Higher Physics (Course Code: C857 76)

SCQF Level 6 (24 Credit Points)

Why study Physics?

This course is designed to increase your knowledge and understanding of the concepts of Physics and its many applications in modern society. It provides the opportunity to develop skills necessary to find solutions to scientific problems, such as experimenting, investigating and analysing, and gives a deeper insight into the structure of the subject. The course makes a valuable contribution to your general education and provides a sound basis for further study.

The skills you learn on this course are valuable for careers in medicine, energy, industry, material development, the environment and sustainability.

Career Pathways

To see what career areas this subject could lead to and the routes to get there, download and view these career pathways:

Animals, Land and Environment

Computing and ICT

Construction

Engineering

Health and Medicine

Science and Maths

Teaching and Classroom Support

Transport and Distribution

Uniformed and Security Services

What do I need to get in?

Entry is at the discretion of the school or college, but you would normally be expected to have achieved:

- **National 5 Physics**

What will I study?

The course consists of **three** areas of study.

Our dynamic Universe

Topics covered: motion – equations and graphs; forces, energy and power; collisions, explosions and impulse; gravitation; special relativity; the expanding Universe.

Particles and waves

Topics covered: forces on charged particles; the Standard Model; nuclear reactions; inverse square law; weave-particle duality; interference; spectra; refraction of light.

Electricity

Topics covered: monitoring and measuring AC; current, potential difference, power, and resistance; electrical sources and internal resistance; capacitors; semiconductors and p-n junctions.

How will I be assessed?

The course assessment has **three** components **totalling 175 marks**:

- Component 1: question paper 1 (multiple choice) – worth 25 marks (scaled to 25 towards overall total)
- Component 2: question paper 2 – worth 130 marks (scaled to 95)
- Component 3: assignment – worth 20 marks (scaled to 30).

For the assignment component, you will research a topic, gather information and produce a report based on your research.

Both the question papers and the assignment are set and externally marked by the Scottish Qualifications Authority (SQA).

The grade awarded is based on the total marks achieved across course assessment.

The course assessment is graded A-D.

Study Materials

- SQA Past Papers Physics Higher
- SQA Understanding Standards Physics
- BBC Bitesize Higher Physics
- Ushare Study Resources

What can I go on to next?

If you complete the course successfully, it may lead to:

- **Advanced Higher Physics**

Further study, training or employment in:

- Animals, Land and Environment
- Computing and ICT
- Construction
- Engineering
- Health and Medicine
- Science and Mathematics
- Teaching and Classroom Support
- Transport and Distribution
- Uniformed and Security Services