

QUALIFICATION:- A Level

You will study the following units:-

Year 12

- **Physical Chemistry:** Atomic Structure, Amounts of substance, Bonding, Energetics, Kinetics, Chemical Equilibria, Redox
- **Inorganic Chemistry:** Periodicity, Group 2, Group 7
- **Organic Chemistry:** Alkanes, Haloalkanes, Alkenes, Alcohols, Organic Analysis.

Year 13

- **Physical Chemistry:** Thermodynamics, Rate Equations, Equilibrium Constants, Electrode potentials and electrochemical cells, Acids and Bases.
- **Inorganic Chemistry:** Properties of the period 3 elements and their oxides, Transition metals, Reactions of ions in aqueous solution.
- **Organic Chemistry:** Optical isomerism, Carbonyls, Carboxylic acids and derivatives, Aromatic Chemistry, Amines, Polymers, Amino acids, Proteins and DNA, Organic Synthesis, NMR Spectroscopy, Chromatography

New skills you will learn or develop further:-

A proportion of the course is in the form of practical work - this involves completing investigations into Chemical reactions and analysing results to make conclusions. A new element to the course will also involve critiquing the methods used as well as equipment choices. Observations and techniques used will be examined at the end of the course.

Possible careers paths you could follow include:-

Research chemist; food scientist; pharmaceutical researcher; forensic scientist; chemical engineering; pharmacy; medicine; dentistry; production chemist.

SUBJECT:- Chemistry

Entry Profile for your course:-

You would generally have an idea of a possible career in a science related industry but may decide go on to other disciplines which require a higher level of numeracy and literacy such as accountancy and law. You will be aware of the academic rigor attributed to the subject (as are universities and employers) this is why a large proportion of them regard a student with this qualification as very desirable.

Entry Requirements:-

To be eligible, you will need to have at least 5 GCSEs grade A*-C which should include at least a GCSE grade B in Maths.

At least a grade B in either GCSE Chemistry, Additional Science or Further Additional Science is essential

How will my course be assessed:-

Assessment is by examination only. There are three exams each of 2 hours. The first exam will be Inorganic Chemistry and the Physical Chemistry that is linked to it. The second exam will be Organic Chemistry and the Physical Chemistry linked to it. Both will contain a mixture of short and long answer questions.

The final exam consists of questions on practical techniques and data analysis. These will be about designated practicals that you will do during the course so you will be familiar with them. In addition it will also contain multiple choice questions and a selection of short answer questions from across the whole specification.

When will my course be assessed:-

All exams will take place at the end of the 2 year course.