Environmental issues such as pollution, habitat degradation, climate change and invasive species threaten the quality sustainability of our aquatic resources. Responding to these threats the Aquatic Science MSc equips students with an interdisciplinary understanding of the structure and functioning of aquatic environments, encompassing lakes, ponds, rivers, wetlands, groundwaters, estuaries and shallow seas.

Degree summary

Students focus on integrated freshwater and coastal systems and gain extensive training in field sampling, study design and species identification. Distinctive features include: integration of aquatic ecology with hydro-geomorphology, aquatic landscape ecology, public engagement, citizen science approaches and science communication, analysis of sediment cores for environmental change reconstruction, design of aquatic monitoring programmes and modelling of aquatic system dynamics. Students come away with a sound and critical knowledge of current-day links between aquatic science, legislation and conservation.

The Aquatic Science MSc is run by UCL Geography which enjoys an outstanding international reputation for its aquatic environmental research and teaching. The degree has a strong emphasis on field working and on the acquisition of key practical skills with three major residential classes to the North Norfolk Coast, Scottish Highlands and Dorset.

The programme is taught by world-leading researchers specialising in Recent Environmental Change & Biodiversity and Environmental Modelling and Observation and has specialist input from the Thames Estuary Partnership.

Speakers from environmental organisations including the Environment Agency, the Rivers Trusts, Wildfowl & Wetlands Trust, the UK Wildlife Trusts, National Trust and Natural England lecture on the programme and take part in fieldwork. The course also has a great network of past students who keep in touch with the current student cohort as part of re-union and course events. By bringing together students (present and past), researchers and practitioners, a vibrant and informal academic environment is created encouraging mutual discovery and ongoing debate.

The programme is delivered through a combination of lectures, seminars, practical classes, laboratory sessions, case-studies and residential field classes. Assessment is through coursework and the dissertation, which includes an oral presentation of the research proposal.

Degree structure

Mode: Full-time: 1 year; Part-time: 2 years
Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of four core modules (60 credits), four optional modules (60 credits) and a research dissertation (60 credits).

A Postgraduate Diploma - four core modules and four optional modules all 15 credits (120 credits, full-time nine months, part-time two years) is offered.

A Postgraduate Certificate - four core modules only at 15 credits each (60 credits, full-time twelve weeks, part-time two years) is offered.

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

Compulsory modules

Aquatic Systems
Aquatic Monitoring (includes field-trip to Scottish Highlands)
Environmental Data Acquisition and Analysis
Scientific Basis for Freshwater and Coastal Conservation (field-based module at North Norfolk Coast, England)

Optional modules

Students choose four of the following:
Lakes
Coastal Change
Politics of Climate Change
Marine Conservation
Surface Water Modelling
Wetlands
Aquatic Macrophytes (field-based module in Dorset, England)
Climate Risks to Hydro-ecological Systems
Biological Indicators of Environmental Change
Non-biological Indicators for Environmental Reconstruction
Environmental GIS
Ocean Circulation and Climate Change
Introduction to Citizen Science and Scientific Crowdsourcing

Dissertation/Report

All students undertake an independent research project which culminates in a dissertation of 12,000 words. Dissertation placement positions are offered linked to external conservation bodies and research orientated consultancies.

Field classes around the UK, these may include week-long trips to the North Norfolk Coast, Scottish Highlands and Dorset. Other shorter field days also take place.

Optional module Aquatic Macrophytes - approximately £200
Your career

This programme provides an ideal foundation for PhD research, or for employment with environmental protection and conservation agencies, the water industry and environmental consultancies.

Employability

The MSc provides students with the science background and practical skills necessary for a career working in aquatic conservation and environmental protection agencies, environmental consultancies and stakeholder agencies. The MSc is also an ideal platform for further PhD study. We aim to expose students to potential employers from the outset and students receive expert tuition in field sampling and monitoring programme design, catchment management, conservation biology, taxonomy of key species groups, knowledge of important aquatic conservation principles and legislation and working with stakeholders.
Entry requirements

Normally a minimum of an upper second-class Bachelor's degree in a relevant discipline from a UK university or an overseas qualification of an equivalent standard. Applicants with relevant professional experience in aquatic science or environmental management will also be considered.

English language proficiency level

If your education has not been conducted in the English language, you will be expected to demonstrate evidence of an adequate level of English proficiency.

The level of English language proficiency for this programme is: Good.

Information about the evidence required, acceptable qualifications and test providers is provided at:
www.ucl.ac.uk/graduate/english-requirements

Your application

Students are advised to apply as early as possible due to competition for places. Those applying for scholarship funding (particularly overseas applicants) should take note of application deadlines.

When we assess your application we would like to learn:

// why you want to study Aquatic Science
// why you want to study Aquatic Science at UCL
// what particularly attracts you to this programme
// how your academic and/or professional background meets the demands of a challenging academic environment
// where you would like to go professionally with your degree

Together with essential academic requirements, the personal statement is your opportunity to illustrate whether your reasons for applying to this programme match what the programme will deliver.

There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at:
www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

// UK: £12,110 (FT), £6,250 (PT)
// EU: £12,110 (FT), £6,250 (PT)
// Overseas: £23,300 (FT), £11,650 (PT)

The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information on fee status, fee increases and the fee schedule can be viewed on the UCL Students website.

For information on bursaries available, please visit
www.geog.ucl.ac.uk/aquatic

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 26 July 2019

Details on how to apply are available on the website at:
www.ucl.ac.uk/graduate/apply

CONTACT

Programme content

Email: geog-aquatic@ucl.ac.uk

EU referendum

For up-to-date information relating to specific key questions following the UK’s decision to leave the EU, please refer to www.ucl.ac.uk/brexit