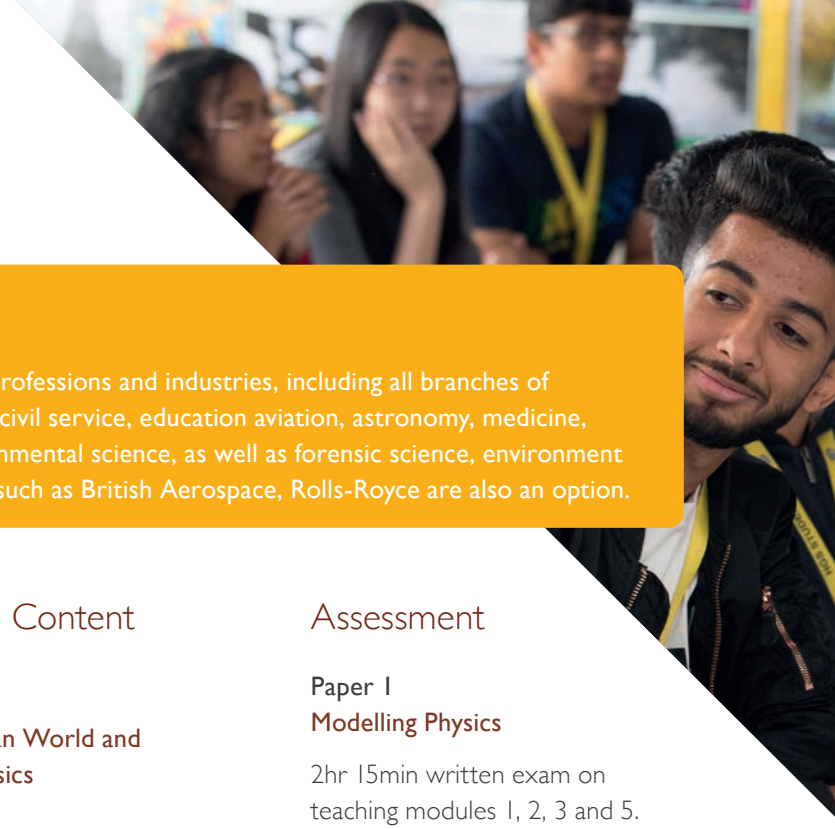
HECKMONDWIKE
GRAMMAR SIXTH FORM

Physics

Exam Board: OCR

Wide variety of support material on-line. Wide range of practical activities. Experienced expert specialist teaching staff. Well-equipped and resourced laboratories. Extension activities.

Physics



Career Opportunities

Physicists are employed in a huge variety of professions and industries, including all branches of manufacturing and engineering, the scientific civil service, education aviation, astronomy, medicine, veterinary science, dentistry, geology, environmental science, as well as forensic science, environment and health. Apprenticeships with companies such as British Aerospace, Rolls-Royce are also an option.

Course Content

YEAR 12

Foundations of Physics

Making measurements and the nature of quantities, physical quantities and units.

Forces and Motion

Motion, forces in action, work, energy and power, materials, Newton's laws of motion and momentum.

Electrons, Waves and Photons

Charge and current, energy power and resistance, electrical circuits, waves, Quantum Physics.

Course Content

YEAR 13

Newtonian World and Astrophysics

Thermal physics, Circular motion, Oscillations, Gravitational fields, Astrophysics and cosmology.

Particles and Medical Physics

Capacitors, Electric fields, Electromagnetism, Nuclear and particle physics, Medical imaging.

Assessment

Paper 1
Modelling Physics

2hr 15min written exam on teaching modules 1, 2, 3 and 5.

100 marks

Section A; multiple choice questions, worth 15 marks. Section B short answer and extended response questions.

85 marks (37% of total A level)

Paper 2
Exploring Physics

2hr 15min written exam on teaching modules 1, 2, 3 and 6.

100 marks

Section A; multiple choice questions, worth 15 marks. Section B short answer and extended response questions.

85 marks (37% of total A level)

Paper 3
Unified Physics

1hr 30min written exam on all content. Short answer and extended response questions.

70 marks (26% of total A level)

Practical Endorsement in Physics

Non-Exam Assessment reported separately.