

## Advanced Higher Chemistry (Course Code: C813 77)

SCQF Level 7 (32 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](#)

[Uniformed and Security Services](#)

### What do I need to get in?

This is at the discretion of the school/college but you would normally be expected to have attained one of the following:

- Higher Chemistry

### What will I study?

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

#### Inorganic Chemistry

You will study:

- electromagnetic radiation and atomic spectra
- atomic orbitals, electronic configurations and the periodic table
- transition metals.

## Physical Chemistry

You will study:

- chemical equilibrium
- reaction feasibility
- kinetics.

## Organic chemistry and instrumental analysis

You will study:

- molecular orbitals
- synthesis
- stereo chemistry
- experimental determination of structure
- pharmaceutical chemistry.

## Researching chemistry

You will study:

- common chemical apparatus
- skills involved in experimental work
- stoichiometric calculations
- gravimetric analysis
- volumetric analysis
- practical skills and techniques.

## How will I be assessed?

**Please note** - for the 2022-23 session there is no project, only the question paper worth 110 marks (scaled up to 120).

The course assessment consists of **two** components **totalling 135 marks**:

- Component 1 - Question paper (110 marks)
- Component 2 - Project (25 marks)

For Component 2, you will carry out an in-depth investigation of a chemistry topic and produce a project-report.

Both the question papers and the project 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 Chemistry Advanced Higher](#)

[SQA Specimen Chemistry Advanced Higher Question Paper](#)

## What can I go on to next?

Further study, training or employment in:

- Chemical and Materials Engineering
- Chemistry and Materials Science
- Engineering
- Health and Medicine
- Manufacturing Industries
- Science and Mathematics