

Physics A Level

What will happen in my first week?

You will look at the fundamentals of atomic structure by looking at the inner workings of the nucleus and the components of protons and neutrons which introduces Particle Physics and Quantum Mechanics, as we explore why we need a massive particle accelerator under the Swiss mountains (CERN)



What can I look forward to in my first year?

Ever wondered, what the Universe is made of? If protons are positive and neutrons are neutral, why does the nucleus not fly apart? How did the Universe begin? What is antimatter? Could scientists at CERN create a black hole? Physics explores these subjects and puts your Maths skills to work to understand the universe itself.

Do I need to buy any equipment or kit?

Please bring your own folder, lined paper, pens, highlighters, a 30cm transparent rule and a Casio fx-991EX (Classwiz).

Who will teach me?

We have highly experienced specialist Physics teachers: David and Philippa

Which modules will I study in my first term?

You will learn about the fundamentals of particle physics, quantum mechanics and electrical circuits. This will also include the key concepts of Energy and Power including a range of practicals.

Are there any books I need to buy or useful websites I should look at?

- You may wish to purchase a paper copy of the online text book, the details are **Oxford University Press book: AQA Physics A level Year 1 and AS 2nd Edition/Jim Breithaupt ISBN-13: 978-0-19-835196-2**
- A useful transition book is called 'Head Start to Physics' which covers advanced GCSE Physics and Early A Level topics. This book helps with transition from GCSE to A Level

