

Module Handbook

[Modules are available to students coming on the following incoming programmes: non-European exchange; European exchange; full-year fee-paying study abroad]

Incoming Students

2025/2026

Chemistry

Content

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A: THE DEPARTMENT

Durham Chemistry is a thriving centre for teaching at both undergraduate and postgraduate levels and for world-leading research in the chemical sciences. Our committed and enthusiastic staff makes the Department a wonderful and stimulating environment in which to work and study.

The Department has a long tradition of interdisciplinary research which covers a wide scientific spectrum from organic synthesis, biological chemistry and soft matter, materials chemistry through to chemical physics and theoretical and computational chemistry. More details can be found via the web pages of our six [research groupings](#). We work closely with many other Departments within the University, institutes such as the Biophysical Sciences Institute and Durham Energy Institute as well as research centres in areas such as Sustainable Chemistry, X-ray methods and Soft Matter. We also have strong links with many other Universities, Research Centres and Companies in the UK and overseas.

Facilities

The Department is located on the main Science Site of the University, just south of the City Centre. It is a short walk (5-10 minutes) from both the hill colleges and those on the peninsula. The original building, which dates from the 1960s, has been refurbished and modernised in a rolling programme over the last couple of years. Teaching laboratories have all been refurbished to a high standard, or are housed in the north wing constructed in 1997. Research laboratories are equally impressive, and there are state-of-the-art facilities: www.dur.ac.uk/chemistry/research/facilities/.

A1: Exchange Coordinator

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B: DEGREE STRUCTURE

All degrees at Durham have a modular structure, consisting of six modules each year for three or four years. Modules are usually studied over all three terms of the teaching year. All modules are examined or assessed in the year in which they are taught: this means that at the end of the first year there are preliminary examinations, and that the final degree class is determined by the examinations taken in the second and third year.

C: REQUIREMENTS AND RESTRICTIONS

This section contains important information for setting up your academic programme at Durham University. Please read through this section carefully before considering your modules and filling in the Learning Agreement!

C1: General

Choice of Modules

IMPORTANT NOTE FOR STUDENTS: PLEASE READ BEFORE COMPLETING YOUR LEARNING AGREEMENT

At Durham University Incoming European Exchange Programme agreements are signed by individual university departments and are not university-wide agreements. This means that, in general, students will have to choose modules (courses) within the Durham University department through which the Incoming European Exchange Programme agreement with their home university has been signed (students should check with the Exchange Coordinator in their home university if they are not sure which department this is). Modules offered by other departments are subject to availability and can only be taken with prior consent from the relevant department.

Certain restrictions (prerequisite courses/knowledge) may also apply to courses in some departments and students need to follow the advice below carefully before completing their Learning Agreements.

Please clearly indicate the modules you wish to take on your Learning Agreement (included in your application package – see also www.dur.ac.uk/international.office) for approval by the respective department(s). Before completing your Learning Agreement, it is very important that you read carefully the relevant departmental section(s) of the Module Handbook to check which modules are available to you and any restrictions which may apply. It is imperative that a properly completed Learning Agreement is submitted as part of the application form. Only complete applications can be processed.

Section *D: Module Details* provides a list of modules available for Incoming European Exchange Programme students in the department where the agreement has been established (receiving department) as well as a list of modules available for students coming in through other departments (external departments). Please choose from these modules only!

To find out about the details for each module (teaching methods and contact hours, prerequisite academic background, method of assessment, content, etc) please refer to the Faculty Handbook online under <http://www.dur.ac.uk/faculty.handbook/>.

C2: Departmental Requirements and Restrictions

Incoming European Exchange Programme students are normally admitted onto courses at Level 2, 3 or Level 4 only (i.e. modules taken by Durham students during their 2nd, 3rd or 4th years). Typically, we offer three options:

(1) Undergraduate Research Project in Durham

Many of the students who come to Durham from our partner Universities come to do a full-time research project. You will be hosted within one of the numerous research groups within the Department, and will work on a genuine project of current interest to the host team. Projects are available in a very diverse range of aspects of Chemistry, ranging from “traditional” topics such as the synthetic design and definition of organic and inorganic compounds, materials chemistry, advanced characterisation and spectroscopy, molecular modelling and computational chemistry, and equally projects in bioactive chemistry and biological chemistry.

Details of research can be found on the Departmental web-page and on individual staff pages:

<http://www.dur.ac.uk/chemistry/research/>

http://www.dur.ac.uk/chemistry/research/staff_profiles/

Dr Andrews will be happy to provide more information in guiding assignment to a particular research group, and about which groups are available in a given academic year.

Although the ideal arrangement is to undertake a standard, full academic year research project (this period includes write-up and standard assessment, as well), there is some flexibility in the timing of projects. We are happy to accept students from October-March or from March-September for project work. Other timings can sometimes be arranged, too. If you prefer to do a non-standard research project, we can still issue a transcript of marks although this will for a part of the relevant module assessment.

Projects are assessed in the form of a scientific report in which the results of the work are discussed in the context of a literature review of the field of relevant studies.

(2) Taught Modules

For students wishing to come to do taught courses, timing is more critical. All taught modules span the first two academic terms, and are assessed by examination in the third term. Therefore, if you wish to do courses and be assessed, it is normally necessary to stay in Durham for the entire academic year (October – June).

For taught modules only, the most appropriate level of study are Levels 2 and 3. The available modules are listed in Section D.

(3) Combination of taught modules and a project

This option is available only for students who come for the entire academic year, and who study at Level 4. The research project (CHEM4494) runs concurrently with modules CHEM4311 and CHEM4481. All assessment takes place in the third term. This is a particularly attractive option for those who have already completed the bulk of their studies at their home University.

D: MODULE DETAILS

This section contains a list of modules Incoming European Exchange Programme students can choose from. Please only select from the modules listed in sections D.1 or D.2 in the Module Handbooks for each subject!

To find further details for each module (teaching methods and contact hours, prerequisite academic background, method of assessment, content, etc) please refer to the Faculty Handbook online under <http://www.dur.ac.uk/faculty.handbook/>. All modules are assessed in English.

D1: Modules available to European students coming on a departmental link

ECTS credits:

The conversion ratio of Durham credits into ECTS is as follows:

20 Durham credits = 10 ECTS

YEAR 2

| MODULE CODE | MODULE TITLE | ECTS |
|-------------|---|------|
| CHEM2012 | CORE CHEMISTRY 2 | 20 |
| CHEM2051 | BIOLOGICAL CHEMISTRY ¹ | 10 |
| CHEM2061 | COMPUTATIONAL CHEMISTRY ¹ | 10 |
| CHEM2077 | CHEMISTRY OF THE ELEMENTS (LECTURES) ² | 5 |
| CHEM2087 | STRUCTURE AND REACTIVITY IN ORGANIC CHEMISTRY (LECTURES) ³ | 5 |
| CHEM2097 | PROPERTIES OF MOLECULES (LECTURES) ⁴ | 5 |
| CHEM2137 | PRACTICAL CHEMISTRY 2 – INTEGRATED ⁵ | 15 |
| CHEM2147 | PRACTICAL CHEMISTRY 2 - SYNTHETIC ⁶ | 5 |
| CHEM2157 | PRACTICAL CHEMISTRY 2 - MEASUREMENT ⁷ | 5 |

1) At least one from CHEM2077, CHEM2087 or CHEM2097.

2) Must be in combination with CHEM2012 and CHEM2107.

3) Must be in combination with CHEM2012 and CHEM2117.

4) Must be in combination with CHEM2012 and CHEM2127.

5) Must be in combination with CHEM2012.

6) Must be in combination with CHEM2012 and CHEM2087 or CHEM2077.

7) Must be in combination with CHEM2012 and CHEM2097.

YEAR 3

| MODULE CODE | MODULE TITLE | ECTS |
|-------------|---|------|
| CHEM3012 | CORE CHEMISTRY 3 | 20 |
| CHEM3097 | INORGANIC CONCEPTS AND APPLICATIONS (LECTURES) ¹ | 5 |
| CHEM3117 | ADVANCED ORGANIC CHEMISTRY (LECTURES) ¹ | 5 |
| CHEM3137 | MOLECULES AND THEIR INTERACTIONS (LECTURES) ¹ | 5 |
| CHEM3451 | PRACTICAL CHEMISTRY 3 – INTEGRATED ¹ | 10 |
| CHEM3447 | PRACTICAL CHEMISTRY 3 – SYNTHETIC ¹ | 5 |
| CHEM3467 | PRACTICAL CHEMISTRY 3 – MEASUREMENT ¹ | 5 |

| | | |
|----------|------------------------------------|----|
| CHEM3051 | MATERIALS CHEMISTRY ¹ | 10 |
| CHEM3061 | CHEMISTRY AND SOCIETY ¹ | 10 |
| CHEM3421 | ADVANCED BIOLOGICAL CHEMISTRY | 10 |
| CHEM3071 | ADVANCED COMPUTATIONAL CHEMISTRY | 10 |

1) Must be in combination with CHEM3012.

YEAR 4

| MODULE CODE | MODULE TITLE | ECTS |
|--------------------|---|-------------|
| CHEM4311 | FRONTIERS IN MOLECULAR ASSEMBLY | 10 |
| CHEM4481 | ADVANCED RESEARCH CONCEPTS IN CHEMISTRY | 10 |
| CHEM4494 | CHEMISTRY RESEARCH PROJECT | 40 |

All options outlined above corresponds to undergraduate studies (UGT) and make sure this is the selected option in the application process.

It is essential that you contact the departmental coordinator (Dr Andrews) before you select your modules. It is necessary to establish that modules chosen are on the correct level of study matching your current knowledge and understanding of chemistry.

D2: Modules available to European students coming on an external link

Not normally offered.