

# **COURSE DESCRIPTOR**

## A LEVEL PHYSICS

#### SUBJECT OVERVIEW

It is a 2-year course that gives you a thorough grounding in A-Level Physics which is much sought after by top UK universities. One can study a variety of subjects such as Medicine, Engineering, Computing, Medical Physics, Meteorology, Geophysics and Astrophysics. You will often spend time conducting experiments and research in a laboratory environment, so you must be prepared to work with a range of scientific equipment. Students of A-level physics generally develop the ability to recognise, recall and show understanding of specific physics facts, terminology, principals, concepts and practical ability. Having A-level physics is very impressive in a variety of ways, offering you access to a huge range of options for both further education and careers. A-level physics is a highly respected form of qualification that can open doors to several possibilities.

## PRIOR LEARNING REQUIRED

Your interest and curiosity in the fascinating realm of physics are essential for a successful journey through this subject. GCSE or equivalent knowledge of Physics or combined science is recommended. A good understanding of GCSE or equivalent mathmetics is also beneficial to your learning.

Language: IELTS 5.5 or equivalent

#### **EXAM BOARD**

International Baccalaurate

#### COURSE CONTENT

Year 1	Year 2
Module 1: Development of Practical Skills in Physics.  Module 2: Foundations of Physics.  Module 3: Forces and Motion.	Module 5: Newtonian World and Astrophysics. Module 6: Particles and Medical Physics.
Module 4: Electrons, Waves and Photons.	

### **ASSESSMENT**

We have half-termly and termly assessments. We also have a final assessment at the end of academic year, Grades are determined by final external examinations, which take place in May/June at the end of the 2-year course. Practical work is assessed within the school for the practical endorsement, which is a pass or fail.

An end of year exam must be passed for entry to Year 2 and a mock exam must be passed for entry into the enternal exams.

Paper	Length of paper	Weighting
Paper 1 Modelling physics (01)	100 marks 2 hour 15 minutes written paper	37% of A level
Paper 2 Exploring physics (2)	100 marks 2 hour 15 minutes written paper	37% of A level
Paper 3 Unified physics (3)	70 marks 1 hour 30 minutes written paper	26% of A level
Practical Endorsement in Physics (04)	(non-exam assessment)	Reported separately

### **TEXTBOOKS/REVISION GUIDES**

Title	ISBN	Author
A Level Physics for OCR A: Year 1 and AS	978-0-19-835217-4	Graham Bone, Gurinder Chadha, and Nigel Saunders
A Level Physics for OCR A: Year 2	978-0-19-835766-7	Graham Bone, Gurinder Chadha, and Nigel Saunders
A-Level Physics: OCR A Year 1 & 2 Complete Revision	978-1789080391	CGP Books





#### HIGHER EDUCATION PATHWAYS

Physics opens a large range of career options as, together with other sciences, it is important for technology, research, engineering, the medical profession, as well as many other occupations.

Previous students have studied:
Loughborough University – Computer Science
University College London – Mechanical Engineering
Interior Architecture – Leeds Beckett University

#### COMPLEMENTARY SUBJECTS OF STUDY

Maths, Chemistry, Biology, Computer Science

## **CURRICULUM DIRECTOR**

Ms. Sue Chubb