Programme Information		
Programme Title	Programme Code	HECoS Code
Ecological Applications	C1U7	For Registry Use Only

Award	Length of Study	Mode of Study	Entry Point(s)	Total Credits	
				ECTS	CATS
MSc	1 calendar year	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	Diploma of Imperial College (DIC)	Main Location(s) of Study	Silwood Park Campus
External Reference			
Relevant QAA Benchmark Statement(s) and/or other external reference points		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		Prof. Tom Bell	
Student cohorts covered by specification		2023-24 entry	
Date of introduction of programme		October 13	
Date of programme specification/revision		August 23	

Programme Overview

This programme provides broad training in the applications of ecological and evolutionary theory and skills to real world problems. It is designed and taught in partnership with leading organisations in the field of ecological applications and conservation, including the CABI, Surrey Wildlife Trust, and Syngenta. These close links to industry and non-governmental organisations will provide students with experience ideal in preparing for either a PhD or career in applied ecology and conservation.

Each module is taught by a leading researcher in that field, focusing on the practical, quantitative and analytical skills that would be attractive to a diverse range of ecological employers (for instance, industry, government or NGOs) as well as being useful for a career in research.

Learning Outcomes

On successful completion of this programm**e,** you will be able to:

1. Demonstrate the ability to appraise, analyse, evaluate, interpret and explain:
    - Ecological and evolutionary concepts, models, and theory as they relate to individuals, populations, communities, and ecosystem functioning.
    - Principles of applied ecology on selected topics, which may include agro-ecosystems, biocontrol, invasive species, and/or other similar topics.

2. Demonstrate the ability to evaluate, critique, and apply
    - Research techniques, including data and information retrieval, experimental design and statistics, modelling, data collection in the laboratory and field;

3. Demonstrate the ability to explain, synthesize and critique
    - Detailed knowledge and understanding of the essential facts, concepts, principles and theories relevant to your chosen area of specialisation;

4. Demonstrate the ability to compose, explain, and modify where needed
    - the essential methods and experimental tasks needed in your chosen area of specialisation;

5. Demonstrate the use of the following skills in a professional manner
    - management and communication skills, including problem definition, project design and management, decision processes, teamwork, written and oral reports.

6. Produce a scientific research project including written and oral report suitable for potential publication in your chosen area of specialisation

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 science-based 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	N/A
English Language Requirement	Standard requirement (PG) Please check for other Accepted English Qualifications
Admissions Test/Interview	N/A

The programme's competency standards document can be found at: 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
- Lectures
- Tutorials
- Seminars
- Practical classes and field work
- Workshops
- Case studies
- Group work exercises
- Formal presentations
- Computer-based work
- Online lecture materials
- Taxonomy e-diary exercise
- Online seminar recordings
- Group project with Thomson Ecology, ecological consultants
- Group project with Surrey Wildlife Trust, ecological monitoring
- Individual research project & dissertation (5 months), which can include placements

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.

Typically, you will spend around 20% of your time in lectures and practicals and about 30% of your time in independent study during the taught part of the course. The remaining 50% of your time will be spent on independent study on your research project.

Assessment Strategy

Assessment Methods

Assessment will be a combination of examinations, coursework, and research project.

All ILOS are assessed in the project. ILO's 1 and 2 are assessed via coursework and exams, 3 and 4 in the mini-project and research proposal coursework. Coursework (16%): Formative assessment will typically comprise two items of written work and/or presentations that assess that the ability interpret, analyse, and critique, and synthesise a problem in applied ecology (i.e. ILOs 1-5). Examples may include (but are not limited to): mini-projects focusing on a specific applied ecology question, or a grant proposal that identifies a significant problem in applied ecology and how it would be solved within specific budget/time constraints.

Examinations (34%): Summative assessment will comprise examinations covering the full range of taught topics. There will typically be 2 examinations, of which one will be multiple choice questions (ILO 1 and 2) and the other will be essay questions (ILO 3 and 4).

Research Project (50%): The research project will be on an applied ecology topic, and may be computational, laboratory-based, or field-based. The research project will be assessed using a combination of written report (dissertation), presentation, and viva examination. The project will assess ILO 1-6. The project will run during the spring and summer.

Academic Feedback Policy

Coursework is marked and comments by the marker will be annotated directly on the papers (electronically for submissions on blackboard). A summary of the feedback (with tickboxes indicating relative attainment on key dimensions) will be completed, and an indicative grade will be given (actual marks will not be communicated to the students). These papers will then be returned to the students as soon as possible and within two weeks of submission. Generic feedback on exam questions (explaining what contributed good answers, typical features leading to lower marks for each question across the whole class) and indicative grades will be returned following exams. A meeting will be held after the end of the taught component, at which each student will have a one- to-one discussion with the Course Director on progress to date, coursework marks achieved and expectations for the project. 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 exam performance and project selection. Dissertations are marked by supervisor and 2 independent assessors, who provide feedback electronically that is returned automatically to students after the final examiners meeting.
Re-sit Policy
The College's Policy on Re-sits is available at: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/
Mitigating Circumstances Policy
The College'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

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 and compulsory modules.**					
Code	Module Title	Core/ Compulsory/ Elective	Group	Term	Credits
LIFE70019	Ecology Skills	Compulsory		Autumn	15
LIFE70009	Biological Computing	Compulsory		Autumn-Spring	10
LIFE70047	Data Science	Compulsory		Spring	5
LIFE70020	Applied Ecology	Compulsory		Spring	10
LIFE70021	Ecology	Compulsory		Spring	5
LIFE70022	Research Project	Core		Summer	45
				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

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 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: 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 is 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.

a.

Programme Specific Regulations

N/A

Supporting Information
The Programme Handbook is available at: www.imperial.ac.uk/life-sciences/postgraduate/masters-courses/msc-in-ecological-applications/
The Module Handbook is available at: www.imperial.ac.uk/life-sciences/postgraduate/masters-courses/msc-in-ecological-applications/
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 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.