

Chemistry is the study of matter at the level of atoms, molecules, ions and compounds. These substances are the building blocks of life and all the materials that surround us. Chemists play a vital role in the production of everyday commodities. The study of chemistry is of benefit not only to those intending to pursue a career in science, but also to those intending to work in areas such as the food, health, textile or manufacturing industries.

The course enables candidates to make their own decisions on issues within a modern society, where the body of scientific knowledge and its applications and implications are ever developing.

Candidates gain an understanding of chemistry and develop this through a variety of approaches, including practical activities, investigations and problem solving. Candidates research topics, apply scientific skills and communicate information related to their findings, which develops skills of scientific literacy.

Topics Covered

Chemical Changes & Structures

In this area we cover rates of reaction; atomic structure and bonding; formulae and reacting quantities and acids and bases.

Nature's Chemistry

In this area we cover homologous series, everyday consumer products and energy from fuels.

Chemistry In Society

In this area we cover metals; plastics; fertilisers; nuclear chemistry and chemical analysis.

Skills Gained

- Develop scientific enquiry and investigative skills
- Develop scientific analytical thinking skills
- Develop the use of technology, equipment and materials in practical scientific activities
- Develop planning skills
- Develop problem-solving skills
 - Develop skills of independent working
- Use scientific literacy to communicate ideas and issues and the make scientifically informed choices

Assessment Breakdown

The course assessment has two components.

1. Question paper – 100 marks completed in 2.5 hours

2. Assignment – 20 marks scaled to 25 marks completed over 8 hours during class time

Progression & Possible Career Paths

Progression:

- Higher Chemistry
- Advanced Higher Chemistry
- College/University Courses

Possible Career Paths:

- Chemical Engineering
- Pharmaceutical Forensic Science
- Environmental Science
- Education

Entry Requirements and advice

Pupils will need to demonstrate a strong understanding of science concepts through the first 3 years of their secondary education. It is important that pupils have developed good literacy and numeracy skills.

