Post 16 Centre

KEN STIMPSON COMMUNITY SCHOOL

Physics

What will I learn?

This two year qualification builds on the knowledge, understanding and process skills that are developed in GCSE Science. You will learn theory and develop relevant practical skills throughout the course. Numeracy and mathematical methods are important in physics, as are skills in communication, research and critical thinking. You will be expected to take an active part in lessons and use sophisticated laboratory equipment confidently.

What can I do next?

You could take this course to complement other advanced level courses such as Chemistry, Biology or Maths, which could then lead onto higher education in a science related subject or more general higher education courses.

With further training, you could go into a job related to physics such as sound engineer, astrophysicist, electronics engineer, science technician, renewable energy manager/developer, surgeon, financial analyst, air traffic controller, optometrist, radiographer, civil engineer, mechanical engineer, lawyer, vehicle designer, virtual world computer programmer and many more.

The course will also help you develop the skills, understanding and knowledge that many employers across lots of other industries are looking for.

Further course information

Modules to be studied are:

Year 12

Mechanics (motion, forces, energy and power)

Materials (Fluid flow, strength of materials)

Waves (Behaviour, Light and Sound)

Electricity (Electrical quantities and circuits)

Nature of Light (Spectra and energy levels)

Further Mechanics (momentum and circular motion)

Electric and Magnetic Fields

Summary

Level: A Level

Duration: 2 years

Qualification:
EDEXCEL Advanced GCE in Physics

Entry Requirements:
Mathematics grade 6

English grade 5

Combined Science 6:6 or Triple Science Physics grade 6 plus one other Science grade 6

Year 13

Particle Physics (particle accelerators and particle interactions)

Thermodynamics

Nuclear Radiation

Oscillations

Gravitational fields

Space

Revision

The teaching of the content of the course will be completed by February of year 13. There will then be a thorough revision programme to build up to the final exams.

Award of qualification

The qualification is awarded by successful completion of two topic tests on a wide range of subjects and an exam focussed on more searching general physics principals and laboratory techniques.

In addition to the overall grade, students who demonstrate appropriate laboratory skills over the 2 years will be awarded with a Practical Endorsement.

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