MSc Applied Environmental Science

(1 Year Full Time)

The study of Applied Environmental Science is critical for establishing policies in environmental assessment, evaluating potential change in environmental quality in response to various land use and other activities, and in the development of management and conservation strategies, as well as contributing to policy formulation. This course has a heavy emphasis on practical training in fieldwork, laboratory analyses, information sourcing, data analysis, planning, reporting and communication.

You will work with an interdisciplinary team of experts covering the key aspects of Environmental Science, encompassing marine, freshwater and terrestrial systems. This is the only Applied Environmental Science course in Ireland to include a major input from civil engineering, relating particularly to water quality, hydrology and waste treatment processes.

Course Content and Structure

- **90 credits** taught masters
- **65 credits** taught modules
- **5 credits** placement/internship
- **20 credits** research project/task

Samples of modules include:

- Water Resources Engineering
- Environmental Impact Assessment
- Quantitative Tools for the Life Sciences
- Freshwater Resources Assessment
- Global Change Ecology
- Wildlife and Resources Management
- Marine/Coastal Ecology
- Soil Ecology
- Environmental Geology
- Ecotoxicology and Air Quality Monitoring
- Vegetation Ecology
- Geographic Information Systems (GIS) and Data Analyses

Modules and topics shown are subject to change and are not guaranteed by UCD.

Entry Requirements

- This programme is intended for applicants with a primary degree in science, engineering, geography, architecture or a related subject. An upper second class honours or international equivalent is required.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent, such as TOEFL (iBT) score of 90 or PTE score of 63. Applicants with an IELTS score of at least 5.5 may apply for admission to the UCD Pre-Masters Pathway programme.

Graduate Profiles

Hannah Fearon, RPS Environmental, Ireland

Overall, the course was an eye-opening experience with a great mix of lab sessions, field work and lectures. The highlight of this course for me was definitely the opportunity to gain professional work experience and I would encourage anyone interested in following a career in the Environmental sector to seriously consider this course.

Betsy Townsend, Physical Scientist, US EPA

The MSc coursework paired with my 6-week placement at Dublin City Council prepared me for a career in the environmental sector, and gave me proficiency in the collection, processing, analyses, and interpretation of environmental data.

Career Opportunities

Our graduates are building successful varied careers in environmental resources assessment, management and protection. A considerable number have been employed in environmental consultancy and national and International government agencies, such as Inland Fisheries Ireland and the Environmental Protection Agency (EPA). Some graduates have also continued their studies at PhD level in the areas of fisheries, biomass fuels, soil, water engineering and invertebrate ecology. The course gives due consideration to key legislative requirements and policy developments.