



Entry Criteria:

- You will need to achieve the pathway criteria, please see the prospectus for further information
- You will need to achieve a Grade 5 above in GCSE Mathematics
- You will need to achieve a GCSE Science with a significant Chemistry component (for example, Core and Additional Science) at Grade 5 or above.

Coursework/Examination Requirements:

AS Assessment: Two written examinations each worth 50%

A Level Assessment: Three written examinations worth 35%, 35% and 30%

Awarding Body/Specifications: AQA

Advanced Level (A Level): Chemistry is the study of how matter interacts on an atomic or molecular scale in order to understand its bulk properties. Chemists then make use of this knowledge to build a healthier, more colourful and technologically advanced world. More than most subjects, Chemistry allows students to study advances in cutting edge technology that lead to the forefront of current knowledge in areas of medicine, drugs, colour, materials science and many more.

The following units will be covered on this course:

AS - Year 12 Unit Content

Physical Chemistry: Atomic Structure, Amount of Substance, Bonding, Energetics, Kinetics, Chemical Equilibria, Redox

Inorganic Chemistry: Periodicity, Group 2, Group 7

Organic Chemistry: Introduction to Organic Chemistry, Alkanes, Alkenes, Alcohols, Halogenoalkanes, Organic Analysis.

A Level - Year 13 Unit Content

Physical Chemistry: Thermodynamics, Rate Equations, Equilibrium Constant K_p , Electrochemical, Cells, Acids and Bases

Inorganic Chemistry: Properties of Period 3 Elements, Transition, Metals, Reactions of Ions in Aqueous Solution

Organic Chemistry: Optical Isomerism, Aldehydes, Ketones, Carboxylic Acids and Derivatives, Aromatic Chemistry, Amines, Polymers, Amino Acids, Proteins and DNA, Organic Synthesis, NMR, Chromatography.

Advanced Subsidiary (AS): If you choose to study this subject for one year only, you will be awarded the AS level. You will cover the AS unit content and sit public examinations in Year 12. These examinations include a multiple choice section as well as questions relating to practical work and mathematical techniques applied in Chemistry.

Progression: Any career that requires qualities such as adaptability, creativity, curiosity, tenacity and analytical skills. An essential for potential Doctors, Veterinarians and Pharmacists. Former students have studied the following degrees at Higher Education: Medicine, Pharmacy, Natural Science, Dentistry, Chemistry, Oceanography, Geology, Law, Forensic Science, Engineering, Paramedic Science, Fashion and Textiles, Sports Science and many more.

Opportunities: You will have the opportunity to take part in Chemistry challenges and visit university research laboratories. There are also a variety of conferences and workshops that are run by external providers which are open to any student wishing to attend.