

CHEMISTRY

AS Chemistry offers the opportunity to explore further some of the wonders of the natural world. Through a combination of practical and theoretical investigation, it provides a grounding in the basic principles that underpin chemistry and applies them to the world and its resources.

Chemistry is the gateway to many different career pathways, such as Medicine, Dentistry, Pharmacy, Veterinary Science, Biochemistry, Engineering, Forensic Science and many others. It develops practical and analytical skills and provides opportunities for research into and evaluation of existing theories and techniques. In Short, chemistry is stimulating, challenging, satisfying and fun.

ENTRY REQUIREMENTS

A good grounding in Chemistry is essential – preferably an A or B at GCSE level – along with a lively curiosity and an active imagination.

To progress onto A2 Chemistry, it is important that you have satisfactorily completed AS Chemistry.

EXAMINATION BOARD

AQA

MODULES

Module 1 – Foundation Chemistry: Atomic Structure, Equations and Calculations, Bonding, Periodicity, Introduction to Organic Chemistry.

Module 2 – Chemistry in Action: Energetics, Kinetics, Equilibria, Redox Reactions, Halogens, Alkaline Earth Metals, Extraction of metals, More Organic Chemistry.

Module 3 – Investigative and Practical Skills.

Module 4 – Reaction kinetics, Equilibria, Acids and Bases, Further Organic Chemistry and Structure Analysis.

Module 5 – Thermodynamics, Periodicity, Redox Equilibria, Transition Metals and Reactions of Inorganic Compounds in Aqueous solutions and synoptic questions to cover all AS and A2 Chemistry.

Module 6 – Investigative and Practical Skills.

ASSESSMENT

AS is assessed with two written theory examination papers, sat in June, involving long and short answer questions. During the year practical and investigation skills are assessed both in general and through specific tasks and a written paper.

A2 consists of two written examination papers in June. Two involve short and long answer questions, the third involves multiple choice questions. During the year practical and investigation skills are assessed both in general and through specific tasks and a written paper.

WHERE DOES IT LEAD?

Any science career. The ability to demonstrate analytical and scientific thinking is of value in most career paths.

Chemistry will be helpful for researchers, engineers, doctors, veterinary surgeons, geneticists, pharmacists, pharmacologists, the list is endless.