University College Dublin
Ireland's Global University

COURSE CODE: F080

MSc Plant Biology & Biotechnology

(1 Year Full Time)

Rapid developments in our understanding of plants and their significance to our wellbeing has been achieved through advances in a range of disciplines including genetics, genomics, cell biology, physiology, ecology and studies on climate change. Graduates of this one-year MSc will be equipped with the knowledge and skills in these recent advances to rise to the future challenges in academia, industry and policy development. Innovation and entrepreneurship permeate the course as central themes and, in addition, a specific module on entrepreneurship in plant biology is delivered. This MSc covers a wide diversity of both topics and approaches, and is taught by a high-profile research-oriented group of academics.

Researchers from the UCD School of Biology and Environmental Science represent the single largest grouping of plant scientists in Ireland, with research interests ranging from genetics and molecular biology of the cell to plant physiology and ecology.

Course Content and Structure

90 credits taught masters = **60 credits** taught modules + **30 credits** research project/minor thesis

Modules include:

- Entrepreneurship in Plant Biology
- Current Developments in Plant Biology
- Plant Pathology and Biotechnology
- Biological Imaging
- Plant Development
- Programmed Cell Death in Plants
- Plant Phenotyping
- Insect-Plant Interactions
- Biological Invasions
- Plants and Stress

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

APPLY NOW This programme receives significant interest so please apply early online at www.ucd.ie/apply

Entry Requirements

- This programme is intended for applicants with a BSc in an appropriate life science discipline. An upper second class honours or international equivalent is required. However, in certain cases/circumstances, applicants with lower second class honours will also be considered.
- 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.

Career Opportunities

Graduates will have a distinct advantage when applying for PhD studentships or other more advanced graduate training in the area of plant biology and biotechnology. This MSc is ideal for graduates interested in pursuing scientific careers in academia, agriculture and plant science-based or biotechnology industries. Graduates will have opportunities to pursue postgraduate education and research and work in areas such as plant biotechnology, scientific journalism/publishing and for government agencies involved in governmental and non-governmental policy.

Faculty Profile

Associate Professor Carl Ng, UCD School of Biology and Environmental Science

My research focuses on understanding the signalling processes underlying the responses of plants and crops to abiotic stresses. The aim is to understand plant cellular strategy for adapting to changing environmental conditions and how temporally dynamic gene expression systems can confer evolutionary advantages during the colonisation of land by plants.

EU ENQUIRIES Associate Professor Carl Ng : futurecrops@ucd.ie
www.ucd.ie/courses/msc-plant-biology-biotech
UCD School of Biology and Environmental Science, University College Dublin, Belfield, Dublin 4.

NON-EU ENQUIRIES : internationaladmissions@ucd.ie
www.ucd.ie/global