

MRes Molecular and Cellular Biosciences

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 intended as a reference point for prospective students, current students, external examiners and academic and support staff involved in delivering the programme and enabling student development and achievement.

Programme Information

Programme Title	Molecular and Cellular Biosciences			
Award(s)	MRes			
Programme Code	C7Y9			
Associateship	None			
Awarding Institution	Imperial College London			
Teaching Institution	Imperial College London			
Faculty	Faculty of Natural Sciences			
Department	Department of Life Sciences			
Main Location of Study	South Kensington Campus			
Mode and Period of Study	1 academic year, full-time			
Cohort Entry Points	Annually in October			
Relevant QAA Benchmark Statement(s) and/or other external reference points	Master's Degree Characteristics			
Total Credits	ECTS:	90	CATS:	180
FHEQ Level	Level 7			
EHEA Level	2 nd cycle			
External Accreditor(s)	None			
Specification Details				
Student cohorts covered by specification	2021-22 entry			
Person responsible for the specification	Dr Tony Southall			
Date of introduction of programme	-			
Date of programme specification/revision	August 2021			

Programme Overview

This research-based course provides a highly specialised biosciences education and practical training.

Based at the South Kensington campus, it provides students with the fundamental skills to enable them to enter a research career in modern biosciences research in industry or academia.

There is considerable flexibility and students will be able to focus on specialist subjects consistent with their interests and career intentions.

This course will be of great benefit to graduates in biochemistry, biology, structural biology, biomedical sciences and related disciplines.

Learning Outcomes

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

Knowledge and Understanding of:

1. The essential facts, concepts, principles and theories relevant to the student's chosen area(s) of specialisation;
2. Research techniques including information retrieval;
3. Experimental design and statistics;
4. Critical assessment of results and conclusions;
5. Written and verbal presentations and the use of computers for analysis and display of data;
6. Laboratory safety
7. Management and communication skills, including problem definition, project design, decision processes, teamwork, written and oral reports, scientific publications.

Intellectual Skills:

1. Analyse and solve bioscience-based problems using an integrated multidisciplinary approach;
2. Integrate and evaluate information;
3. Formulate and test hypotheses using appropriate experimental design and statistical analysis of data;
4. Plan, conduct and write-up a programme of original research.

Practical Skills:

1. Plan and execute safely a series of experiments;
2. Use laboratory methods to generate data;
3. Analyse experimental results and determine their strength and validity;
4. Prepare technical reports;
5. Give technical presentations;
6. Use the scientific literature effectively;
7. Use computational tools and packages.

Transferable Skills:

1. Communicate effectively through oral presentations, computer processing and presentations, written reports and scientific publications;
2. Apply statistical and modelling skills;

3. Management skills: decision processes, objective criteria, problem definition, project design and evaluation, risk management, teamwork and coordination, extension needs;
4. Integrate and evaluate information from a variety of sources;
5. Transfer techniques and solutions from one discipline to another;
6. Use Information and Communications Technology;
7. Manage resources and time;
8. Learn independently with open-mindedness and critical enquiry;
9. Learn effectively for the purpose of continuing professional development.

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).
Non-academic Requirements	None
English Language Requirement	Higher requirement IELTS score of 7.0 overall (minimum 6.5 in all elements)

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 Strategy

Scheduled Learning & Teaching Methods	<ul style="list-style-type: none"> • Laboratory work (during research projects) • Formal presentations (preparing for viva examination)
E-learning & Blended Learning Methods	<ul style="list-style-type: none"> • Computer-based work
Project and Placement Learning Methods	<ul style="list-style-type: none"> • Individual lab research project and writing up a project report (~5 months)

Assessment Strategy

Assessment Methods	<ul style="list-style-type: none"> • Individual research project report • Oral presentation • Viva
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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 available to students via the course director.

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.

Re-sit Policy

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

Programme Structure

Full-time	Pre-session	Term One	Term Two	Term Three	Term Four
Projects	0	1	0	1	0

Assessment Dates & Deadlines

Written Examinations	None
Coursework Assessments	Spring and summer
Project Deadlines	Spring and summer
Practical Assessments	None

Assessment Structure

Marking Scheme

Pass:

- The Pass Mark is 50%. Students must pass both Projects in order to be awarded a degree.

Merit:

- In order to be awarded a result of merit, a candidate must obtain a mark of 60% or greater in each Project.
- Where appropriate, a Board of Examiners may award a result of merit where a candidate has achieved an aggregate mark of 60% or greater across the programme as a whole AND has obtained a mark of 55% or greater in one of the Projects.

Distinction:

- In order to be awarded a result of distinction, a candidate must obtain a mark of 70% or greater in each Project.
- Where appropriate, a Board of Examiners may award a result of Distinction where a candidate has achieved an aggregate mark of 70% or greater across the programme as a whole AND has obtained a mark of 65% or greater in one of the Projects.

Module Weightings	
Module	% Module Weighting
Research Project 1	50%
Research Project 2	50%

Indicative Module List

Code	Title	Core/ Elective	L&T Hours	Ind. Study Hours	Place- ment Hours	Total Hours	% Written Exam	% Course- work	% Practical	FHEQ Level	ECTS
	Research Project 1	Core	0	1125	0	1125	0%	100%	0%	7	45
	Research Project 2	Core	0	1125	0	1125	0%	100%	0%	7	45

Supporting Information

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

The Module Handbook is available at: <http://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: <https://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".
<http://www.imperial.ac.uk/admin-services/secretariat/college-governance/charters/>

Imperial College London is regulated by the Higher Education Funding Council for England (HEFCE) <http://www.hefce.ac.uk/reg/register/>

Modifications

Description	Committee	Date	Paper
Changes to the assessment strategy.	Programmes Committee	17 October 2017	PC.2017.05