

# Chemical Sciences (with a Foundation Year)

A four-year route to a range of BSc (Hons) degree programmes within the Department of Chemistry.



UCAS Code F108 | 4 Years (1+3) | Full-time

**This course provides students with the opportunity to enter a range of degree programmes offered within the Department of Chemistry.**

## Entry Requirements

A typical offer is likely to be CDD or 80 points in three subjects at A Level, preferably in related subjects. Students with alternative A Level combinations are welcome to apply but should expect to be made higher offers. All students must meet the baseline GCSE requirements of 5 GCSEs at grade C or above including Mathematics (grade 5 if numerical), English Language (grade 4 if numerical) and Sciences (either core and additional science or two separate sciences). Adult learners will be considered without Level 3 qualifications but must meet the GCSE requirements and may be invited for interview. Students with overseas qualifications should contact the college to enquire about whether their qualification are accepted for entry.

Students holding offers at the University of Liverpool may be made a change of course offer to F108, after the examination results, if they fail to gain the required number of points for their first choice course.

Applicants will be expected to fall into one of the following categories:

Adult learners returning to education with A Level passes

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Adult learners returning to education with 5 GCSE / O Level passes or more inc. Maths, Sciences and English Language

.....  
Sixth Form school leavers currently studying A Levels or BTEC L3 Extended Diploma (Applied Science)

.....  
Students from within the European Union

## CONTACT

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## Course Modules

Students can choose three modules to make up their own programme, however, certain subjects are compulsory for entry onto specific degree courses. These are marked as essential modules [E] and optional modules [O] on the course selection chart. Course titles and essential modules are outlined below.



### Chemistry (2 semesters compulsory)

This module covers atomic structure, atoms and moles, the periodic table, chemical bonding, chemical energy, kinetics and an introduction to Organic Chemistry, alkanes and alkenes. In the second semester ideas are extended and the key areas of Organic Chemistry, the Chemistry of the main group elements and Equilibria are studied in further depth. During the two semesters problem solving and practical work are integrated into the lecture programme.

### Mathematics (2 semesters compulsory)

This lecture course aims to introduce students to graph work, differentiation and integration, vectors, statistics, trigonometry, logarithms, iteration and partial fractions. Students can expect to develop problem solving and analytical skills.

### Biology (2 semesters optional)

This course looks at cell structure and function, biological molecules, cell division, genetics and metabolism in the first semester. During the second semester students will study hormonal control, transport systems in mammals and multicellular animals, the action of drugs, pharmacology and immunity. Biology is a practical subject and students will have opportunities to take part in laboratory investigations and practicals.

### Physics (2 semesters optional)

The module explores in some depth the topics of measurement, mechanics, electricity thermodynamics, atomic physics, forces, magnetism, materials, waves and oscillations. Assignments are set on a regular basis and laboratory classes are organised to extend the ideas studied within the lecture course.

### Progression

Assessment is by examination and coursework and students are expected to score an overall mark of 50% to progress to the second year of the course. In the second year students will start on the first year of:

F100 Chemistry  
F111 Chemistry with a year in industry

F1B2 Medicinal Chemistry  
F700 Ocean Sciences (Chemistry Pathway)

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