National 3 Chemistry (Course Code: C713 73)

SCQF Level 3 (18 Credit Points)

Why study Chemistry?

Chemistry is vital to everyday life and allows us to understand and shape the world in which we live. You will learn about the applications of chemistry in everyday contexts such as medicine, energy and industry, as well as its impact on the environment and sustainability. You will learn how to think creatively and independently, and analyse and solve problems.

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

Engineering

Health and Medicine

Manufacturing Industries

Science and Maths

Teaching and Classroom Support

Uniformed and Security Services

What do I need to get in?

The school or college will decide on entry requirements for the course. You would normally have achieved:

- **National 2 Science in the Environment**

What will I study?

You will learn about how we use the Earth's resources, the chemistry of everyday products and environmental analysis. You will find out how chemistry affects our environment and our everyday lives. This will help you to make your own decisions on contemporary issues where scientific knowledge is constantly developing.

The course has **three** compulsory units.

Chemical Changes and Structure (6 SCQF credit points)

In this unit you will:

- develop scientific skills and knowledge of the chemicals in our world including the properties and reactions of common elements, and how these relate to their position in the periodic table
- focus on everyday elements, compounds and mixtures, you will work towards the concept of chemical reactions and word equations
- study everyday uses and reactions of acids and bases, and the impact they have on the environment, through practical experience.

Nature's Chemistry (6 SCQF credit points)

In this unit you will:

- research the Earth's rich supply of natural resources
- investigate the formation of fossil fuels and how developments in sustainable energy sources is changing their use
- find out how chemists use plants in the development of everyday products
- explore plants as a source of oils, carbohydrates and nutrients.

Chemistry in Society (6 SCQF credit points)

In this unit you will:

- investigate the environmental issues associated with the reactions, applications and corrosion of metal
- explore the use of metals in chemical cells
- compare and contrast the properties and applications of metals, plastics and new materials
- research the use of chemicals in industry, with an emphasis on the environmental issues.

How will I be assessed?

Your work will be assessed by your teacher or tutor on an ongoing basis throughout the course. Items of work might include:

- practical work - practical experiments
- written work - research assignments and reports
- projects
- class-based exams.

You must pass all three units to get the qualification.

Study Materials

What can I go on to next?

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

- **National 4 Chemistry**
- **National 4 Science**

Further study, training or employment in:

- Animals, Land and Environment
- Engineering
- Health and Medicine
- Manufacturing Industries
- Science and Mathematics
- Teaching and Classroom Support
- Uniformed and Security Services