National 5 Physics (Course Code: C857 75)

SCQF Level 5 (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 have achieved one of the following:

- **National 4 Physics**
- **National 4 Chemistry**
- **National 4 Biology**
- **National 4 Environmental Science**
- **National 4 Science**

What will I study?

From the sources of the energy we use, to the exploration of space, Physics covers a range of applications that affect our lives. Studying Physics allows you to gain an insight into the underlying nature of our world and its place in the universe. It will help you to develop your logical and critical thinking, solve problems and make decisions.

The course comprises **six** areas of study.

Dynamics

You will learn about:

vectors and scalars; velocity–time graphs; acceleration; Newton's laws; energy; projectile motion.

Space

You will learn about

space exploration; cosmology.

Electricity

You will learn about:

electrical charge carriers; potential difference (voltage); Ohm's law; practical electrical and electronic circuits; electrical power.

Properties of matter

You will learn about:

specific heat capacity; specific latent heat; gas laws and the kinetic model.

Waves

You will learn about:

- wave parameters and behaviours; electromagnetic spectrum; refraction of light.

Radiation

You will learn about:

nuclear radiation.

How will I be assessed?

Course Assessment

The course assessment has **two** components **totalling 155 marks**:

- Component 1: question paper – worth 135 marks (scaled to 100 towards the overall total)
- Component 2: assignment – worth 20 marks (scaled to 25).

The question paper will be set and externally marked by SQA.

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

The course assessment is graded A-D.

Study Materials

- SQA Past Papers Physics National 5
- SQA Specimen Paper Physics National 5
- SQA Understanding Standards Physics
- BBC Bitesize National 5 Physics
- Ushare Study Resources

What can I go on to next?

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

- **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