



Physics

...it *is* Rocket Science!



Exam Board:

Edexcel

Components:

- Working as a Physicist
- Mechanics
- Electric Circuits
- Further Mechanics
- Electric and Magnetic Fields
- Nuclear and Particle Physics
- Materials
- Waves and the Particle Nature of Light
- Thermodynamics
- Space
- Nuclear Radiation
- Gravitational Fields
- Oscillations

Assessment:

Advanced Physics I:

90 marks (30%)

1 hour 45 minutes

Advanced Physics II:

90 marks (30%)

1 hour 45 minutes

General and Practical Principles in Physics:

120 marks (40%)

2 hours 30 minutes

Practical

Endorsement

Summary

A level Physics starts by continuing the work done in GCSE. In Year 1, students study Mechanics, Electric circuits, Materials and Waves and the particle nature of light. In Year 2 the course introduces students to topics not met before with- in Further mechanics, Electric and magnetic fields, nuclear and particle physics, Thermodynamics, Nuclear radiation, Oscillations and Space.

The amount and level of mathematics contained within the Physics course is higher than other sciences. Although pupils not taking A level maths are wel- come to take A level Physics, they must be aware that there will be an expecta- tion that they will complete additional work to learn and practice the specific mathematical skills that are fundamental in advanced Physics.

The assessment of practical work in Physics will not contribute to the final A level grade, but will be reported separately as the Practical Endorsement, which is pass or fail. The exam boards have agreed Common Practical Assessment Criteria (CPAC) across all science subjects, which students will need to meet to gain the endorsement. The written exams will contain questions where the students will be expected to demonstrate a knowledge and understanding of the Core Practicals.

Looking Ahead

Physics is a seriously useful subject for the majority of STEM (science, technolo- gy, engineering and maths) careers and you'll find physicists everywhere, in industry, transport, government, universities, the armed forces, the secret ser- vice, games companies, research labs and more.

Physics is especially helpful for jobs that involve building things and developing new technologies, including: engineering, astronomy, robotics, renewable ener- gies, computer science, communications, space exploration, sports and games technology, research and nanotechnology.

Link Subjects

Physics will support your study of other science and tech subjects, including chemistry, biology, engineering, geography and IT. Physics is espe- cially closely linked to maths.

Key Skills Developed

Problem solving
Mathematical
Investigative
ICT

Student View

"Intense but enjoya- ble..."

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