

Physics

Examination Board: AQA

Why study Physics?

Studying Physics develops students' ability to think logically, to apply basic principles to a range of different problems, to carry out and report on practical work and to understand the way in which the world and the universe work. This is an interesting subject to study because it takes students from the everyday to the universal, from the small to the enormous and from the familiar to the unknown. Physics is today at the forefront of scientific development, not least in the search for life elsewhere in the universe and in the quest for better communications and deeper understanding here on Earth.

The study of physics is necessary if you wish to go on to university to study Pure Physics, Astrophysics, Cosmology, Oceanography, Mechanical, Civil, Nuclear or Electronic Engineering.

Entry Requirements

GCSE Physics (Grade B) or GCSE Core and Additional Science (Grade BB).

Maths GCSE (Grade B).

English Language GCSE (Grade C).

It is also recommended that pupils study A-level Mathematics to support Physics, however it is appreciated that this is not always possible. Pupils will be expected to learn some mathematics that goes beyond GCSE during the A-level physics course.

Subject Specification

The AS and A level are co-taught in the first year of A level but the AS is a standalone qualification and does not count towards the A level.

AS level Physics

The content is split into five teaching sections:

1. Measurements and their errors
2. Particles and radiation
3. Waves
4. Mechanics and materials
5. Electricity

A level Physics

The content is split into nine teaching modules with the first five modules being the same as the AS. The additional topics are:

6. Further mechanics and thermal physics
7. Fields and their consequences
8. Nuclear physics
9. Turning Points in Physics

There is also a non-exam assessment Practical endorsement for physics (candidates complete a minimum of 12 practical activities to demonstrate practical competence this is a pass/fail, reported separately)

Further Information

Students or parents requiring any further details are most welcome to contact Mr J McIntyre, Subject Leader for Physics (jmc@oswestryschool.org.uk).

