CHEMISTRY A-LEVEL

WHY SHOULD I STUDY A-LEVEL CHEMISTRY?

Chemistry provides essential knowledge and understanding of different areas of the subject and how they relate to each other. Chemistry develops and demonstrate a deep appreciation of the skills, knowledge and understanding of scientific methods as well as increasing competence and confidence in a variety of practical, mathematical, and problem-solving skills. Pupils often go on to develop an interest in and enthusiasm for the subject, including potential for further study and careers associated with the subject, all while understanding how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.

WHAT WILL I LEARN ABOUT?

A summary of the content for the A-level course is as follows: Module 1 – Development of practical skills in Chemistry, assessed in a written examination and in the practical endorsement; Module 2 – Foundations in Chemistry including atoms, compounds, molecules and equations; Module 3 – Periodic table and energy including the periodic table and periodicity; Module 4 – Core organic chemistry including basic concepts, alcohols and haloalkanes and analytical techniques; Module 5 – Physical Chemistry and transition elements including reaction rates and equilibrium (quantitative); Module 6 – Organic Chemistry and analysis including compounds, synthesis and chromatography and spectroscopy (NMR).

HOW WILL I BE ASSESSED?

All three externally assessed components (01–03) contain some synoptic assessment, some extended response questions and some stretch and challenge questions. Stretch and challenge questions are designed to allow the most able learners the opportunity to demonstrate the full extent of their knowledge and skills.

WHAT SKILLS WILL I DEVELOP?

The ability to demonstrate and apply knowledge and understanding of scientific ideas, processes, techniques, and procedures, in a theoretical and practical context and when handling qualitative and quantitative data. And to analyse, interpret, and evaluate scientific information, ideas, and evidence, to make judgements and reach conclusions, developing and refining practical design and procedures.

WHERE COULD THIS SUBJECT TAKE ME IN THE FUTURE?

Chemistry is an important subject for careers in STEM, as well as medicine, environmental science, engineering, toxicology, developing consumer products, metallurgy, developing perfumes and cosmetics, pharmaceuticals, space exploration, teaching, science writing software development and research.

Exam Board: OCR