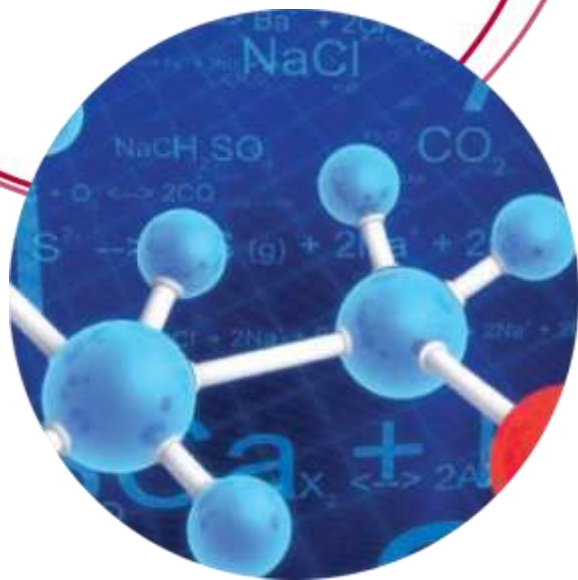


# A Level Chemistry at RPS



- What is A Level chemistry like?
- Who should study chemistry?
- What should you study chemistry with?
- How do you get on to the course?
- What do our students say?

# What is A Level chemistry like?



- Develops knowledge and understanding of chemistry
- Develops knowledge, understanding and skills of scientific methods
- Develops competence and confidence of practical, mathematical and problem solving skills
- Develops interest and enthusiasm in the subject, for careers and further study
- Allows students to understand how society makes decisions about scientific issues and how science contributes to the success of the economy and society

# What is A Level chemistry like?



- Atoms, compounds, molecules and equations
- Amount of substance
- Acid-base and redox reactions
- Electrons, bonding and structure
- The periodic table
- Group 2 and the halogens
- Qualitative analysis
- Enthalpy changes
- Reaction rates and equilibrium
- Hydrocarbons
- Alcohols and halo alkanes
- Organic synthesis
- Analytical techniques

***All the topics studied in the first year of the course build upon the basics taught at GCSE.***

# What is A Level chemistry like?



- One textbook (*OCR A*)
- Two teachers
- Three exams
- Four labs
- Five lessons
- Six Modules

*The OCR A course is taught by two teachers, and examined by three linear exams at the end of Y13. Students have five lessons in Y12 and four in Y13, with one directed study period. The course is split in to six modules. Module 1 is a practical endorsement, certificated and recognised by Universities. Module 2-6 are divided up between both teachers over two years.*

# Who should study chemistry?



- Medics
- Vets
- Dentists
- Engineers
- Chemists
- Biochemists
- Biologists
- Scientists
- Lawyers
- Teachers
- **Creative thinkers**
- **Problem solvers**
- **Logical thinkers**
- **Hard workers**

*Although essential for some Undergraduate degrees like Medicine and Dentistry, Chemistry is recognised everywhere.*

**What should  
you study  
chemistry with?**

**Maths**  
**Biology**  
**Physics**



*Most of our students study at least one other of the sciences. The course has 20% marks awarded for mathematical skills so although not a prerequisite, students that study maths as well find many of the concepts easier.*

### **Curious about chemistry?**

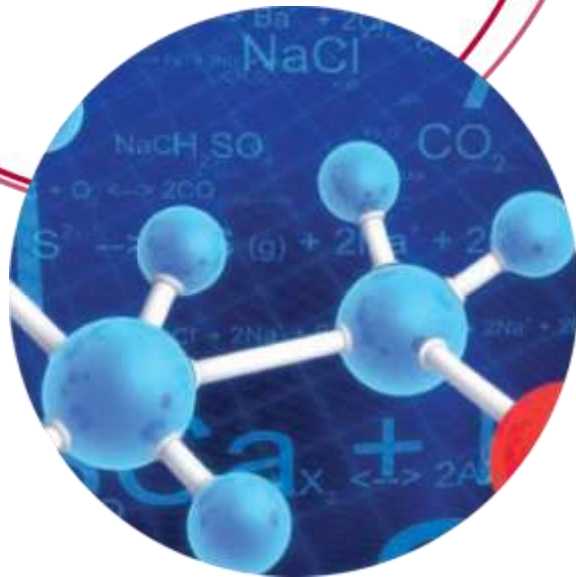
Chemistry can be studied with **any** subject. All Universities and employers consider it as a highly respected A Level and therefore can make you stand out from other prospective candidates.

# Course entry requirements



- You need to gain at least a grade 6 in GCSE Chemistry, or a 6-6 in Combined Science
- You also need at least a grade 6 in maths
- Students that have achieved at least a grade 7 tend to achieve the highest grades

# Where do our students go?



Mechanical Engineering  
Chemistry  
Computer Science  
Apprenticeship  
International Relations and Politics  
Mathematics  
Geography  
Physics and Astronomy  
General Engineering  
Gap Year  
Biological Sciences  
Biomedical Science  
Natural Sciences

***In 2017, 26 of our 31  
students accepted a  
course in a STEM subject  
at University.***



# Where do our students go?



Chemistry with Industrial Experience

Chemistry with External Placement

Medicine

Medicine

Gap Year

Forensic Chemistry

Mathematics

Engineering (Mechanical)

Computing Science

Chemical Engineering

Mathematics

Biomedical Science

Biochemistry

Medical Sciences (Neuroscience)

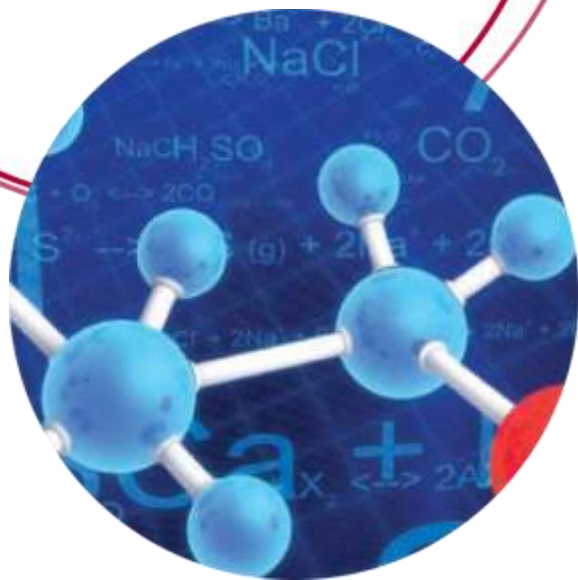
Engineering Design

Computer Games Design

Chemistry

Medicinal and Biological Chemistry

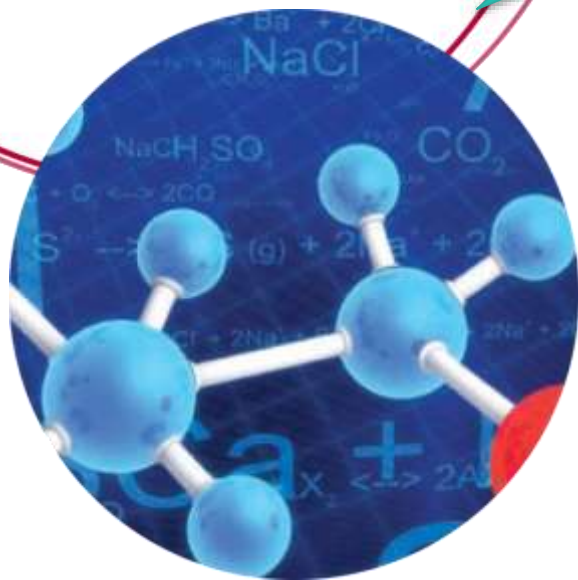
# Why did you choose chemistry?



I enjoyed most of the GCSE course, therefore I wanted to learn the concepts behind some of the facts that I purely learnt at GCSE level.

Most versatile subject for any scientific courses at uni (it's often required for courses other than chemistry).

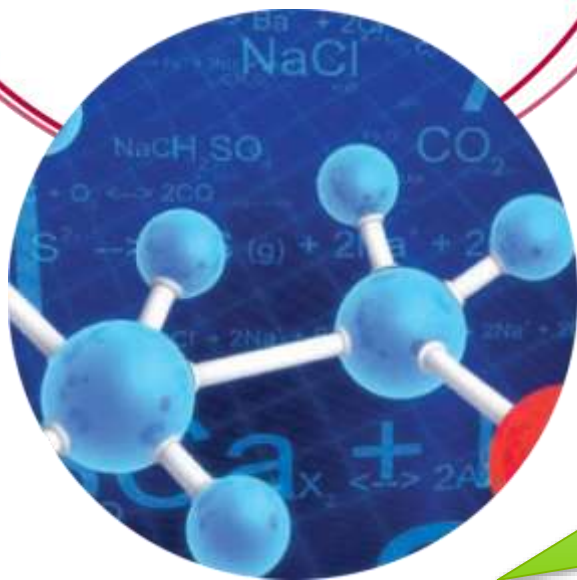
**What did  
you expect  
chemistry to  
be like?**



I expected it to cover the same sort of topics as GCSE, except to go into much further depth. This is what it is like, however I didn't realise how much more information there is to know about the simple GCSE topics.

I expected it to be a tough course and it is but all A levels are a massive jump from GCSE

# What do you like about chemistry?



It's hard  
but worth  
it

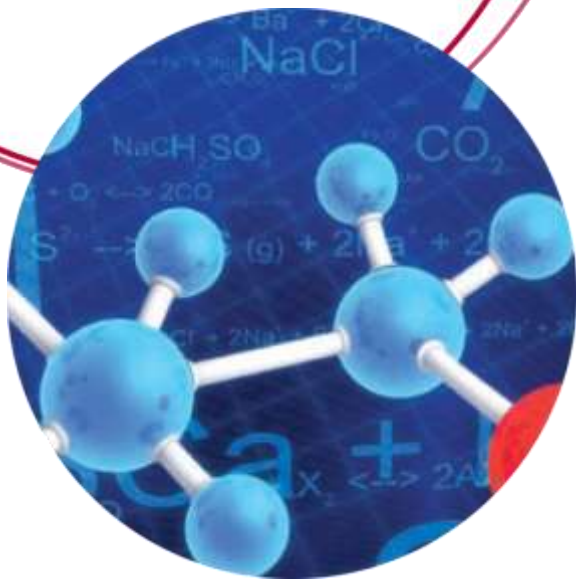
Practicals

I like (most of!) the calculation questions, because I didn't take A-level maths, but I did enjoy it at GCSE, therefore I still get a chance to do some calculations

I like how it can link to real life problems

I like learning new stuff all the time.

**What was a surprise when you started the course?**



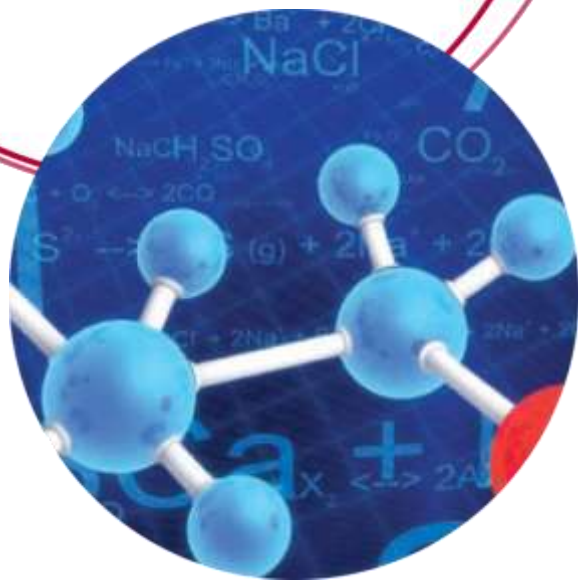
How much more there was to learn about the simple GCSE topics, and that fact that some of the facts that you learn at GCSE aren't completely true.

The amount of information there is to remember.

How easy the maths is.

The volume of material that we have to learn for the course.

# What advice would you give a Y11?

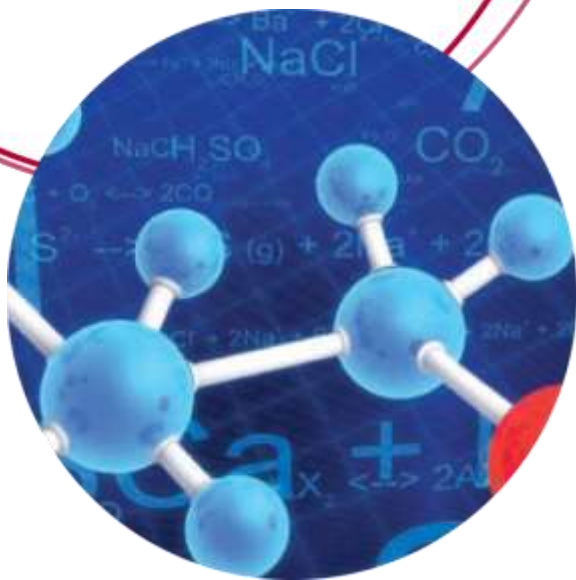


By all means take it, the course is very rewarding. However it is not a throwaway; you really have to work to keep up in terms of content and grades.

Be prepared for a challenge

If you are prepared to work hard and enjoy chemistry I would take it.

# What advice would you give a Y11?



Take chemistry if you enjoy maths and logical thinking and if you want to develop practical skills

Take chemistry it is a highly respected A level that actually teaches you interesting stuff and useful skills

If you are prepared to work hard and enjoy chemistry I would take it.

*“Chemistry”, declared Roger Kornberg in an interview, “is the queen of all sciences. Our best hope of applying physical principles to the world around us is at the level of chemistry. In fact if there is one subject which an educated person should know in the world it is chemistry.”*

Kornberg won the 2006 Nobel Prize in chemistry for his work on transcription which involved unravelling the more than dozen complicated proteins involved in the copying of DNA into RNA.