Chemistry A-Level

Exam board: OCR A

A-Level Chemistry offers a comprehensive exploration of the building blocks of matter and the reactions that shape the physical world. The course equips students with a deep understanding of how and why substances interact, combine, and transform. Practical experiments and analytical skills are emphasised, fostering scientific thinking and precision.

Studying A-Level Chemistry is ideal for those curious about the principles governing why matter behaves in the way that it does. Studying A-level chemistry develops problem-solving, logical reasoning, and practical skills, making it a vital subject for some careers such as medicine, or engineering. Employers, both in and out of the science sector, are immediately attracted to candidates with A-level chemistry as it shows that problem solving and critical thinking can be used to enter many different professions.

Entry requirements:
PH6 standard entry requirements of five + GCSEs (or equivalent) grades 9-5.
Grade 6-6 or above in GCSE Combined Science or Grade 6 in biology, chemistry, and physics.
Grade 6 or above in GCSE Mathematics.

Student attributes:
• Naturally inquisitive and curious nature, prepared to ask questions and challenge ideas.
• Attention to detail and preparedness to be precise in use of language and making measurements.
• Commitment and discipline to enable fact retrieval.
• Willingness to employ trial and error techniques when solving problems or practical problems.
• Resilience and perseverance: prepare to be challenged, to have your ideas about the world challenged, and handle set backs.
• Interest in the subject: have a passion for the subject and read about the subject beyond the specification.

Course Content & Assessment:
A-Level Chemistry is a linear subject: all assessment is through written exams at the end of Year 13.
Paper 1: Periodic table, elements, and physical chemistry - 2 hour 15 minutes, 37% of A-level.
Paper 2: Synthesis and analytical techniques - 2 hour 15 minutes, 37% of A-level.
Paper 3: Unified chemistry – 1 hour 30 minutes, 26% of A-level.
Practical endorsement: throughout the course in class assessed by your teacher.

Future Destinations:
- University degrees: chemistry, chemical engineering, medicine, pharmacy, biochemistry, pharmacology, environmental science, materials science, forensic science, food science, dentistry, veterinary science, nanotechnology, geology, biomedical sciences, law, business management, economics, marketing, education, journalism,
- Professions: chemical engineer, pharmacist, doctor, surgeon, forensic scientist, environmental scientist, food scientist, research scientist, patent attorney, business consultant, financial analyst, data analyst, journalist, public policy advisor, environmental lawyer.

"Chemistry begins in the stars. The stars are the source of the chemical elements, which are the building blocks of matter and the core of our subject."

Peter Atkin "Molecules" (1994)
British Chemist and Author