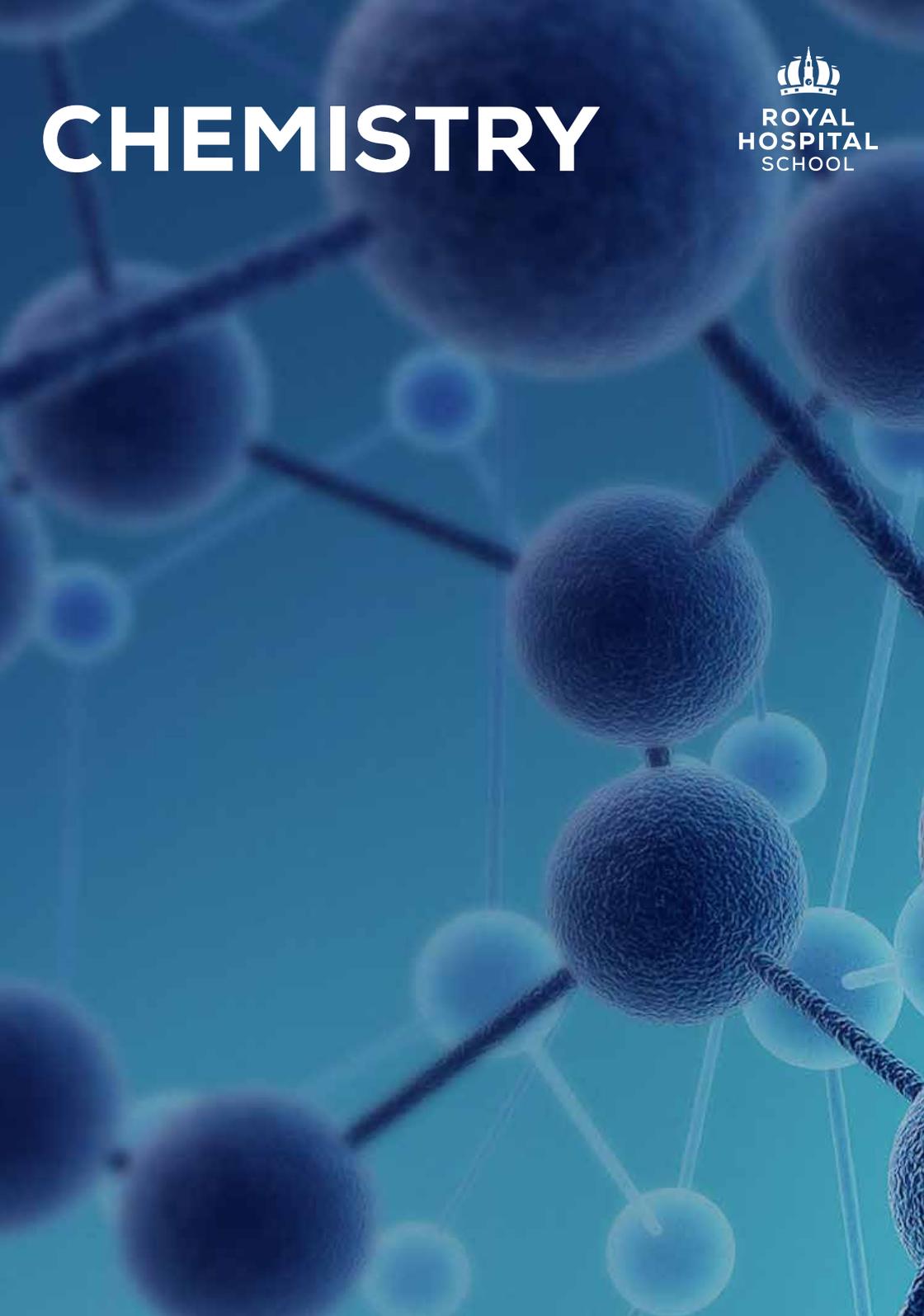


# CHEMISTRY



ROYAL  
HOSPITAL  
SCHOOL





**CHEMISTRY IS ALMOST ALL AROUND ME; IT'S INVOLVED IN EQUIPMENT I USE FROM THE CARBON AND MATERIALS ON MY BIKE TO WETSUIT MATERIAL AND THROUGH THE WHOLE COMPETITION.**

*– Alistair Brownlee, two-times triathlon world champion & double Olympic gold medallist in 2012 & 2016*

## WHAT IN THE WORLD ISN'T CHEMISTRY?

Chemistry is an essential part of society, helping us to cope with increasing pressures on energy, food, water and other scarce natural resources, to allow us to live more sustainably. It is helping to improve and maintain human health for all in a rapidly changing world. In lifestyle and recreation - from skincare to sport - chemistry is all around us. Indeed, it is hard to imagine an area in which chemistry has not made a contribution.

## WHY STUDY CHEMISTRY?

Chemistry at A Level is an exciting subject and is an excellent foundation for degree courses and careers, as it develops useful, transferable skills requested by both employers and universities. You should study A Level Chemistry if you:

- Enjoyed GCSE Chemistry and want to take it further
- Have an interest in how chemistry affects our everyday lives
- Are interested in a science-based degree or career

## SKILLS REQUIRED

- Minimum Grade 7 in GCSE Chemistry (or 7/8 Double Award Science)
- The ability to communicate effectively
- The ability to carry out research and work independently
- Ideally, a Grade 7 or above in GCSE Maths

## WHAT WILL YOU STUDY?

A Level Chemistry builds on the foundation you have established at GCSE. You will also develop independent learning, problem-solving and communication skills, as well as thinking skills such as reasoning, creative thinking and evaluation.

A Level Chemistry gives you the opportunity to study a core of key concepts in greater detail. Some of the ideas first covered at GCSE will be revisited but with greater emphasis on explaining rather than simply describing the behaviour of substances.

Topics included cover the range of inorganic, organic and physical chemistry; they look at trends and patterns, how we can control reactions, and how reactions take place.

## EXAM STRUCTURE

A Level Chemistry at RHS follows the Cambridge International A Level syllabus (CIE).

At the end of Year 13 you will sit five exams:

COMPONENT	LENGTH	WEIGHTING
Paper 1 Multiple Choice	1 hr	15.5%
Paper 2 AS Level Structured Questions	1 hr 15 mins	23%
Paper 3 Advanced Practical Skills*	2 hrs	11.5%
Paper 4 A Level Structured Questions	2 hrs	38.5%
Paper 5 Planning, Analysis and Evaluation	1hr 15 mins	11.5%

\* practical examination

## WHAT SKILLS WILL I GAIN?

While studying A Level Chemistry you will develop a range of practical skills including:

- Problem solving & creative thinking
- Making observations
- Data collection & manipulation
- Analysing experimental results & formulating conclusions
- Communication
- An appreciation of how scientific models are developed & evolve
- The applications & implications of science



# CAREERS

ANALYTICAL SCIENTIST **MEDICINE**  
HAZARDOUS WASTE MANAGER  
**CHEMICAL ENGINEER**  
ROCKET SCIENTIST  
PHARMACOLOGIST **TEACHER**  
**FORENSIC SCIENTIST**  
**TOXICOLOGIST** SCIENTIFIC JOURNALIST  
PHARMACEUTICAL RESEARCH  
DENTIST **POLYMER SCIENTIST** **VET**

**MILITARY** **GEOCHEMIST** **CLINICAL BIOCHEMIST**

The world needs more chemical scientists, and chemistry skills can lead you into a vast range of fulfilling careers. Find out more about the possibilities open to you at [www.rsc.org/careers/future](http://www.rsc.org/careers/future)

If you would like to discuss the A Level specification and the options that the Chemistry Department offer, please don't hesitate to contact  
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