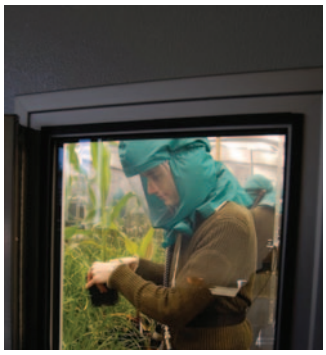
Plant Biology

CAO code: DN200 Option: Biological, Biomedical and Biomolecular Science (BBB)



Experiment on maize in the Programme for Experimental Atmospheres and Climate (PÉAC) lab at UCD.
Image by Peter Lang © UCD

- Understand how plants are a vital component of the biosphere and are responsible for the environmental conditions essential for all life on Earth
- Develop skills to study how plants and plant cells grow and develop

"I chose Plant Biology as Plant Biotechnology and Plant Pathology particularly interested me. Our classes were specific to Plant Biology, were smaller and we had lots of contact with lecturers and tutors. The opportunity to carry out a research internship in South America with the Plant Palaeoecology and Palaeobiology research group in my third year was one of the highlights of my time in UCD. After graduating, I completed a research Master's in Plant Pathology and I am currently completing a PhD in molecular plant genetics, focused on the regulation of gene expression in stomatal guard cells."

Emma Doyle, Graduate

Sample pathway for a degree in Plant Biology *

YEAR 1 — ENGAGE WITH THE PRINCIPLES

BIOLOGY *Modules include:*
- Biology in Action
- Life on Earth
- Cell Biology & Genetics
- Biomedical Sciences

CHEMISTRY *Modules include:*
- The Basis of Organic and Biological Chemistry

MATHEMATICS *Modules include:*
- Mathematics for the Biological & Chemical Sciences

- One Elective module
- One Small-Group Project

YEAR 2 — CHOOSE YOUR SUBJECTS

The subject combinations listed below are illustrative of what a student who graduates in Plant Biology could choose in Year 2. Further subject combinations are possible depending on the choices in Year 1. Further information is available on page 19.

PLANT BIOLOGY *Modules include:*
- Chemistry for Biologists
- Scientific Communication
- Principles of Plant Biology
- Biomolecular Lab Skills
- Principles of Cell and Molecular Biology

ENVIRONMENTAL BIOLOGY *Modules include:*
- Principles of Environmental Biology and Ecology

ZOOLOGY *Modules include:*
- Principles of Zoology
- Animal Behaviour
- Molecular Genetics and Biotechnology

- Two Elective modules

YEAR 3 — FOCUS ON YOUR CHOSEN SUBJECT

PLANT BIOLOGY – *Modules include:*
- Plant Diseases
- Plant Form & Function
- Plant Biotechnology
- Experimental Plant Physiology
- Plant Cell Biology
- Working with Biological Data
- Genetics
- Systems Ecology
- Two Elective modules

YEAR 4 — REFINE YOUR KNOWLEDGE

PLANT BIOLOGY – *Modules include:*
- Plant Biology Research Project
- Biology and Ecology of Coastal Wetlands
- Environmental Impact
- Assessments
- Developmental Plant Genetics
- Cell Signalling in Plants
- Plants and Stress
- Plant Phenotyping
- Programmed Cell Death
- Plant Biotechnology and Entrepreneurship

BSc (Honours) Plant Biology

MSc (Taught)
- MSc Applied Environmental Science
- MSc World Heritage Management
- MSc Plant Biology & Biotechnology

PhD
- Students can pursue a PhD in universities in Ireland or abroad in areas as diverse as climate change, marine biology or cell and molecular biology

Industry
- National Parks and Wildlife Services
- State and Semi-State bodies
- Conservation Bodies
- Agriculture and Aquaculture
- Environmental Management

Conversion Courses
- Professional Master of Education (PME)
- Graduate Medicine
- Master of Management
- Graduate Veterinary Medicine

**See pages 4 and 5 for information on the terminology used above. Potential combinations shown here are examples only and are not guaranteed by UCD. Modules are subject to change each year.*

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