

Why Study A Level Chemistry?

Course Introduction

Discover the science behind the substances, reactions and materials that shape our world. From understanding atoms and chemical bonding to exploring how reactions occur, A-level Chemistry develops your analytical thinking, practical skills and scientific understanding.

Entry Requirements

5 GCSEs with a minimum Grade 6
Minimum Grade 6 in GCSE Maths,
GCSE Chemistry or Combined Science
and Grade 5 in English

Course Content

A-level Chemistry builds on GCSE knowledge to explore the structure, properties and reactions of substances through deeper chemical principles.

- Foundations in chemistry: Understand atomic structure, bonding and quantitative calculations.
- Periodic table and energy: Explore element behaviour, energy changes and reaction rates.
- Organic chemistry: Study organic reactions and the production of useful compounds and polymers.
- Physical chemistry and analysis: Investigate acids and transition metals, using analytical techniques to identify substances.

Skills Developed

Develop your ability to analyse scientific problems, interpret data and apply chemical principles accurately. You'll strengthen your mathematical reasoning, practical laboratory techniques and attention to detail. The course will teach you to evaluate experiments, explain reaction mechanisms and draw evidence-based conclusions.

Career Opportunities

A-level Chemistry can lead to university courses and careers in chemistry, medicine, pharmacy, chemical engineering, biochemistry and forensic science. It also opens pathways into environmental science, materials science, healthcare and research.

Course Assessment

Assessment combines written examinations featuring chemical calculations, practical-based questions, data analysis and extended responses

- Paper 1: Periodic Table, Elements and Physical Chemistry: 2 hours 15 minutes (37%).
- Paper 2: Synthesis and Analytical Techniques: 2 hours 15 minutes (37%).
- Paper 3: Unified Chemistry: 1 hour 30 minutes (26%).

