Imperial College London

Programme Information		
Programme Title	Programme Code	HECoS Code
Molecular and Cellular Biosciences	C7Y9	For Registry Use Only

Award Length of Study Mode of Study	I amouth of Chindry	Made of Childre	Fratur Daint/a	Total Credits	
	Entry Point(s)	ECTS	CATS		
MRes	1 Calendar Year (12 months)	Full-Time	Annually in October	90	180

Ownership				
Awarding Institution	Imperial College London	Faculty	Faculty of Natural Sciences	
Teaching Institution	Imperial College London	Department	Life Sciences	
Associateship	N/A	Main Location(s) of South Kensington Campus		
External Reference				
Relevant QAA Benchmark St external reference points	ratement(s) and/or other	N/A		
FHEQ 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. Tony Southall		
Student cohorts covered by specification		2022-23 entry		
Date of introduction of programme		-		
Date of programme specification/revision		October 22		

Programme Overview

Based at the South Kensington campus, this is an MRes programme that revolves around two substantial lab projects allowing you to develop lab skills and expertise in different areas of biosciences. This research-based course provides a highly specialised biosciences education and practical training. Your skills training will be embedded in the context of answering a broad set of molecular and cellular biological questions by performing laboratory-based experiments. For the areas or research undertaken, the training will increase your understanding to levels approaching that of active researchers in the field. You will be supported throughout the course by research-active academics, including postdoctoral researchers and PhD students.

Projects will be from labs across the Department and students will be embedded in a research group during their projects. The ~ 5 month projects provide students with the opportunity to fully involve themselves with the project and generate substantial data. There is a huge variety of topics (and supervisors) to choose from, and potential topics ranging from structural biology to the study of neurodegeneration. There is considerable flexibility and you will be able to focus on specialist subjects consistent with your interests and career intentions.

Many alumni use this course as a stepping stone to a PhD, as the longer length of the research project enables a greater exploration of analyses and results, which may result in a scientific publication. However, others have moved on to work as research assistants, patent lawyers, scientific writers, or work in the biotechnology industry.

Learning Outcomes

Upon successful completion of this programme, you will be able to:

- 1. Interpret, extrapolate, and explain essential facts, concepts, principles, and theories relevant to the student's chosen area(s).
- 2. Learn independently with open-mindedness and critical enquiry.
- 3. Formulate and test hypotheses using appropriate experimental design and statistical analysis of data.
- 4. Plan and execute safely a series of experiments.
- 5. Integrate and evaluate scientific results.
- 6. Apply statistical and modelling skills.
- 7. Provide critical assessment of results and conclusions.
- 8. Communicate effectively through oral presentations, computer processing and presentations, written reports and scientific publications.
- 9. Manage resources and time.
- 10. Transfer techniques and solutions from one discipline to another.
- 11. Write-up a programme of original research.

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: www.imperial.ac.uk/students/academic-support/graduate-attributes

Entry Requirements			
Academic Requirement	Normally a 2.1 UK Bachelor 's Degree with Honours in a Biosciences-based subject (or a comparable qualification recognised by the College). For further information on entry requirements, please go to PG: www.imperial.ac.uk/study/pg/apply/requirements/pgacademic		
	P.G. www.imperial.ac.un/study/pg/appry/requirements/pgacademic		
Non-academic Requirements	None		

English Language Requirement	Higher requirement (PG)
English Language Requirement	Please check for other Accepted English Qualifications
Admissions Test/Interview	No interview, no Admissions test. Decisions based on CV, references and personal statement

The programme's competency standards documents can be found at: The programme 's competency standards document can be found at: http://www.imperial.ac.uk/media/imperial-college/faculty-of-natural-sciences/department-of-life-sciences/public/postgraduate/masters/Life-Sciences-Competence-standards-PG.pdf

Learning & Teaching Approach

Learning and Teaching Delivery Methods

- Laboratory work (during research projects)
- Formal presentations (preparing for oral examination)
- Computer-based work, which can include programming (e.g. Python and R), DNA plasmid design and statistics.
- Individual lab research projects, including writing up a project report and preparing a presentation for an oral exam (~5 months). Students will learn scientific knowledge, laboratory techniques, scientific writing skills, presenting skills and scientific practice from their supervisor and day-to-day supervisor.

Overall Workload

Your overall workload consists of face-to-face sessions and independent learning. While your actual contact hours may vary according to the optional modules you choose to study, the following gives an indication of how much time you will need to allocate to different activities at each level of the programme. At Imperial, each ECTS credit taken equates to an expected total study time of 25 hours. Therefore, the expected total study time for this 90 ECTS MSc programme is 2250 hours per year, subject to reasonable adjustments.

Most of the time will be spent in the lab on research projects.

Assessment Strategy

Assessment Methods

- Research project report (40%)
- Research project oral presentation (10%)
- Research project viva (30%)
- Supervisor 's assessment of laboratory skills (10%) and understanding and analytical skills (10%)

Each research project is 40 ECTS

- Review/highlight of a recent preprint (part of the Research Project 1 module 5 ECTS)
- Flash talks (peer assessment, moderated by academic staff) (part of the Research Project 2 module -5 ECTS)

Academic Feedback Policy

Feedback for the written report, the oral presentation and the viva is recorded by the two examiners after the examination. This is made available to students. The feedback from the first project is provided towards the beginning of the second project so that students can reflect on their strengths/weaknesses to help improve their performance for project 2.

Feedback for the review/highlight of a recent preprint will be provided by the students first project supervisor using Turnitin.

The flash talks are peer-assessed. The scores will be moderated by academic staff to reduce bias.

Anonymised comments and an aggregate score will be provided to the students

Staff-student meetings are held termly to communicate general feedback between student representatives and the course directors. Additional meetings are held to provide general feedback and guidance e.g. on project selection.

The College '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

The College 's Policy on Re-sits is available at: www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/

Mitigating Circumstances Policy

The College's Policy on Mitigating Circumstances is available at: www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/

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				
N/A	N/A	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 Structure¹

Year 1 – FHEQ Level 7 Students study all core modules.

Code	Module Title	Core/ Elective	Group	Term	Credits
LIFE70031	Research Project 1 (includes Review/highlight of a recent preprint – 5 ECTS)	Core		1-2	45
LIFE70032	Research Project 2 (includes Flash talk – 5 ECTS)	Core		2-3	45
Credit Total			90		

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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

Award of a Postgraduate Degree (including MRes)

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

- 1. accumulated credit to the value of no fewer than 90 credits at level 7 or above of which no more than 15 credits may be from credit level 6;
- 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 College sets the class of Degree that may be awarded as follows:

- 1. Distinction: The student has achieved an overall weighted average of 70.00% or above across the programme.
- 2. Merit: The student has achieved an overall weighted average of above 60.00% but less than 70.00%.
- 3. Pass: The student has achieved an overall weighted average of 50.00% but less than 60.00%.
- a. For a Masters, students must normally achieve a distinction (70.00%) mark in the dissertation or designated final major project (as designated in the programme specification) in order to be awarded a distinction.
- b. For a Masters, students must normally achieve a minimum of a merit (60.00%) mark in the dissertation or designated final major project (as designated in the programme specification) in order to be awarded a merit
- c. Modules taken at level 6 as part of the programme specification for a named postgraduate award will contribute to the determination of pass, merit or distinction for any taught postgraduate award and are included in the calculation of the overall weighted average.

Programme	Specific	Regulations
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N/A

Supporting Information

The Programme Handbook is available at: www.imperial.ac.uk/life-sciences/postgraduate/masters-courses/mres-in-molecular-and-cellular-biosciences/

The Module Handbook is available at: www.imperial.ac.uk/life-sciences/postgraduate/masters-courses/mres-in-molecular-and-cellular-biosciences/

The College 's entry requirements for postgraduate programmes can be found at: www.imperial.ac.uk/study/pg/apply/requirements

The College 's Quality & Enhancement Framework is available at: www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance

The College 's Academic and Examination Regulations can be found at: www.imperial.ac.uk/about/governance/academic-governance/regulations

Imperial College is an independent corporation whose legal status derives from a Royal Charter granted under Letters Patent in 1907. In 2007 a Supplemental Charter and Statutes was granted by HM Queen Elizabeth II. This Supplemental Charter, which came into force on the date of the College's Centenary, 8th July 2007, established the College as a University with the name and style of "The Imperial College of Science, Technology and Medicine".

www.imperial.ac.uk/admin-services/secretariat/college-governance/charters/

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 a typical student may reasonably be expected to achieve and demonstrate if s/he takes 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.

Modifications				
Description	Approved	Date	Paper Reference	
Curriculum Review	Programmes Committee	22/03/22	PC.2021.67	