# MRES (MASTER OF RESEARCH) IN PLANT BIOLOGY

# Overview

#### NFQ Level 9, Major Award

The MRes in Plant Biology is a full-time programme running over 12 months from the date of first registration for the programme. The programme consists of

- 1. a major research thesis and
- 2. taught modules on generic and transferable skills, with an emphasis on scientific writing, oral presentations, and general research skills.

Part-time study for this programme is not available.

Students undertake a total workload equivalent to **90** credits over the 12 month programme, the principal element of which is the completion of a major research thesis of approximately 25,000 words. In parallel, students must take and pass taught modules to the value of **20** credits.

See also Procedures for Submission and Examination of Research Masters Degrees (https://reg.ucc.ie/curriculum/calendar/live/ postgraduate/Masters/Procedures%20for%20Submission%20and %20Examination%20of%20Research%20Masters%20Degrees.pdf).

## **Programme Requirements**

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

## **Programme Requirements**

Title

#### Credits

Students take **90** credits as follows - taught modules (**20** credits) and a Major Research Thesis (**70** credits):

# Taught Modules

Code

EI	eci	live	e M	100	u	es

Total Credits		90		
Thesis (25,000 words) <sup>2</sup>				
Research				
ZY4021	Evolutionary Ecology (5)			
PS6001	Plant Genetic Engineering (5)			
PS4024	Crop Physiology and Climate Change (5)			
PS4021	Sustainable Plant Pest and Disease Management (5)			
BL6024	Quantitative Skills for Biologists using R (10)			
BL6019	Ecological Applications of Geographical Information Systems (5)			
BL4006	Sustainable Food Production (5)			
BL4004	Frontiers in Biology (5)			
Students take n	nodules to the value of $f 20$ credits from the following: $^1$	20		

Students may elect to take other, relevant modules (subject to availability) that are offered by the University and are not listed above to fulfil the elective requirement with approval from the MRes coordinator, research supervisor and Head of School of Biological, Earth and Environmental Science.

<sup>2</sup> Students undertake independent research towards completion of a research thesis to a student workload equivalent of **70** credits on a selected topic in Plant Biology.

# Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

### **Programme Learning Outcomes**

#### Programme Learning Outcomes for MRes (Master of Research) in Plant Biology (NFQ Level 9, Major Award)

On successful completion of this programme, students should be able to:

- Carry out an independent and original research project to address an emerging question in Plant Biology;
- Prepare and write a dissertation of their research project in a critical, logical and systematic manner, in keeping with the standards of postgraduate research;
- Display advanced theoretical knowledge and practical understanding within a research area of Plant Biology;
- Understand the basis and application of field and laboratory methods used in Plant Biology and a knowledge of their limitations;
- Avail of relevant workshops or modules to increase scientific technical skills (e.g. biostatistics);
- Source, review, critically assess and evaluate relevant primary literature and summarize material for presentation to peers and for inclusion within the research dissertation;
- Design, write and defend a scientific research proposal based on their current research topic or a proposed topic;
- · Evaluate their skill set and identify skills that should be acquired;
- Develop professional practice skills including team-work, negotiation, time-management, scientific writing and oral communication.