

**MSc Ecological Applications**

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	Ecological Applications			
Award(s)	MSc			
Programme Code	C1U7			
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	Silwood Park Campus			
Mode and Period of Study	1 academic year, full-time			
Cohort Entry Points	Annually in October			
Relevant <a href="#">QAA Benchmark Statement(s)</a> and/or other external reference points	<a href="#">Master's Degree Characteristics</a>			
Total Credits	ECTS:	90	CATS:	180
<a href="#">FHEQ Level</a>	Level 7			
<a href="#">EHEA Level</a>	2 <sup>nd</sup> cycle			
External Accreditor(s)	None			
<b>Specification Details</b>				
Student cohorts covered by specification	2017-18 entry			
Person responsible for the specification	Tim Barraclough			
Date of introduction of programme	October 2013			
Date of programme specification/revision	March 2018			

## 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, Thomson Ecology, and the British Trust for Ornithology. 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

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](http://www.imperial.ac.uk/students/academic-support/graduate-attributes)

### 1. Knowledge and Understanding

- Ecological principles of population and environmental management and control;
- Social and economic dimensions of policy and management and their evaluation;
- Research techniques, including information retrieval, experimental design and statistics, modelling, sampling, taxonomic keys, bioassays, environmental microbiology, molecular biology, laboratory and field safety;
- Detailed knowledge and understanding of the essential facts, concepts, principles and theories relevant to the student's chosen area of specialisation;
- Management and communication skills, including problem definition, project design, decision processes, teamwork, written and oral reports, scientific publications.

### 2. Skills and other Attributes

#### Intellectual Skills

- Analyse and solve ecological- based problems using an integrated multidisciplinary approach, applying professional judgements to balance costs, benefits, safety and social and environmental impact;
- Integrate and evaluate information;
- Formulate and test hypotheses using appropriate experimental design and statistical analysis of data;
- Plan, conduct and write-up a programme of original research.

#### Practical Skills

- Plan and execute safely a series of experiments;
- Use laboratory and field-based methods to generate data;
- Analyse experimental results and determine their strength and validity;
- Prepare technical reports;
- Give technical presentations;

- Use the scientific literature effectively;
- Use computational tools and packages.

### Transferable Skills

- Communicate effectively through oral presentations, computer processing and presentations, written reports and scientific publications;
- Apply statistical and modelling skills;
- Management skills: decision processes, objective criteria, problem definition, project design and evaluation, risk management, teamwork and coordination;
- Integrate and evaluate information from a variety of sources;
- Transfer techniques and solutions from one discipline to another;
- Use Information and Communications Technology;
- Manage resources and time;
- Learn independently with open-mindedness and critical enquiry;
- 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 science-based subject (or a comparable qualification recognised by the College).
English Language Requirement	<a href="#">Standard requirement</a> IELTS score of 6.5 overall (minimum 6.0 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"> <li>• Laboratory</li> <li>• Lectures</li> <li>• Tutorials</li> <li>• Seminars</li> <li>• Practical classes and field work</li> <li>• Workshops</li> <li>• Case studies</li> <li>• Group work exercises</li> <li>• Formal presentations</li> </ul>
E-learning & Blended Learning Methods	<ul style="list-style-type: none"> <li>• Computer-based work</li> <li>• Online lecture materials</li> <li>• Taxonomy e-diary exercise</li> <li>• Online seminar recordings</li> </ul>
Project and Placement Learning Methods	<ul style="list-style-type: none"> <li>• Group project with Thomson Ecology,</li> </ul>

	<p>ecological consultants</p> <ul style="list-style-type: none"> <li>• Group project with Surrey Wildlife Trust, ecological monitoring</li> <li>• Individual research project &amp; dissertation (5 months), which can include placements</li> </ul>
<b>Assessment Strategy</b>	
Assessment Methods	<ul style="list-style-type: none"> <li>• Coursework</li> <li>• Essays</li> <li>• E-Diary</li> <li>• Dissertations</li> <li>• Presentations</li> <li>• Individual research project report</li> <li>• Viva</li> </ul>
<b>Academic Feedback Policy</b>	
<p>Coursework is double-marked and comments by the markers 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.</p> <p>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.</p> <p>Dissertations are marked by supervisor and 2 independent assessors, who provide feedback electronically that is returned automatically to students after the final examiners meeting.</p>	
<b>Re-sit Policy</b>	
<p>In line with College policy, students who are unsuccessful in any of their examinations may usually be allowed an opportunity to re-sit at the discretion of the Board of Examiners.</p> <p>Specific information regarding re-sits for Taught Master's degrees can be found in the relevant Academic Regulations available at: <a href="https://www.imperial.ac.uk/about/governance/academic-governance/regulations/">https://www.imperial.ac.uk/about/governance/academic-governance/regulations/</a></p>	
<b>Mitigating Circumstances Policy</b>	
<p>Students may be eligible to apply for mitigation if they have suffered from serious and unforeseen circumstances during the course of their studies that have adversely affected their ability to complete an assessment task and/or their performance in a piece of assessment.</p> <p>The College's Policy on Mitigating Circumstances is available at:</p>	

<https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/>

### Programme Structure

Full-time	Pre-session	Autumn Term	Spring Term	Summer Term	Summer Vacation
Core Modules	0	9	5	0	0
Elective Modules	0	0	0	0	0
Projects	0	0	0	1	0

### Assessment Dates & Deadlines

Written Examinations	Spring and Summer
Coursework Assessments	Autumn and Spring
Project Deadlines	Summer
Practical Assessments	N/A

### Assessment Structure

#### Marking Scheme

#### Pass

- Achieve a minimum aggregate mark of 50% across the examinations in the Taught module;
- Achieve a minimum aggregate mark of 50% across the coursework assessments in the Taught module;
- Achieve a minimum aggregate mark of 50% for the MSc Ecological Applications Research Project module.

#### Merit

- Achieve a minimum aggregate mark of 60% across the examinations in the Taught module;
- Achieve a minimum aggregate mark of 60% across the coursework assessments in the Taught module;
- Achieve a minimum aggregate mark of 60% for the MSc Ecological Applications Research Project module.
- A student who fails to meet this requirement may be Compensated. Compensation is awarded at the discretion of the Board of Examiners and only in accordance with paragraphs 14.1 and 14.2.1 of the Regulations for the Examination of Master's Level Degrees.

#### Distinction

- Achieve a minimum aggregate mark of 70% across the examinations in the Taught module;
- Achieve a minimum aggregate mark of 70% across the coursework assessments in the Taught module;
- Achieve a minimum aggregate mark of 70% for the MSc Ecological Applications Research Project module.
- A student who fails to meet this requirement may be Compensated. Compensation is

awarded at the discretion of the Board of Examiners and only in accordance with paragraphs 14.1 and 14.2.1 of the Regulations for the Examination of Master's Level Degrees.

Indicative Module List								
Code	Title	Core/ Elective	L&T Hours	Ind. Study Hours	Place- ment Hours	Total Hours	FHEQ Level	ECTS
	Taught	CORE	291	834	0	1125	7	45
	Research	CORE	0	1125	0	1125	7	45

## Supporting Information

The Programme Handbook is available at: <http://www.imperial.ac.uk/life-sciences/postgraduate/masters-courses/msc-in-ecological-applications/>

The Module Handbook is available at: <http://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](http://www.imperial.ac.uk/study/pg/apply/requirements)

The College's Quality & Enhancement Framework is available at: [www.imperial.ac.uk/registry/proceduresandregulations/qualityassurance](http://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/charter-and-statutes/>

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