



Physics

This course is an Edexcel International qualification leading to AS level and/or A2 examinations. Successful completion enables students to progress to further education courses or the world of work.

AS

Unit 1: Physics on the Go

This unit involves the study of mechanics (rectilinear motion, forces, energy and power) and materials (density, flow of liquids, Hooke's law, the Young modulus and elastic strain energy).

Assessment: Examination

Unit 2: Physics at Work

This unit involves the study of different types of wave and their properties (including standing waves, refraction, polarisation, diffraction and the wave/particle nature of light), and electricity (definitions of various electrical quantities, for example current, potential difference and resistance, Ohm's law and non-ohmic conductors, potential dividers, e.m.f. and internal resistance of cells and negative temperature coefficient thermistors).

Assessment: Examination

Unit 3: Exploring Physics

Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed in Units 1 and 2.

Assessment: Examination



Physics

A2

Unit 4: Physics on the Move

This unit involves the study of further mechanics (momentum and circular motion), electric and magnetic fields, nuclear and particle physics.

Assessment: Examination

Unit 5: Physics from Creation to Collapse

This unit involves the study of thermal energy, nuclear decay, oscillations, astrophysics and cosmology.

Assessment: Examination

Unit 6: Experimental Physics

Students are expected to further develop the experimental skills and the knowledge and understanding of experimental techniques that they acquired in Units 1 and 2 by carrying out a range of practical experiments and investigations while they study Units 4 and 5.

This unit will assess students' knowledge and understanding of the experimental procedures and techniques that were developed in Units 4 and 5.

Assessment: Examination