GCE PHYSICS *(A Russell Group Facilitating Subject)*

Examination Board: CCEA

Overview

Physics at A level will follow the CCEA specification. Further information on Physics at A level can be viewed on the CCEA website: www.ccea.org.uk. The details below were correct when printed but are subject to change.

In Physics you will look at the gravitational fields of the very largest stars to the incredibly small basic particles that join together to form protons and neutrons.

The areas of study in L6th are forces, motion, energy, electricity, waves, quantum physics and health physics. In U6th you will study momentum, oscillations, thermal physics, gravitational, electric and magnetic fields and nuclear physics.

AS LEVEL

Unit	Content	Assessment
1 - Forces, Energy & Electricity	Forces, motion, energy and electricity are dealt with in a very mathematical manner. This builds on work from Years 11 and 12 on the same topics.	40% of AS 16% of A Level
2 - Waves, Quantum Physics, Medical Imaging & Astronomy	Following on from Year 12's work on waves, you will study sound and light. Medical imaging and quantum physics are the only completely new topics this year. The astronomy section deals with the GCSE Earth in Space topic in more detail.	40% of AS 16% of A Level
3 - Practical Techniques & Data Analysis 1	In this section you will be carrying out practicals, recording results and analysing your findings.	20% of AS 8% of A Level

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A LEVEL		
Unit	**Content**	**Assessment**
4 – Deformation of Solids, Thermal Physics, Circular Motion, Oscillations and Atomic and Nuclear Physics	The first topic examines how materials behave when forces act on them. Thermal physics, circular motion and nuclear physics follow on from Year 11 work in GCSE Physics.	40% of A2 24% of A Level
5 – Fields and their Applications	You will study gravitational, electric and magnetic fields before looking at particle accelerators and quarks – the most basic particles in nuclei.	40% of A2 24% of A Level
6 - Practical Techniques & Data Analysis 2	This involves practical work at a more advanced level than at AS level.	40% of A2 12% of A Level

Careers
Aeronautical Engineer, Architect, Astronomer, Astrophysicist, Automobile Engineer, Building Surveyor, Civil Engineer, Cyberneticist, Electrical Engineer, Flight Engineer, Forensic Scientist, Geophysicist, Laboratory Technician, Land Surveyor, Materials Scientist/Technologist, Medical Physicist, Metallurgist, Meteorologist, Mining Engineer, Nuclear Scientist, Radiographer, Researcher, Structural Engineer, Physics Teacher, Marine Engineer, Optometrist, Recording Engineer, Patent Examiner, Medical Technical Officer, Veterinarian and Doctor.