IMPERIAL

Programme Information

Programme Title	Programme Code	HECoS Code
Ecology and Environmental Biology	C180	For Registry Use Only

Award	Length of Study	Mode of Study	Entry Point(s)	Total Credits	
				ECTS	CATS
BSc	3 Years	Full-time	October	180	360
Dip HE	N/A	N/A	N/A	120	240
Cert HE	N/A	N/A	N/A	60	120

The Cert. HE / Dip. HE are exit awards and are not available for entry. All students must apply to and join the BSc. The Cert HE will be titled 'Biological Sciences'.

Ownership

Awarding Institution	Imperial College London	Faculty	Natural Sciences
Teaching Institution	Imperial College London	Department	Life Sciences
Associateship	Associateship of the Royal College of Science (ARCS)	Main Location(s) of Study	South Kensington

External Reference

Relevant QAA Benchmark Statement(s) and/or other external reference points	Biosciences
FHEQ Level	Level 6
EHEA Level	1st cycle

External Accreditor(s) (if applicable) Not applicable

External Accreditor 1:	N/A		
Accreditation received:	N/A	Accreditation renewal:	N/A

Collaborative Provision Not applicable

Collaborative partner	Collaboration type	Agreement effective date	Agreement expiry date
N/A	N/A	N/A	N/A

Specification Details

Programme Lead	Prof Huw Williams
Student cohorts covered by specification	2025-26 entry
Date of introduction of programme	October 2019
Date of specification revision	February 2025

Programme Overview

Studying the Ecology and Environmental Biology BSci programme you will be actively engaged in a curriculum that will be enriched from year 1 onwards by the department's research environment. You will study the diversity of the living world, how we make sense of this diversity and how the planet's biological diversity is organised by ecological processes into ecosystems, communities, and populations. You will develop an understanding of the processes by which the diversity of life on earth has arisen, interacts with its environment, and is maintained, so that you can develop and critically evaluate conservation and environmental policies.

All students on Ecology and Environmental Biology programmes follow the same core modules in the first year of study, where the programme will range from biological chemistry to ecology and biodiversity. This will be complemented by a Life Science Skills programme that will provide training in quantitative skills, programming, statistics and scientific writing and presentation. You will develop a synoptic understanding of Biological Sciences before starting to specialise in year 2 by taking elective modules to allow you to start to specialise in ecology and environmental biology including population and community ecology, behavioural ecology, resource management, biodiversity, conservation biology and global change biology and a field course. Our final year specialised modules are based around our wide-ranging, world class research expertise and you will be brought to the edge of knowledge in your chosen specialised modules, taught by experts.

Through laboratory, computational and field work you will learn the skills you need to design, carry out and analyse the data from biological experiments

You will have the opportunity to contribute to the department's research by undertaking a 10 week, full time research project.

You will learn from the full range of academic staff in the department, including world leaders, as well as postgraduate students, your peers and visiting scientists to the department.

Graduates in Ecology and Environmental Biology go onto range of employments and further study including PhD study, research and development, science policy, research and ecological consultancy, business and finance.

Programme transfers: Transfer from C180 Ecology and Environmental Biology degree programmes onto the Biological Sciences degrees (C100) degrees can normally occur up to the start of the final year of study.

Learning Outcomes

Please refer to the Teaching Toolkit for advice on the role and purpose of Intended Learning Outcomes (ILO): www.imperial.ac.uk/staff/educational-development/teaching-toolkit/intended-learning-outcomes

On completion of this programme, graduates will be able to:

On achieving the Cert HE:

1. Interpret and apply core terminology and key concepts used in life sciences;

2. Integrate fundamental biological principles to explore biological complexity;

3. Integrate concepts from a range of disciplines, including physics, chemistry and maths, to solve problems in life sciences;

4. Demonstrate effective verbal, written communication and presentation skills;

On achieving the Dip HE, the ILOs (1-4) above and ....

5. Explore ethical and social issues in life sciences, and consider the potential impact of novel technologies;

6. Formulate hypotheses, design experiments, and apply lab and/or field skills to collect and critically evaluate relevant data;

7. Conduct statistical analyses using programming skills, adhering to publication standards;

8. Collaborate successfully in diverse, multicultural and international teams;

On achieving the BSc, all the ILOs (1-8) above and ....

9. Demonstrate and apply deep and wide-ranging ecological knowledge and skills to the understanding and study of important contemporary problems in ecology and environmental biology.

10. Demonstrate excellent verbal, written communication and presentation skills across a range of academic and disciplinary activities, including research, assessment, dissemination and communication with diverse audiences;

11. Solve complex real-world problems within their degree specialisation, using a range of appropriate laboratory, computational or field skills;

12. Create independent, enquiry-based, extended and novel work that demonstrates critical analysis and evaluation.

13. Demonstrate an awareness of the outstanding research problems of their chosen ecological specialities through exploring topics in the final year, research-led modules and be able to evaluate and understand how they are being or can be tackled.

14. Display a strong sense of personal and professional identity as a life scientist, and feel confident to apply the scientific method to real-world life science problems;

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	A level AAA overall, to include: A in Biology A in Chemistry, Mathematics or Physics A in another subject General Studies and Critical Thinking are not accepted. International Baccalaureate (IB) Minimum **38** overall **6** in Biology at higher level **6** in Chemistry, Physics or Mathematics at higher level
Non-academic Requirements	None

English Language Requirement	 IELTS score of 7.0 overall (minimum 6.5 in all elements).
Admissions Test/Interview	There is no admissions test associated with entry to this programme and applicants will not normally be interviewed.

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

Learning & Teaching Approach

Learning and Teaching Delivery Methods

Lectures and large group-teaching incorporating a range of active leaning approaches, laboratory practicals working as individuals, in pairs or small groups, field work, computational work, seminars, tutorials and problem classes, interactive online learning material, online concepts and skills videos and interactive group work, student presentations as individuals and small groups, team-based learning, dissertation and individual research projects.

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 1500 hours per year.

Typically in the first two years you will spend in the order of 30% of your time on lectures, laboratory work and small group teaching and seminars and similar (around 400 hours) and in the order of 70% of your time on independent study.

Assessment Strategy

Assessment Methods

Formative assessment.
Performance in problem classes, quizzes in lectures, digital resources for self-assessment including online quizzes and problems, by discussions in tutorials as well as written and or verbal feedback on a range of non-examined tasks, including the types of summatively assessed tasks listed below.

Summative Assessment
Written Examinations
Laboratory write-ups
Essays
Reports
Dissertations
Presentations
Individual research project report
Viva voce examination
Peer assessment
Poster presentations

Assessment Mode	Year 1	Year 2	Year 3
Examination	60	48	56
Coursework	40	52	44

Academic Feedback Policy
Coursework submission is managed by our education office and in most cases coursework is submitted electronically via BlackBoard and feedback is provided electronically or by a feedback form attached to items of coursework. Feedback is also provided via Blackboard on formative quizzes. You will receive feedback normally within 10 working days, but this might be longer for some very substantial pieces of work, such as a dissertation. Personal tutors hold timetabled tutorials to give feedback on examination performance and can be approached by their tutees at any point in the year for further guidance. The education office manages the timely return of coursework feedback and the Director of Undergraduate Studies routinely monitors the quality and quantity of feedback provided. In some instances, generic class feedback is returned to all students via email or a Blackboard announcement once coursework is marked

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
Field Trips	Mandatory	£1500

Programme Structure

Year 1 – FHEQ Level 4
You will study all core modules.

Code	Module Title	Core/ Elective	Group*	Term	Credits
LIFE40005	Biological Chemistry and Microbiology	Core		Autumn	10
LIFE40008	Evolution and Diversity	Core		Autumn-Spring	15
LIFE40006	Cell Biology and Genetics	Core		Spring-Summer	15
LIFE40007	Ecology and Evolution	Core		Spring-Summer	10
LIFE40009	Core skills for Life Scientists	Core		Autumn-Summer	10
				Credit Total	60

Year 2 - FHEQ Level 5
You will study all core modules. You must select three electives for study, one from each of Groups A, B and C.

Code	Module Title	Core/ Compulsory/ Elective	Group	Term	Credits
LIFE50016	Applied Molecular Biology	Core		Autumn	7.5
LIFE50011	Genetics	Core		Autumn	7.5
LIFE50025	Bioinformatics, Programming and Statistics (Biological Sciences)	Core		Autumn-Spring	5
LIFE50003	Tutored Dissertation	Core		Spring - Summer	7.5
LIFE50009	Essentials of Ecology: Theory and Practice	Elective	A	Spring	10
LIFE50002	Behavioural Ecology	Elective	B	Spring	10
LIFE50024	Vertebrate Form and Evolution	Elective	C	Summer	7.5
LIFE50008	Ecology Field Skills	Elective	C	Summer	7.5
	iExplore	Compulsory		Autumn-Spring	5/7.5
				Credit Total	60/62.5

Year 3 - FHEQ Level 6
All year 3 modules are electives and you will select three electives for study, one from each of Groups A, B and C and a research project option from Group D. Elective modules in Groups A, B and C are capped

Code	Module Title	Core/ Elective	Group	Term	Credits
normally at 40-45 students/module and students choose their top three choices from each group with final allocations being made by an algorithm that maximises the allocation of highest number of top choices across the cohort.					
LIFE60044	African Biology Field Course	Elective	A	Autumn	15
LIFE60063	Symbiosis, Plant Immunity and Disease	Elective	B	Autumn	15
LIFE60065	The Microbiome	Elective	C	Autumn	15
LIFE60050	Evolutionary Applications	Elective	B	Autumn	15
LIFE60045	Biodiversity and Conservation Biology	Elective	B	Autumn	15
LIFE60046	Biodiversity Genomics	Elective	A	Autumn	15
LIFE60051	Global Change Biology	Elective	C	Spring	15
LIFE60049	Disease Ecology and Epidemiology	Elective	B	Spring	15
LIFE60040	Science Communications plus Research Proposal Project	Elective	D	Spring-Summer	15
LIFE60066	Research Project (Lab, Data, Field)	Elective	D	Spring-Summer	15
				Credit Total	60

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

Progression and Classification

Progression

In order to progress to the next level of study, you must have passed all modules (equivalent to 60 ECTS) in the current level of study at first attempt, at resit or by a compensated pass.

The overall weighted average for each year must be 40%, including where a module(s) has been compensated, in order for you to progress to the next year of the programme.

Classification

The marks from modules in each year contribute towards the final degree classification.

In order to be considered for an award, you must have achieved the minimum number of credits at the required levels prescribed for that award and met any programme specific requirements as set out in the Programme Specification.

Your classification will be determined through:

  i)   Aggregate Module marks for all modules
  ii)   Year Weightings

For this award, Year One is weighted at 7.5%, Year Two at 35% and Year Three at 57.5%.

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

  i) First   70% or above for the average weighted module results

  ii) Upper Second 60% or above for the average weighted module results

  iii) Lower Second 50% or above for the average weighted module results

  iv) Third   40% or above for the average weighted module results

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
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 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.