

Chemistry A Level

Examination Board:
AQA

Entry Requirements:
Grades 666 in Separate
Sciences OR Grades 66 in
Combined Science PLUS Grade
6 in Mathematics

Potential Career Opportunities:

Chemistry can lead to a wide range of University courses, STEM careers, research, engineering and pharmaceuticals. It is also considered one of the key subjects, alongside Biology, to go on to study Medicine.

Chemistry is listed as a facilitating subject; the skills and knowledge you will gain as part of the course are considered to give you access to a very wide range of careers, both in and out of the Science sector.

Course Overview:

Year 1:

1. Physical Chemistry
 - a. Atomic Structure
 - b. Amount of substance
 - c. Bonding
 - d. Kinetics
 - e. Equilibria
 - f. Redox
2. Inorganic Chemistry
 - a. Periodicity
 - b. Group 2
 - c. Group 7
3. Organic Chemistry
 - a. Introduction to organic Chemistry
 - b. Alkanes
 - c. Alkenes
 - d. Halogenoalkanes
 - e. Alcohols
 - f. Analysis

Year 2

1. Physical Chemistry
 - a. Thermodynamics
 - b. Kinetics
 - c. Equilibrium
 - d. Electrochemical cells
 - e. Acids, bases and buffers
2. Inorganic Chemistry
 - a. Periodicity
 - b. Transition metals
 - c. Inorganic reactions
3. Organic Chemistry
 - a. Isomerism
 - b. The carbonyl group
 - c. Aromatic Chemistry
 - d. Amines
 - e. Polymerisation
 - f. Biological molecules
 - g. Synthesis and analysis
 - h. Chromatography

Assessment:

There are three examinations in Year 13, each two hours long.

Paper 1: Inorganic and Physical Chemistry

Paper 2: Organic and Physical Chemistry

Paper 3: Synoptic paper - practical skills, data analysis and any topics from paper 1 or 2.

The Practical Endorsement is assessed through the completion of 12+ Core Practicals, and is awarded in addition to your A Level grade.

Why would this course suit me?

If you are curious about why atoms do what they do, have an inquisitive nature and enjoy a challenge and finding out about new ideas then Chemistry is for you. A Level Chemistry covers a range of topics ranging from the fundamental structure of atoms, to why acids are acidic, to the molecules that make up life. There are also great opportunities for practical work alongside many of the modules.

How does this course link to other subjects?

Chemistry complements other Sciences well, in addition to Mathematics. Physical Chemistry is based on physical laws, while organic Chemistry links very well to the biochemistry studied in Biology. A strong foundation in Mathematics will aid with some of the topics studied.

