Chemistry A-level

Exam board: AQA

Where do I start?

You need at least a **Grade 7** in GCSE Trilogy Science including a **Grade 7** in the Chemistry component OR a **Grade 7** in GCSE Separate Science Chemistry. A **Grade 6** or above in Mathematics is also required.

Chemistry – about the subject:

Chemistry is one of the key branches of Science along with Biology and Physics. Chemistry is the study of matter, its properties, how and why substances react or separate to form new products. Understanding basic chemistry concepts is important in almost every single profession and is part of everything in our lives

Why study Chemistry?

Chemistry is well suited to learners with a passion and interest in Science. Chemistry can help you develop research, problem solving and analytical skills. It helps to challenge ideas and show how you worked out a problem through logical steps. Chemistry often requires teamwork and communication skills. The skills that are gained through the study of Chemistry make it a desirable subject to Universities and employers.

Learners study Chemistry because they want to:

- become mainstream chemist and develop an understanding of matter or become involved in one of the areas described below;
- improve their career prospects. Chemistry is a practical subject and one in which the frontiers of knowledge are being expanded on a regular basis, particularly in drug development. Many employer hold chemistry in high regard;
- meet the entry requirements for courses and careers in Medicine, Dentistry, Forensic Chemistry, Chemical engineering, Food and Flavour Chemistry and many more; or
- Complement other areas of study such as Biology, Physics, maths and engineering.

FOUNDATION FOR GROWTH

WPS VI

'Ipsum quod faciendum est diutius'

Which aspects of the subject will I be studying?

Paper 1: covers Thermodynamics, Equilibrium constant Kp for homogeneous systems, Electrode potentials and electrochemical cells, Acids and bases, Properties of Period 3, Transition metals, Reactions of ions in aqueous solutions

Paper 2 : covers Rate equations, Optical isomerism, Aldehydes and ketones, Carboxylic acids and derivatives, Aromatic chemistry, Amines, Polymers, Amino acids, proteins and DNA, Organic synthesis, NMR Spectroscopy Chromatography

Paper 3: Any topic from any paper

How will I be assessed?

Learners are assessed on three main objectives:

AO1: Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.

AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures; in a theoretical context, in a practical context, when handling qualitative data and when handling quantitative data.

AO3: Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to: make judgements, reach conclusions and to develop and refine practical design and procedures.

What are the career/higher education prospects?

Chemistry combines well with a number of other subjects. Prime lines of career paths include Medicine, Forensic Chemistry, Chemical engineering, Dentistry, Veterinarian