

Programme Information		
Programme Title	Programme Code	HECoS Code
Experimental Neuroscience	A3TZ	For Registry Use Only

Award	Length of Study	Mode of Study	Entry Point(s)	Total Credits	
				ECTS	CATS
MRes	12 months	Full Time	Annually in October	90	180

Ownership			
Awarding Institution	Imperial College London	Faculty	Faculty of Medicine
Teaching Institution	Imperial College London	Department	Brain Sciences
Associateship	Diploma of Imperial College (DIC)	Main Location(s) of Study	Hammersmith Hospital
External Reference			
Relevant QAA Benchmark Statement(s) and/or other external reference points		Master’s Degree Characteristics	
FHEQ Level		Level 7 - Master’s	
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 Stefano Sandrone Dr Samuel Barnes	
Student cohorts covered by specification		2026-27 entry	
Date of introduction of programme		October 19	
Date of programme specification/revision		January 26	

Programme Overview

The MRes Experimental Neuroscience programme is based in the Department of Brain Sciences (www.imperial.ac.uk/brain-sciences/). It is designed to offer practical experience of neuroscience research, covering a wide range of skills which will prepare you for PhD studies and enable you to make a more informed choice for your research.

The Department has world class facilities with a wide range of research programmes in the areas of Neuroinflammation, Neurodegeneration, Restorative Neuroscience, Clinical Translation and Psychiatry. The Multiple Sclerosis Society and Parkinson's UK Tissue Banks are hosted by the Department. The Hammersmith campus also houses state-of-the-art facilities for PET/CT, MRI and optical imaging. There is a broad spectrum of research, "*from the bench to the bedside*", with a particular emphasis on the application of modern scientific techniques to questions relevant to understanding the pathogenesis of disease and developing new approaches to treatment. There is also opportunity for cross faculty collaborative research based in the UK Dementia Research Institute at Imperial (www.imperial.ac.uk/dementia-research-institute/). Key research areas include: Ageing, environment and lifestyle; The microbiome and brain health; Novel bioelectronics technologies; Sleep as a protectant against dementia; Neural-circuit plasticity in neurodegeneration; Glial-neuronal interactions

The MRes programme is comprised of two modules. Each module consists of a research project, a coursework and an oral presentation. The research projects will each be conducted within a different research group, in order for you to experience a variety of different laboratory environments and different practical techniques. Research projects are provided by academics who are internationally known leaders in their fields of research.

Past projects have included:

- 1) an investigation of vascular damage and white matter integrity in traumatic brain injury;
- 2) investigating the use of non-invasive brain stimulation to produce analgesic effects in different chronic pain syndromes;
- 3) investigating neuronal cell death in progressive multiple sclerosis and potential targets for drug development;
- 4) analysis of imaging and electroencephalography data to gain insights into disturbances of neural processing that underlie cognitive and behavioural impairments.

Among the coursework, the formulation of a PhD proposal, relevant since most students intend to follow this course with PhD studies, and a problem-solving team exercise to develop skills useful for group working. The research skills acquired will provide excellent training for students who wish to pursue a PhD in neuroscience and many graduates of the course succeed in gaining entry to PhD programs. Other graduate destinations include careers in industrial research, in clinical service or scientific publishing.

Learning Outcomes

Upon successful completion of the programme the student should be able to

- Apply knowledge obtained in a range of topics in modern neuroscience to real life problems.
- Critically assess and evaluate experimental approaches and their possible applications.
- Evaluate and use a range of experimental techniques used in modern neuroscience.
- Design experiments, generate novel data, and analyse experimental findings.
- Interpret and critically appraise research findings in the context of published literature.
- Use planning and project management skills required for completion of research projects
- Retrieve, review, and critique evidence in a systematic way
- Communicate science effectively in various formats
- Work constructively as part of a team to solve research problems
- Reflect on performance to address personal training needs, and identify evidence gaps in the wider scientific field

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College London degree programme. The Graduate Attributes are available at: <https://www.imperial.ac.uk/about/education/our-graduates/>

Entry Requirements

Academic Requirement	The minimum requirement is normally a 2:1 UK Bachelor's Degree with Honours in an appropriate science subject (or a comparable qualification recognised by the College). For further information on entry requirements, please go to www.imperial.ac.uk/study/apply/postgraduate-taught/entry-requirements/accepted-qualifications/
Non-academic Requirements	None
English Language Requirement	Standard requirement Please check for other Accepted English Qualifications
Admissions Test/Interview	Places are offered on the basis of applications.
The programme's competency standards documents are available from the department.	
Learning & Teaching Approach	
Learning and Teaching Delivery Methods	
You will conduct two research projects designed to provide training in research skills. The projects will be written up as a short dissertation (Technical skills module and Critical appraisal module). The research project will require you to demonstrate independent learning to explore the background literature pertaining to the project. It is not possible for projects to be carried out partly or wholly at an external organisation. Over the course of the year, you will communicate your research as oral and poster presentations to expert audiences. Focussing on transferable skills relevant to academic research, the coursework components will include the preparation of a PhD proposal in the first module and a problem-solving team activity in the second module. You will be expected to attend departmental seminars and work-in progress meetings where PhD students present their latest results. In the research groups where you will be conducting your projects, you will participate in laboratory meetings where your experiments and research results will be discussed.	
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 is about 2250 hours per year.	
Assessment Strategy	
Assessment Methods	
At the end of each module, the research project dissertation and the poster or oral presentations will be assessed. For each module, the research projects (dissertations and presentations) will comprise 75% of the mark and the coursework components 25% of the mark. The final mark of each module will contribute equally to the total mark. The research centres in the department run seminar series and journal club sessions; you will be required to attend at least three seminars/journal clubs in each rotation. There will also be formative assessments on project performance including feedback from supervisors and peers in the laboratory. There will also be a mid-project meeting with the course tutor during which any concerns you have can be discussed.	
Academic Feedback Policy	
At the end of each module, after assessments have taken place, students will receive written feedback on their performance. Verbal feedback on assessments will be immediate. Feedback on written submissions will be provided within two weeks. Where this is not logistically possible, students will be advised of a revised timescale. 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
N/A	N/A	N/A

Programme Structure ¹					
Year 1 – FHEQ Level 7 You will study all core modules.					
Code	Module Title	Core	Group*	Term	Credits
BRAI70001	Technical Skills	Core	N/A	Autumn-Spring	45 ECTS
BRAI70002	Critical Appraisal	Core	N/A	Summer	45 ECTS
Credit Total					90

* 'Group' refers to module grouping (e.g. a group of electives from which one/two module(s) must be chosen).

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.

Award and Classification for Postgraduate Students

Award of a Degree of Master of Research (MRes)

To qualify for the award of Master of Research you must have:

1. passed modules to the value of no fewer than 90 credits at credit level 6 or above of which no more than 15 credits may be from credit level 6.
2. no compensation may be included in the award.
3. met 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%.

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/apply/postgraduate-taught/entry-requirements/accepted-qualifications/
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
Imperial College London 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 Imperial's Centenary, 8th July 2007, established Imperial as a University with the name and style of "The Imperial College of Science, Technology and Medicine". www.imperial.ac.uk/admin-services/secretariat/university-governance-structure/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 they 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.