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# PHYSICS

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## Aims of the Course

- To stimulate an interest in, and care for, the environment in relation to the impact of Physics and its applications
- To encourage individual learning
- To stimulate students and create a sustained interest in Physics so that the study of the subject is exciting, enjoyable and satisfying
- To develop an awareness of the relationship of Physics to everyday life, and of the interaction of Physics with engineering and technology
- To encourage an experimental approach to Physics, and link this approach both with the theoretical and quantitative aspects of the subject.

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## Types of Learning Experience:

A high level of commitment is required from all students throughout the course. Students work individually or in small groups and teaching uses a wide variety of methods but also draws on students' experiences and knowledge. Practical work forms an important element of the course.

## Link Subjects:

Physics may be taken with any other subject but has strong links with mathematics, chemistry, biology and technology.

## Progressing to Higher Education:

Physics is a challenging and rewarding subject which is relevant and important for life in a technologically advanced society. It is a recognised A Level subject for entry to university and Higher Education. There are many degrees available combining Physics with, for example, mathematics, astronomy, electronics and music.

## Careers:

A pass in A level Physics opens up a wide range of careers with a scientific basis. Universities are now producing Physics degree courses linked to the financial centres such as London where the analytical skills possessed by graduates are in great demand. The possibilities encompass pure research, manufacturing industries such as space technology, electronics, all forms of power generation, management, accounting, armed services, technical sales and education. Many of our students have gone on to University to study mechanical and electrical engineering, aeronautics, medicine and dentistry

## YEAR 13

### Further Mechanics and Thermal Physics, Fields, Nuclear Physics and Turning Points in Physics.

#### Assessment

Three written examinations of 2 hr each. Consisting of, multiple choice, short and long questions.

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#### Investigative Skills Assessment

Experimental skills in Physics.

#### Assessment

Six experiments assessed on a pass or fail basis against the Common Practical Assessment Criteria CPAC.

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## YEAR 12

### Particles and Radiation, Waves, Mechanics and Materials, and Electricity

#### Assessment

Two written examinations of 1 hr 30 minutes each. Consisting of,

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#### Investigative Skills Assessment

Experimental skills in Physics.

#### Assessment

Six experiments assessed on a pass or fail basis against the Common Practical Assessment Criteria CPAC.

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## Entry requirements:

**A minimum of 5 grades 9-4 at GCSE** including English. A minimum of grades 7,6, 6 in any order in GCSE Science and Maths is required. It is strongly recommended that you take A Level Maths alongside Physics.

