A LEVEL PHYSICS

Course description

Awarding Body: OCR, Physics A - H556

Examinations

Table below summarises the assessment in the course:

Component	Marks	Duration	Weighting
Modelling physics (01) Assesses content from modules 1, 2, 3 and 5	100	2 hours 15 mins	37%
Exploring physics (02) Assesses content from modules 1, 2, 4 and 6	100	2 hours 15 mins	37%
Unified physics (03) Assesses content from all modules (1 to 6)	70	1 hour 30 mins	26%
Practical endorsement in physics (04)	Non-exam assessment		

Non Examined Assessment

Practical endorsement in physics (04): Students gain practical skills throughout the course. These are assessed in the written examinations and in the practical endorsement (component 04).

Course content

Studying A Level in Physics enables our students to build on their knowledge of the laws of physics, applying their understanding to solve problems on topics ranging from subatomic particles to the entire universe. They also have the opportunity to develop all the relevant practical skills. Content of the course comes in six modules and each one is divided into key topics:

Name of the module	Key topics studied
Module 1: Development of practical skills in physics	Practical skills assessed in all written examinations and in the practical endorsement.
Module 2: Foundations in physics	Physical quantities and units, Making measurements and analysing data, Nature of quantities
Module 3: Forces and motion	Motion, Forces in action, Work, energy and power, Materials, Newton's laws of motion and momentum
Module 4: Electrons, waves and photons	Charge and current, Energy, power and resistance, Electrical circuits, Waves, Quantum physics
Module 5: Newtonian world and astrophysics	Thermal physics, Circular motion, Oscillations, Gravitational fields, Astrophysics and cosmology
Module 6: Particles and medical physics	Capacitors, Electric fields, Electromagnetism, Nuclear and particle physics, Medical imaging

Entry requirements

Grade 7,8 or 9 at Physics GCSE or Grade 7-7,8-7,8-8,9-8 or 9-9 in Double Science AND Grade 7,8 or 9 in Mathematics GCSE.

Future opportunities

For most science and engineering courses both A-level Physics and Maths are required. It is important to remember that although many jobs outside science do not require you to have studied a specific subject, studying a recommended A-level such as physics can give you an advantage. Physics is also a significant component of the BMAT (medical entry) papers and studying it beyond GCSE does give students applying for medical schools requiring this for entry an advantage.

Further information

A physics degree is a great starting point for a career in scientific research, as well as in a range of careers in the business, finance, IT and engineering sectors. Physics and the problem-solving skills it develops are useful in many different job families. The salaries of physics graduates are also well above the national average. Over a working lifetime, the average physics graduate earns 30% more than someone holding just A-levels.