

These programme regulations should be read in conjunction with the University's [core regulations for undergraduate programmes](#), and the [marking and classification conventions for undergraduate programmes](#).

This document contains separate regulations based on programme start date (from October 2026 and in October 2025 or earlier).

Please ensure that you review the correct programme regulations for your start date.

MSci Chemistry and Mathematics (FG12)

MSci Chemistry and Mathematics with Placement (FG15)

(for candidates admitted from October 2026)

1. This programme is available at Durham City, in a full-time mode of study.
2. All module selections must be timetable compatible and approved by the Director of Natural Sciences or by their nominee to ensure a credible pathway through to 120 credits of Year 4 modules.
3. Where modules are delivered entirely within a single term, a total of no more than 70 credits may be taken within any term.

Level 1 (Certificate)

4. Candidates shall study and be assessed in the following modules:

		Credit value
Foundations of Chemistry: Atoms, Bonding & Energetics #	CHEM1032	40
Chemical Systems & Change: Structure & Dynamics *	CHEM1131	20
Calculus I #	MATH1061	20
Linear Algebra I *	MATH1071	20
Dynamics and Relativity I *	MATH1627	10
A module available from the Level 1 Mathematics (MATH) list		10

Level 2 (Diploma)

5. Candidates shall study and be assessed in:

		Credit value
Principles of Inorganic Chemistry: Symmetry & Transition metal complexes	CHEM****	20
Principles of Physical Chemistry: Thermodynamics & Spectroscopy	CHEM****	20
Practical Measurement and Analysis – Level 2	CHEM****	20
Methods of Mathematical Physics II	MATH2741	20
Algebra II	MATH2781	20
Mathematical Methods II *	MATH2811	20

Level 3 (Degree)

6. Candidates shall study and be assessed in the following modules:

		Credit value
Contemporary Physical Chemistry: Statistical thermodynamics & Kinetics	CHEM****	20
Practical Measurement and Analysis – Level 3	CHEM****	20
Quantum Mechanics III	MATH3111	20

7. Candidates shall also study and be assessed in 20 credits from the following modules:

		Credit value
Contemporary Inorganic Chemistry: Organometallics & Catalysis	CHEM****	20

Computational Chemistry	CHEM****	20
Material Chemistry	CHEM****	20

8. Candidates shall also study and be assessed in 40 credits from those offered by the Department of Mathematical Sciences at Level 3 (including the Mathematical Sciences (MATH) list and Science Enterprise NSCI3001).

Placement – Year 3 or Year 4

9. Candidates admitted to the MSci Chemistry and Mathematics (FG12) can apply to transfer to the MSci Chemistry and Mathematics with Placement (FG15). Students undertaking the MSci Chemistry and Mathematics with Placement (FG15) will undertake an approved placement chosen in consultation with the Director of Natural Sciences or their nominee and the host partner.
10. Candidates wishing to transfer to the MSci Chemistry and Mathematics with Placement (FG15) as their third year must:
- Have successfully completed Level 1 of the MSci Chemistry and Mathematics (FG12) and progressed to Level 2 of the Honours or BSc programme; and
 - Secure a Placement Year opportunity or opportunities comprising at least 40 weeks of professional-level work experience, agreed with the Director of Natural Sciences or their nominee; and
 - Successfully complete Level 2 to be eligible to progress to Level 3 of the MSci Chemistry and Mathematics (FG12) Honours programme; and
 - register for the module “Natural Sciences Placement MSci (NSCI 3966)”
11. Students who the Board of Examiners for Natural Sciences deem to have made satisfactory progress on the placement will continue to Level 3 of the MSci Chemistry and Mathematics with Placement (FG15). Students who have not made satisfactory progress on the placement will not be permitted to continue on the MSci Chemistry and Mathematics with Placement (FG15) programme but must instead proceed to Level 3 of the MSci Chemistry and Mathematics (FG12) programme.
12. Candidates wishing to transfer to the MSci Chemistry and Mathematics with Placement (FG15) as their fourth year must:
- Have successfully completed Level 2 of the MSci Chemistry and Mathematics (FG12) and progressed to Level 3 of the Honours programme; and
 - Secure a Placement Year opportunity, or opportunities, comprising at least 40 weeks of professional-level work experience, agreed with the Director of Natural Sciences or their nominee; and
 - Successfully complete Level 3 of the MSci Chemistry and Mathematics (FG12) programme to be eligible to progress to Level 4 of the MSci Chemistry and Mathematics (FG12) Honours programme; and
 - register for the module “Natural Sciences Placement MSci (NSCI 3966)”
13. Students who the Board of Examiners deem to have made satisfactory progress on the placement will continue to Level 4 of the MSci Chemistry and Mathematics with Placement (FG15). Students who have not made satisfactory progress on the placement will not be permitted to continue on the MSci Chemistry and Mathematics with Placement (FG15) programme but must instead proceed to Level 4 of the MSci Chemistry and Mathematics (FG12) programme.

Level 4 (Degree)

14. **Either:** Candidates shall study and be assessed in the following module:

Chemistry Research Project	CHEM4494	Credit value 80
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Or: Candidates shall study and be assessed in the following modules:

Emerging Developments in Chemistry	CHEM4491	Credit value 20
Project IV	MATH4072	40
Advanced Computational Chemistry	CHEM****	20

15. Candidates shall study and be assessed in:

Modules from Level 4 Master of Mathematics (G103) regulations	Credit value 40
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Assessment, progression and award

16. Modules marked with the # symbol must be passed at no less than 40% in order to progress to the next level of study.
17. Modules marked with the * symbol must be passed at no less than 40% in order to progress to the next level of study. Students who have not passed will not be permitted to continue on the MSci in Chemistry and Mathematics (FG12) programme, but must instead proceed to Level 2 of the MSci Natural Sciences (FGC0) programme.
18. Candidates whose achievement at the end of Level 2 does not qualify them to proceed to Level 3 but who achieve the standard required for progression in accordance with the Core Regulations to Level 3 of a Bachelors programme may progress to an appropriate programme within the suite of Natural Sciences degrees.
19. Candidates whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 will be awarded a BSc in Chemistry and Mathematics in accordance with the Core Regulations.
20. Candidates whose achievement at the end of Level 4 does not qualify them to be awarded the MSci degree will be awarded a BSc in Chemistry and Mathematics in accordance with the Core Regulations.
21. This programme is accredited by the Royal Society of Chemistry for candidates entering Level 1 up to and including October 2030 as satisfying the academic requirements for the award of Chartered Chemist (CChem) for holders of first or second class honours degrees.

These programme regulations should be read in conjunction with the University's [core regulations for undergraduate programmes](#), and the [marking and classification conventions for undergraduate programmes](#).

MSci Chemistry and Mathematics (FG12)

MSci Chemistry and Mathematics with Placement (FG15)

(for candidates admitted in October 2025 or earlier)

1. This programme is available at Durham City, in a full-time mode of study.
2. All module selections must be timetable compatible and approved by the Director of Natural Sciences or by their nominee to ensure a credible pathway through to 120 credits of Year 4 modules.

Level 1 (Certificate)

3. Candidates shall study and be assessed in the following modules:

		Credit value
Core Chemistry 1 #	CHEM1078	30
Practical Chemistry 1A *	CHEM1087	10
Practical Chemistry 1B	CHEM1107	10
Linear Algebra I #	MATH1071	20
Calculus I #	MATH1061	20
Analysis I *	MATH1051	20
Dynamics and Relativity I *	MATH1627	10

Level 2 (Diploma)

4. Candidates shall study and be assessed in:

		Credit value
Core Chemistry 2 #	CHEM2012	40
Properties of Molecules *	CHEM2097	10
Practical Chemistry 2 – Measurement *	CHEM2157	10
Complex Analysis II	MATH2791	20
Mathematical Methods II *	MATH2811	20
Methods of Mathematical Physics II *	MATH2741	20

Level 3 (Degree)

5. Candidates shall study and be assessed in the following modules:

		Credit value
Chemical Physics 3 *	CHEM3411	20
Computational Chemical Physics *	CHEM3151	20
Molecules and their Interactions *	CHEM3137	10
Practical Chemistry 3 – Measurement	CHEM3467	10
Quantum Mechanics III	MATH3111	20

6. Candidates shall also study and be assessed in 40 credits from those offered by the Department of Mathematical Sciences at Level 3 (including the Mathematical Sciences (MATH) list and Science Enterprise (NSCI3001).

Placement – Year 3 or Year 4

7. Candidates admitted to the MSci Chemistry and Mathematics (FG12) can apply to transfer to the MSci Chemistry and Mathematics with Placement (FG15). Students undertaking the MSci Chemistry and

Mathematics with Placement (FG15) will undertake an approved placement chosen in consultation with the Director of Natural Sciences or their nominee and the host partner.

8. Candidates wishing to transfer to the MSci Chemistry and Mathematics with Placement (FG15) as their third year must:
 - a. Have successfully completed Level 1 of the MSci Chemistry and Mathematics (FG12) and progressed to Level 2 of the Honours or BSc programme; and
 - b. During the first term of Level 2 study, the student must discuss their intention to apply with the Director of Natural Sciences or their nominee in order to be admitted to the MSci Chemistry and Mathematics with Placement (FG15) and receive approval by the Director of Natural Sciences or their nominee; and
 - c. Secure a Placement Year opportunity or opportunities comprising at least 40 weeks of professional-level work experience, agreed with the Director of Natural Sciences or their nominee; and
 - d. Successfully complete Level 2 to be eligible to progress to Level 3 of the MSci Chemistry and Mathematics (FG12) Honours programme.
9. Students who the Board of Examiners for Natural Sciences deem to have made satisfactory progress on the placement will continue to Level 3 of the MSci Chemistry and Mathematics with Placement (FG15). Students who have not made satisfactory progress on the placement will not be permitted to continue on the MSci Chemistry and Mathematics with Placement (FG15) programme, but must instead proceed to Level 3 of the MSci Chemistry and Mathematics (FG12) programme.
10. Candidates wishing to transfer to the MSci Chemistry and Mathematics with Placement (FG15) as their fourth year must:
 - a. Have successfully completed Level 2 of the MSci Chemistry and Mathematics (FG12) and progressed to Level 3 of the Honours programme; and
 - b. During the first term of Level 3 study, the student must discuss their intention to apply with the Director of Natural Sciences or their nominee in order to be admitted to the MSci Chemistry and Mathematics with Placement (FG15) and receive approval by the Director of Natural Sciences or their nominee; and
 - c. Secure a Placement Year opportunity or opportunities comprising at least 40 weeks of professional-level work experience, agreed with the Director of Natural Sciences or their nominee; and
 - d. Successfully complete Level 3 of the MSci Chemistry and Mathematics (FG12) programme to be eligible to progress to Level 4 of the MSci Chemistry and Mathematics (FG12) Honours programme.
 - e. register for the module "Natural Sciences Placement MSCI (NSCI 3996)"
11. Students who the Board of Examiners deem to have made satisfactory progress on the placement will continue to Level 4 of the MSci Chemistry and Mathematics with Placement (FG15). Students who have not made satisfactory progress on the placement will not be permitted to continue on the MSci Chemistry and Mathematics with Placement (FG15) programme, but must instead proceed to Level 4 of the MSci Chemistry and Mathematics (FG12) programme.

Level 4 (Degree)

12. **Either:** Candidates shall study and be assessed in the following module:

Chemistry Research Project	CHEM4494	Credit value 80
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Or: Candidates shall study and be assessed in the following modules:

Advanced Research Concepts in Chemistry	CHEM4481	Credit value 20
Project IV	MATH4072	40
Advanced Computational Chemical Physics 4	CHEM4471	20

13. Candidates shall study and be assessed in:

Modules from Level 4 Master of Mathematics (G103) regulations	Credit value 40
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Assessment, progression and award

14. Modules marked with the # symbol must be passed at no less than 40% in order to progress to the next level of study.

15. Modules marked with the * symbol must be passed at no less than 40% in order to progress to the next level of study. Students who have not passed will not be permitted to continue on the MSci in Chemistry and Mathematics (FG12) programme, but must instead proceed to Level 2 of the MSci Natural Sciences (FGC0) programme.
16. Candidates whose achievement at the end of Level 2 does not qualify them to proceed to Level 3 but who achieves the standard required for progression in accordance with the Core Regulations to Level 3 of a Bachelors programme may progress to an appropriate programme within the suite of Natural Sciences degrees.
17. Candidates whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 will be awarded a BSc in Chemistry and Mathematics in accordance with the Core Regulations.
18. Candidates whose achievement at the end of Level 4 does not qualify them to be awarded the MSci degree will be awarded a BSc in Chemistry and Mathematics in accordance with the Core Regulations.
19. This programme is not available with an additional year to study abroad at a partner institution; however, this does not exclude the opportunity for an individual student to seek a concession to undertake a replacement year at an overseas institution where an appropriate programme of study can be identified and secured by that student in liaison with the University's International Office and subject to the approval of the Director of Natural Sciences.
20. This programme is accredited by the Royal Society of Chemistry for candidates entering Level 1 up to and including October 2030 as satisfying the academic requirements for the award of Chartered Chemist (CChem) for holders of first or second class honours degrees.