

Why study Physics?

Physics is the subject that helps us to understand nature from the smallest possible scale (deep inside the atom) to the largest conceivable scale (stretching across the entire Universe). Physics is about making predictions, testing them through observations and measurements and devising theories and laws to make more predictions. You will cover some ideas that you may be familiar with, but in more depth, such as mechanics, waves and electricity, but you will also explore new areas such as astronomy and particle Physics. You will learn the skills of making observations and measurements and how to use your mathematical skills to make sense of experiments. Learning how to communicate your knowledge and understanding of the subject effectively will also be a key part of the course. You will also learn how to think logically about a problem and how to apply what you know to new situations – a useful skill in all areas of life!

What will you be learning?

We follow the AQA A Physics course; there are nine teaching modules in total over the new A Level course. These modules will be split over the two-year course, between two teachers. Your A Level grade is based entirely on your performance in your exams, there is no coursework element. Practical skills do form an integral part of your A Level course though; there is lots of practical work throughout the course and you will be asked to keep a record of this in a Lab Book. Over the two years you will be assessed against a number of competencies and you will be given a Pass/Fail for the Practical Endorsement. This will appear on your examination certificate and it's likely universities will expect to see a Pass, but it will not form part of your overall marks or grade in Physics. Exam papers will include questions based on the practical work you have done so it is important to look after your Lab Book and revise the practicals you have done as well as the content you have learnt.

The units covered are:

- Measurements and their errors
- Particles and radiation
- Waves
- Mechanics and materials
- Electricity
- Further mechanics and thermal physics
- Fields and their consequences
- Nuclear physics
- Plus an additional unit of Turning points in physics

What are the lessons like?

Lessons will be a mixture of note taking, discussions, answering questions, going through questions and practical work.

What can it lead to?

Anything! There are many different degrees in aspects of Physics as well as the study of the subject itself... Astronomy or Cosmology, Electronics, Engineering, Geophysics, Mathematical Physics. Or you could apply what you have learned to the study of Medicine, Computing, Accountancy, Journalism, Business, Design, Law...in fact, just about anything! Physics A Level is highly regarded across a broad spectrum of courses and careers and is regarded by some Universities as a 'facilitating subject'. Check out U-Explore for more ideas!

Want to know more?

To find out more about the course and discuss your suitability please contact r.derbyshire@qes.org.uk