



# CHEMISTRY



*What exactly do chemists do?*

- *Chemists analyse, synthesize, quantitate and design many materials including new drugs.*
- *The public services employ chemists in important analytical and forensic science roles.*
- *Chemists monitor pollution, the environment and climate.*
- *Chemists have greatly improved the quality of life for the majority of people.*

Chemistry is challenging and stretches the imagination whilst at the same time it remains practical and very 'hands on'. If you are interested in the above then Chemistry may be the course for you!

## ASSESSMENT

**Level:** AS + A Level

**Specification:** AQA [www.aqa.org.uk](http://www.aqa.org.uk)

**Assessment details:**

AS: Paper 1 and Paper 2 Exam in June.

A Level: Paper 1, 2 and Paper 3 (Practical skills) in June of Year 13 only.

## QUALITIES AND QUALIFICATIONS

Students with a wide range of interests enjoy the Chemistry course. Whether you would like a job in medicine or industry, Chemistry is the solid platform upon which careers are built. Good numeracy skills are an advantage as you will be faced with a number of mathematical problems. To support your study at this level you must also be taking either Maths or Physics at AS level in conjunction with this course.

## OUTLINE OF SUBJECT

**At AS level you will study:**

- In Paper 1 you will cover inorganic chemistry topics like the periodic table and redox.
- In Paper 2 you will cover organic chemistry topics like hydrocarbons, alcohols and analytical techniques.
- Physical chemistry topics such as atomic structure, bonding and energetics will be spread across both Papers 1 and 2.

**At A Level you move on to study (along with the all the AS level material):**

- Paper 1 covers further inorganic chemistry topics like transition metals and ions in solution.
- Paper 2 covers further organic chemistry topics like polymers, amino acids, proteins and aromatic chemistry.
- Physical chemistry topics like thermodynamics equilibria will be spread across both Papers 1 and 2. Throughout both AS and A2 courses, time will be dedicated to improving and perfecting your investigative and practical skills.

## COMPLEMENTARY SUBJECTS AND FUTURE PATHWAYS

- Chemistry is a great choice of subject for people who want a career in health and clinical professions, such as medicine, nursing, biochemistry, dentistry or forensic science.
- It will also equip you for a career in industry, for example in the petrochemical or pharmaceutical industries.
- Chemistry is highly regarded by universities; Psychology, Sociology, Biology, Science in Society, Physics, Applied Science, Health & Social Care, Critical Thinking and Environmental Studies all require similar skills and feature overlapping issues.