# ELIZABETH WOODVILLE SCHOOL SIXTH FORM

# PHYSICS

Qualification Level	A Level
Exam Board/ Specification	OCR Physics A
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# Why study this course?

Whether you want to work to help cure medical problems, study the weather, explore extreme environments such as space, volcanoes or the deep sea, Physics will give you a grounding in the mechanics, fields, thermodynamics and space science that will set you up for further study in any of these areas.

#### **Course content**

Class teaching and practical lessons are complimented by a range of textbooks and other resources. Students are encouraged to increase the depth of their subject knowledge through independent study workshops where they are given directed tasks to complete in peer groups.

# Content is split into six teaching modules:

- Module 1 Development of practical skills in physics
- Module 2 Foundations of physics
- Module 3 Forces and motion
- Module 4 Electrons, waves and photons
- Module 5 Newtonian world and astrophysics
- Module 6 Particles and medical physics

# Higher education/ career links

In terms of future careers, Physics is a highly regarded qualification. Studying the sciences takes discipline and commitment and is best suited to students who have good attention to detail, strong mathematical skills and a passion for learning. Physics is a facilitating subject that provides pathways to engineering, medical science, laboratory research, teaching and lecturing or space science.

Careers this qualification can lead to: 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.

Jobs directly related to physics include:

- Academic researcher
- Acoustic consultant
- Astronomer
- Clinical scientist, medical physics
- Geophysicist
- Higher education lecturer
- Metallurgist
- Meteorologist
- Nanotechnologist
- Radiation protection practitioner
- Research scientist (physical sciences)

- Secondary school teacher
- Sound engineer
- Technical author

Jobs where physics would be useful include:

- Actuary
- Applications developer
- Clinical technologist
- Data analyst
- Nuclear engineer
- Operational researcher
- Patent attorney

Famous people who have studied the subject: Brian Cox (TV presenter), Angela Merkel (German Chancellor)

Entry requirements

Grade 7 in Physics, Combined Science 7/7 and Grade 7 in Mathematics

Component 01 assesses content from modules 1, 2, 3 and 5. Component 02 assesses content from modules 1, 2, 4 and 6. Component 03 assesses content from all modules (1 to 6).