



Sixth Form Subject Guide

CHEMISTRY

★★★ CAREERS RELATED TO STUDYING THIS SUBJECT

Chemistry graduates have high employment rates in a variety of different sectors, both scientific and non-scientific, due to the skills that are gained such as analysis, problem solving and research amongst many others. Popular current career paths include further academic research, the petrochemical industry, biochemical science, medicinal chemistry, chemical engineering, pharmaceuticals and biotechnology, aerospace technology and many more. Due to the high-level skills that chemists gain, there are also many employment opportunities in business management, finance, and human resources areas as well as many opportunities in the public sector.

★★★ A LEVEL COURSE CONTENT

A Level Chemistry provides a depth and breadth of knowledge and understanding and is an ideal choice for those that know they want to study a science-related discipline at university.

The key concepts encapsulated in the CIE programme of study are:

- Atoms and Forces;
- Experiments and Evidence;
- Patterns in Chemical Behaviour and Reactions;
- Chemical Bonding; and
- Energy Changes.

★★★ A LEVEL METHODS OF ASSESSMENT

Assessment Component	Weighting	
	AS Level	A Level
Paper 1: [AS Syllabus] Multiple Choice (1 hour 15 minutes)	31%	15.5%
Paper 2: [AS Syllabus] Longer Structured Questions (1 hour 15 minutes)	46%	23%
Paper 3: Advance Practical Skills (2 hours) <ul style="list-style-type: none">• Practical Test under exam conditions in the Laboratory.	23%	11.5%
Paper 4: [AS & A2 Syllabus] Longer Structure Questions (2 hours)	N/A	38.5%
Paper 5: Planning, Analysis and Evaluation (1 hour 15 minutes) <ul style="list-style-type: none">• Based on Experimental Skills.	N/A	11.5%

★★★ METHODS OF STUDY FOR A LEVEL

Chemistry is a practical science and thus many areas will be taught through gaining and utilising experimental evidence to further conceptual understanding. This means lots of laboratory experiments and demonstrations.

Discussion of concepts using chemical terminology forms a significant part of lesson activities as well as quantitative reasoning, 3D modelling, computer aided simulations, as well as written question-based activities.

Progress is monitored through performance in lessons, homework activities, and more formal written and practical based class tests.

Independent study forms an important part of the successful student in Chemistry and, therefore, it is an expectation that the number of hours of independent study at least matches the number of hours of in-class study per week.

★★★ ENTRY REQUIREMENTS FOR A LEVEL

A minimum of Grade B in IGCSE Chemistry or BB in IGCSE Coordinated Science and a minimum of Grade B in IGCSE Mathematics.

