



## AS Level / A Level Physics (Full-Time/Part-Time)

Also available as a Part-Time option - please select 'Click here to contact us' for more information.

The AS Level / A Level Physics Course is a Full-time course located in the Sixth Form Academy (SFA). This course is designed for students who are interested in science and becoming a Physicist.

If you are fascinated by the world around you and would like to understand more about it or are thinking about a career in Engineering, Medicine, Electronics, Astronomy or Technology, then Physics is for you.

You will learn to design experiments, use mathematics, and computing in real-life situations, observe events, work happily in a team, create new ideas and think up new theories, and develop logical and analytical problem-solving skills.

Applying for AS Levels or A Levels? Click 'Apply Now' on any ONE of the subjects you are interested in studying. Complete the online application form, where you will be asked to specify your other two choices. Then book an Interview appointment to meet the tutors and discuss your preferred choices.

### Entry Requirements

A minimum of six GCSEs at Grade C or above including English, Higher/Intermediate Tier GCSE Maths Grade B required & Higher Tier Additional/Triple Science Grade B required.

### Career Prospects

With a Physics qualification, you could choose to work in the open air, hospital, laboratory team, engineering, education and in many other environments.

For somebody who finds the idea of a job in this industry attractive, there are openings based on Materials, Computing, Energy or Food Science.

There is also exciting work in Meteorology, Telecommunication, Scientific Journalism, Aerospace and Forensic Science.

Coleg Afan  
Coleg Bannau Brycheiniog  
Academi Chweraeon Llandarcy  
Canolfan Ragoriaeth Adeiladwaith Maesteg  
Coleg Castell-nedd  
Coleg Y Drenewydd  
Coleg Pontardawe  
Canolfan Adeiladwaith Abertawe

Afan College  
Brecon Beacons College  
Llandarcy Academy of Sport  
Maesteg Construction Centre of Excellence  
Neath College  
Newtown College  
Pontardawe College  
Swansea Construction Centre





With an A level in Physics, many students continue to study Physics or Engineering at University.

(For most of these career options, A-Level Mathematics is required alongside A-Level Physics)

## Course Modules

AS

Unit 1: Motion, Energy and Matter. Basic physics, Kinematics, Dynamics, Energy concepts, Solids under stress, Using radiation to investigate stars, Particles and nuclear structure.

Unit 2: Electricity and Light. Conduction of electricity, Resistance, D.C. circuits, The nature of waves, Wave properties, Refractions of light, Photons, Lasers.

A2

Unit 3: Oscillations and Nuclei. Circular motion, Vibrations, Kinetic theory, Thermal physics, Nuclear decay, Nuclear energy.

Unit 4: Fields and Options, Capacitance, Electrostatic and gravitational fields of force, Orbits and wider universe, Magnetic field, Electromagnetic induction and Medical Physics.

Unit 5: Practical Examination.

## Assessment

AS Specification. Practical work is integrated throughout the course and questions may arise in the written papers.

Unit 1: Written Exam – 1 hour 30 minutes, 20% of the qualification.

Unit 2: Written Exam – 1 hour 30 minutes, 20% of the qualification.

A2 Specification: Practical work performed throughout the year will culminate in a practical exam.

Unit 3: Written examination – 2 hours 15 minutes, 25% of the qualification.

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Unit 4: Written examination – 2 hours, 25% of the qualification.

Unit 5: Practical Examination, 10% of the qualification.

## Additional Costs

There will be additional course-related costs.

## STUDY MODE

FT

## LOCATION COURSE LENGTH

2Y

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