



Queen Elizabeth Grammar School
Wakefield

Technical Information

A-level

A-level Course Title	Unit Code	Awarding Body
Chemistry	7405	AQA

A-level Examinations:

Name	Method of Assessment	Marks
Paper 1	Examination	35%
Paper 2	Examination	35%
Paper 3	Examination	30%

QEGS Senior School

(Boys 11-18 years)
154 Northgate
Wakefield WF1 3QX
Telephone: 01924 373 943
Email: office@qegsss.org.uk
Twitter: @QEGSYorkshire

www.wgsf.org.uk

Course Guide

A-level Chemistry

Chemistry

Background Knowledge and Qualifications

The qualification builds on the knowledge, understanding and process skills inherent in GCSE.

You should have achieved a high grade in GCSE Chemistry or Trilogy and also a high grade in GCSE Maths is essential, due to the increased mathematical content at A-level.

The qualification integrates theory and relevant practical work, which are developed at different levels throughout the course.

You will need to be able to communicate effectively, research and critically think about chemical problems.

Course Description

This A-level is a reformed A-level. For your A-level you will be studying the following areas:

Physical Chemistry

The topics covered are Atomic Structure, Amount of Substance, Bonding, Energetics, Kinetics, Chemical Equilibria and Le Chatelier's principle, Oxidation, reduction and redox equations, Thermodynamics, Rate equations, Equilibrium constant K_c for homogeneous systems, Electrode potentials and electrochemical cells, Acids and bases.

Inorganic Chemistry

Periodicity, Group 2 the alkaline earth metals and Group 7 the halogens. Properties of period 3 elements and their oxides, Transition metals and reactions of ions in aqueous solution.

Organic Chemistry

Introduction to organic chemistry, Alkanes, Halogenoalkanes, Alkenes, Alcohols, Organic analysis, Optical Isomerism, Aldehydes and ketones, Carboxylic acids and derivatives. Aromatic chemistry, Amines and polymers Amino acids, proteins and DNA, Organic synthesis, NMR spectroscopy and chromatography.

Use of Course and Qualification

Follow a Chemistry based degree course, e.g. Colour Chemistry, Environmental Science, Chemical Engineering.

Follow a course with significant Chemistry content e.g. Medicine, Pharmacy, Biotechnology, Food, Polymers etc.

Use a chemistry degree for entry into a non-related further course or employment in other fields e.g. Accountancy, Computers.

UCAS handbooks and the Careers department will give you further guidance.

With a first degree in Chemistry job prospects are rather better than with many other subjects.



Student Testimonial

Year 13 student
Proposed University
Course: Chemical
Engineering

Chemistry challenges me academically. Our theoretical learning is reinforced with fun practicals, which establishes good understanding and means it is always interesting.