

A-LEVEL CHEMISTRY

Why study A-level Chemistry?

A-level Chemistry attempts to answer the big question 'what is the world made of' and it's 'the search for this answer' that makes this subject so fascinating.

From investigating how one substance can be changed drastically into another, to researching a new wonder drug to save millions of lives, the opportunities that chemistry provides are endless.

Exam Board: AQA

Course overview...

Year 12:

Physical Chemistry

Atomic structure
Amount of substance
Bonding
Energetics
Kinetics
Chemical equilibria, Le Chatelier's principle and K_c
Oxidation, reduction and redox equations

Inorganic Chemistry

Periodicity
Group 2, the alkaline earth metals
Group 7(17), the halogens

Organic Chemistry

Introduction to organic chemistry
Alkanes
Halogenoalkanes
Alkenes
Alcohols
Organic analysis

Year 13:

Physical Chemistry

Thermodynamics (A-level only)
Rate equations (A-level only)
Equilibrium constant K_p for homogeneous systems (A-level only)
Electrode potentials and electrochemical (A-level only)
Acids and bases (A-level only)

Inorganic Chemistry

Properties of Period 3 elements and their oxides (A-level only)
Transition metals (A-level only)
Reactions of ions in aqueous solution (A-level only)

Organic Chemistry

Optical isomerism (A-level only)
Aldehydes and ketones (A-level only)
Carboxylic acids and derivatives (A-level only)
Aromatic chemistry (A-level only)
Amines (A-level only)
Polymers (A-level only)
Amino acids, proteins and DNA (A-level only)
Organic synthesis (A-level only)
Nuclear magnetic resonance spectroscopy (A-level only)
Chromatography (A-level only)

Possible careers linked to this qualification...

Studying an A-level Chemistry related degree at university gives you all sorts of exciting career options including: Analytical chemist, Chemical engineer, Clinical biochemist, Pharmacologist, Doctor, Pharmaceuticals, Research scientist, Toxicologist, Chartered certified accountant, Environmental consultant, High education lecturer, Patent attorney, Science writer

Some of our students have gone on to study...further after completing...

Chemical Engineering.....Mechanical Engineering.....Medicine.....Mathematics
Civil Engineering.....Computing.....Pharmacy.....Biomedical sciences.....Nursing