

PHYSICS

Course Aims:

Physics is behind the technology that put man on the Moon, made the internet possible and revolutionised surgery, and also the technology that will shape tomorrow's world: quantum computers, nuclear fusion or perhaps the means to colonise the solar system. The Sixth Form programme develops the pupils' practical, analytical and mathematical skills so that they can progress into any technical discipline.

Summary of Course Structure:

- Themed units of work divided into topics which are taught over two years for the A-level examined at the end of Year 13.
- Half of the units taught during the first year in preparation for an AS entry at the end of Year 12 or continuation to the end of Year 13.

Assessment:

- Practical investigation and application of Physics taught throughout Year 12 and Year 13
- AS - 100% examination at the end of YR12 with a practical skills verification
- A2 – 100% examination (including all AS content) at the end of YR13 with practical skills verification

What do I need to know or be able to do before taking this course?

- At least a B in GCSE Science and Additional science OR a B in GCSE Physics
- AND at least a C in GCSE Maths

It is an obvious advantage if you follow an A level Mathematics course, although this is not essential.

Course Content at AS:

- **Topics include:**
Mechanics, materials, DC electricity, nature of light, waves

Course Content at A2:

- **Topics include:**
Electric and magnetic fields, further mechanics, astronomy and cosmology, oscillations, nuclear decay, particle physics, thermal energy

What could I go on to do at the end of the course?

Employers and Universities hold Physics A Level in high regard. Many students go on to study physics, astrophysics or engineering at University. This can lead to careers in areas as diverse as: research science, radiation protection, meteorology, banking, aerospace, oil and gas, space exploration, telecommunications.

Further details:

Speak to: *Mr J Conduct* or *Mr S Ockleston*

