

Chemistry



Exam Board
OCR

Syllabus number
A/ H432



King's
School

“Every aspect of the world today - even politics and international relations, is affected by chemistry.”

Linus Pauling

Course entry requirements

Grade 6 in GCSE Chemistry or two Grade 6s in GCSE Combined Science. Grade 6 or above in Mathematics would be beneficial.

Why should I study chemistry?

Chemists use their experiments and knowledge to develop medicines, foods, fabrics and other materials, from neon lights to shatterproof glass. They also use it to understand the world around us, from why leaves change colour to discovering invisible pollutants in the air. Chemistry is sometimes known as the 'central science' because it helps to connect physical sciences, like mathematics and physics, with applied sciences, like biology, medicine and engineering. Chemistry helps you to develop research, problem solving and analytical skills. It helps to you challenge ideas and show how you worked things out through logic and step-by-step reasoning. Chemistry often requires teamwork and communication skills too, which is great for project management.

What does the course look like?

The content is in six modules:

- Module 1 – Development of practical skills in chemistry
- Module 2 – Foundations in chemistry
- Module 3 – Periodic table and energy
- Module 4 – Core organic chemistry
- Module 5 – Physical chemistry and transition elements
- Module 6 – Organic chemistry and analysis

This is a linear course, and you will sit three written exams:

Paper	Title	Duration	Weighting
1	Periodic table, elements and physical chemistry	2 hours 15 mins	37%
2	Synthesis and analytical techniques	2 hours 15 mins	37%
3	Unified chemistry	1 hour 30 mins	26%

In addition, you will complete practical activities throughout the course that will lead to the Practical endorsement in chemistry.

How will I learn?

The course features a wide range of teaching and learning approaches and methods, including practical work, interactive classroom study, group tasks, private study and lab based practical activities. Outside of lessons there may be opportunities to visit laboratories and you will be encouraged to enter competitions such as the Chemistry Olympiad. There will be a greater focus on independent learning and wider reading will be essential in order to succeed on this course.

What kind of things might the subject lead me to?

An A Level in chemistry can open many doors for you in the future. It is seen as a challenging, academic and rigorous A Level that will impress a lot of universities and employers. It can lead to many careers in healthcare such as medicine, pharmacy and dentistry, the biological sciences, physics, mathematics, pharmacology and analytical chemistry. Many law applicants also take

chemistry as it shows potential employers that you can cope with difficult concepts. You need chemistry to study veterinary medicine or medicine - universities usually ask for an A.

