COURSE INFORMATION

PHYSICS AT SSFC

Why study Physics?

Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. It is the most basic and fundamental science.

Physics challenges our imaginations with concepts like relativity and string theory, and it leads to great discoveries, like computers and lasers, that lead to technologies which change our lives — from healing joints, to curing cancer, to developing sustainable energy solutions.

Physics encompasses the study of the universe from the largest galaxies to the smallest subatomic particles.

Moreover, it is the basis of many other sciences, including chemistry, oceanography, seismology and astronomy (and can be applied to biology or medical science). All are easily accessible with a bachelor's degree in physics.

Course Overview

In year 1 we will cover most of the topics you studied in GCSE Physics but to a greater depth. These include electricity, mechanics, energy and waves. Some topics will be new to you such as materials science and quantum physics.

In year 2 topics will include gravitational, electric and magnetic fields. We will also do a lot of atomic and nuclear physics.

We will do lots of practical work and, if we get the chance, go on at least one trip every year.

Careers

A physics degree is a great starting point for a career in scientific research, as well as in a range of careers in the business, finance, IT and engineering sectors

Many students go on to do one of the many types of engineering degrees, e.g. mechanical, chemical, electrical etc. Many go on to do a science degree or a degree in computing or mathematics.

Many go on to do an unrelated degree but one where the skills they have learned are very useful, e.g. Accounting or Geography

What subjects go well with Physics?

Physics and Mathematics go hand in hand. In just about every Physics lesson, we do some calculations and, at a higher level, it is hard to tell them apart.

Any other third subject is OK, but Chemistry, Computing or Engineering would give you the most options for further study.

Entry requirements

You must have at least a grade 6 in Physics or Combined Science and Mathematics

You should also choose A Level Maths

Social Media

Videos which cover the complete course are on YouTube

Search for **Understanding Physics by Dave**