

Programme Information		
Programme Title	Programme Code	HECoS Code
Experimental Biomolecular Sciences	A3EB	For Registry Use Only

Award	Length of Study	Mode of Study	Entry Point(s)	Total Credits	
				ECTS	CATS
MRes - A3EB	1 year (12 months)	Full-Time	Annually in February	90	180
PG Diploma - A3EBD	N/A	N/A	N/A	NA	NA
PG Certificate - A3EBC	3 months	Full-Time	Annually in February	30	60
Students must apply to the PG Certificate or MRes in the first instance.					

Ownership			
Awarding Institution	Imperial College London	Faculty	Faculty of Medicine
Teaching Institution	Imperial College London	Department	Immunology and Inflammation
Associateship	Diploma of Imperial College (DIC) (MRes only)	Main Location(s) of Study	Hammersmith Hospital
External Reference			
Relevant QAA Benchmark Statement(s) and/or other external reference points		N/A	
FHEQ Level		Level 7	
EHEA Level		2nd Cycle	
External Accreditor(s) (if applicable)			
External Accreditor 1:	N/A		
Accreditation received:	N/A	Accreditation renewal:	N/A
Collaborative Provision			
Collaborative partner	Collaboration type	Agreement effective date	Agreement expiry date
N/A	N/A	N/A	N/A
Specification Details			

Programme Lead	Dr. Tom McKinnon
Student cohorts covered by specification	2025-26 entry
Date of introduction of programme	February 26
Date of programme specification/revision	August 24

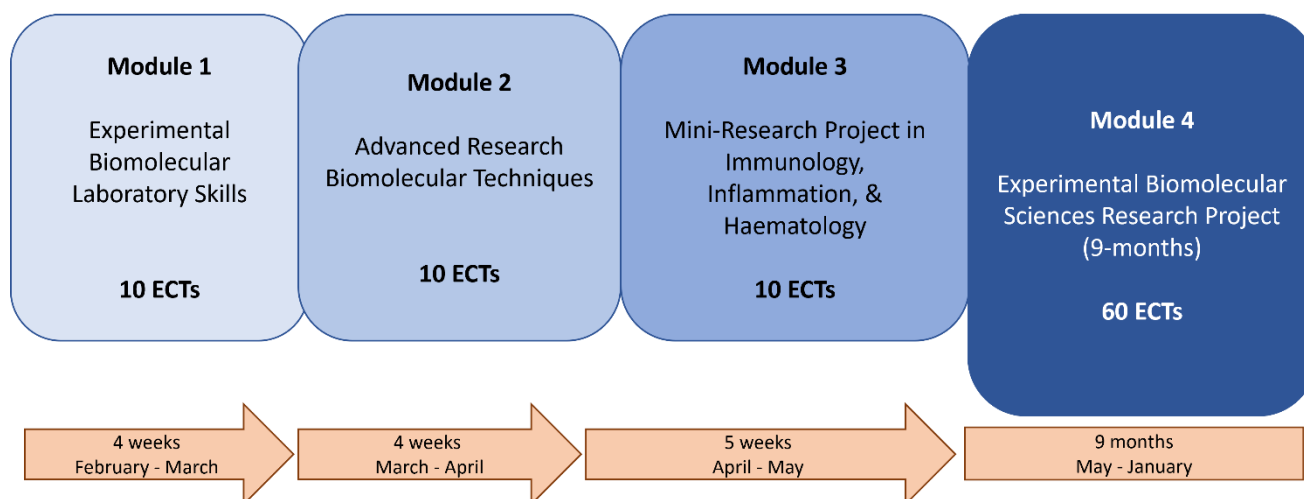
Programme Overview

The PG Certificate in Experimental Biomolecular Sciences will provide you with the theoretical principles and practical skills of commonly used biomolecular laboratory skills and advanced research techniques, as well as a unique chance to plan, design and conduct your own Mini-Research Project in our teaching laboratories. You will be spending a large percentage of the Certificate, around 7 weeks spread between Modules 1-3, in our teaching laboratories practically applying your taught biomolecular skills. Additionally, this programme will provide you with an introduction to data validation, handling and statistical testing.

The MRes in Experimental Biomolecular Sciences will build from the PG Certificate by taking you on a journey in which you will use the scientific method to investigate a topic of interest within the research areas being investigated within Imperial's Faculty of Medicine. To accompany you on this journey are our leaders in those fields with whom you will conduct a 9-month research project.

In addition to preparing you to become a researcher with great expertise in experimental biomolecular skills (main professional outcome), this programme will help you strengthen your knowledge, creativity and critical thinking skills, and will also give you a chance to develop your communication, reflective and team working skills. This programme features extensive lab time and a comprehensive 9-month project. This course offers an unparalleled opportunity to gain hands-on experience, develop industry-relevant skills, and thrive in a dynamic, global city.

MRes Experimental Biomolecular Sciences



Proposed MRes Experimental Biomolecular Sciences

Learning Outcomes

PG Certificate

At the end of the PG Certificate, you will be able to:

1. Demonstrate a strong breadth and depth of core knowledge in different experimental biomolecular techniques.
2. Generate experimental plans using the full scientific method to conduct experimental work while implementing good laboratory and health & safety practises.
3. Produce and evaluate your own and others' experimental data and propose follow-up experiments

4. Compare and critique appropriate statistical testing to analyse data problems and develop a theoretical understanding of big data methodologies.
5. Effectively communicate scientific ideas and data in various formats to varied audiences.

MRes Practical Biomolecular Sciences

At the end of the MRes Experimental Biomolecular Sciences, you will demonstrate the Learning Outcomes of the PG Certificate as well as be able to:

1. Plan and execute an original research project using safe laboratory practices, good time management skills, and co-operative teamwork.
2. Generate novel experimental data and critically appraise their quality and importance for the research field.
3. Design follow up experiments based on your evaluation of the data produced during your research project.
4. Propose creative solutions to both theoretical and practical scientific problems.
5. Evaluate and develop high level complex critical thinking skills including problem solving, verbal reasoning, and evaluating arguments.

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial degree programme. The Graduate Attributes are available at:

<https://www.imperial.ac.uk/about/education/our-graduates/>

Entry Requirements

Academic Requirement	<p>A minimum of a 2.1 UK Bachelor's degree in an appropriate science subject, including Biological Sciences, Medicine, Veterinary sciences, or a related Biomedical science subject. The department will consider a 2.2 on a case-by-case basis, for example if a student has previous laboratory experience within an academic or industry environment and is supported by appropriate references.</p> <p>For further information on entry requirements, please go to www.imperial.ac.uk/study/apply/postgraduate-taught/entry-requirements/</p>
Non-academic Requirements	N/A
English Language Requirement	<p>Standard requirement IELTS score of 6.5 overall (minimum 6.0 in all elements)</p>
Admissions Test/Interview	<p>Admissions are conducted by two programme team members. Decisions are made following review of applications which need to include academic results to date, a cv, personal statement and two reference letters.</p>

The programme's competency standards documents are available from the department.

Learning & Teaching Approach

Learning and Teaching Delivery Methods

Over the course of this full-time programme, you will be taught using approaches which are reflective of the way the scientific community works and interacts. The programme prioritises active learning approaches where you will be encouraged to continually reflect on your academic journey and identify areas of improvement. The taught part of the programme will be delivered in a blended manner using asynchronous and synchronous elements. Asynchronous elements will require you to study independently prior to our face to face (synchronous) sessions. These will be in the form of small group tutorials, keynote lectures, data interpretation sessions, journal club, workshops, and group work sessions. Online learning materials will be delivered in a Virtual Learning Environment (VLE) and a significant portion of the taught programme will be face-to-face practical learning, taking place in our teaching laboratories, our computer suite or during data analysis workshops. In the MRes, you will have the opportunity to be taught directly by our research teams in their laboratories. During your research project, you will learn from interacting daily with researchers, networking, presenting in lab meetings, attending seminars, observing others and receiving feedback on your work.

Overall Workload

Your overall workload will consist of face-to-face sessions and independent learning. While your actual contact hours may vary according to the module you are studying, the following gives an indication of how much time you will need to allocate to different activities. At Imperial, each ECTS credit taken equates to an expected total study time of 25 hours, including asynchronous and synchronous material and sessions. Therefore, the expected total study time is 750 hours for the 30 ECTS PG Certificate and 2250 hours for the 90 ECTS MRes.

Assessment Strategy

Assessment Methods

We have designed a range of authentic in-course assessments that are reflective of real-world experimental research settings. Summative assessments will be in the form of practical laboratory examinations, oral presentations, scientific papers, research project thesis and viva, and various other coursework assessments. Assessments will take place either during and/or at the end of each module. Each assessment is carefully designed to produce an authentic output that is related to the learning outcomes. Additionally, assessments are designed to lead to the development of transferable skills and knowledge learnt through the course. An online plagiarism awareness course, facilitated by Imperial College London, must be completed, and the certificate must be presented before any assignment can be accepted. Formative assessments will help you to reflect on and develop your skills in individual and group settings. The teacher and peer feedback that you receive will inform on how to improve your performance and you can also learn from observation of good practice that is modelled by teachers and peers. Self-reflection and learning from the different methods of feedback (verbal or written, informal or formal) is encouraged.

Academic Feedback Policy

You will be provided with feedback dates at the start of year. The programme will aim to return provisional marks and individual feedback as per university guidelines (see below). Exception to the 10-working day best practice recommendation will be notified at the start of year. Feedback will notably take the form of provisional marks, individual feedback, class feedback sessions, small group discussion, or peer feedback. In addition, the programme will ensure that formative feed-forward opportunities are imbedded into the curriculum.

Imperial's Policy on Academic Feedback and guidance on issuing provisional marks to students is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Re-sit Policy

Imperial's Policy on Re-sits is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Mitigating Circumstances Policy

Imperial's Policy on Mitigating Circumstances is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Additional Programme Costs

This section should outline any additional costs relevant to this programme which are not included in students' tuition fees.

Description	Mandatory/Optional	Approximate cost
Computer and Stable Internet Access	Mandatory	N/A

Important notice: The Programme Specifications are the result of a large curriculum and pedagogy reform implemented by the Department and supported by the Learning and Teaching Strategy of Imperial College London. The modules, structure and assessments presented in this Programme Specification are correct at time of publication but might change as a result of student and staff feedback and the introduction of new or innovative approaches to teaching and learning. You will be consulted and notified in a timely manner of any changes to this document.

Programme Structure ¹					
Year 1 – FHEQ Level 7 You will study all core modules.					
Code	Module Title	Core/ Compulsory Elective	Group	Term	Credits
IMMU70009	Experimental Biomolecular Laboratory Skills	Compulsory		Spring	10
IMMU70010	Advanced Research Biomolecular Techniques	Compulsory		Spring	10
IMMU70011	Mini-Research Project	Compulsory		Spring-Summer	10
IMMU70012	Experimental Biomolecular Sciences Research Project	Core		Summer, Autumn, Spring	60
Credit Total					90

¹ **Core** modules are those which serve a fundamental role within the curriculum, and for which achievement of the credits for that module is essential for the achievement of the target award. Core modules must therefore be taken and passed in order to achieve that named award. **Compulsory** modules are those which are designated as necessary to be taken as part of the programme syllabus. Compulsory modules can be compensated. **Elective** modules are those which are in the same subject area as the field of study and are offered to students in order to offer an element of choice in the curriculum and from which students are able to select. Elective modules can be compensated.

Progression and Classification

Progression

Prospective students can apply to undertake either the PG Certificate or the MRes.

Students who apply for and then successfully complete the PG Certificate may subsequently apply to complete the MRes by undertaking the 9-month research project component, however, due to the nature of the research projects being offered, entry will only be allowed in the May of the following academic year to allow them to undertake their research project. Students doing this will be re-enrolled from May onwards and will only be required to be on campus for their projects. However, students will be informed of the list of projects and encouraged to contact supervisors between February and April.

Successful PG certificate students will have to apply to the MRes, the progression will not be automatic.

For students who begin the MRes, but are unable to complete the research project component an award of PG Certificate will be considered on a case-by-case basis

Award and Classification for Postgraduate Students

Award of a Postgraduate Certificate (PG Cert)

To qualify for the award of a postgraduate Certificate, you must have accumulated at least 30 ECTS at Level 7. Therefore, to be awarded the PG Certificate in Experimental Biomolecular Sciences, you will need to pass all three compulsory modules of the PG Certificate with a minimum overall mark of 50% for each module.

Award of a Masters Degree (including MRes)

To qualify for the award of a postgraduate degree you must have:

1. accumulated credit to the value of no fewer than 90 credits at Level 7
2. and no more than 15 credits as a Compensated Pass;
3. met any specific requirements for an award as outlined in the approved programme specification for that award.

Classification of Postgraduate Taught Awards

The university sets the class of Degree that may be awarded as follows:

1. Distinction: 70.00% or above
2. Merit: 60.00% or above but less than 70.00%.
3. Pass: 50.00% or above but less than 60.00%.

For a Masters, your classification will be determined through the Programme Overall Weighted Average meeting the threshold for the relevant classification band.

Your degree algorithm provides an appropriate and reliable summary of your performance against the programme learning outcomes. It reflects the design, delivery, and structure of your programme without unduly over-emphasising particular aspects.

Programme Specific Regulations

N/A

Supporting Information
The Programme Handbook is available from the department.
The Module Handbook is available from the department.
Imperial's entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/pg/apply/requirements
Imperial's Quality & Enhancement Framework is available at: www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance
Imperial's Academic and Examination Regulations can be found at: www.imperial.ac.uk/about/governance/academic-governance/regulations
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Imperial College London is regulated by the Office for Students (OfS) www.officeforstudents.org.uk/advice-and-guidance/the-register/
This document provides a definitive record of the main features of the programme and the learning outcomes that you may reasonably be expected to achieve and demonstrate if you take full advantage of the learning opportunities provided. This programme specification is primarily intended as a reference point for prospective and current students, academic and support staff involved in delivering the programme and enabling student development and achievement, for its assessment by internal and external examiners, and in subsequent monitoring and review.