MSc/PGDip Crop Improvement

Focus on the understanding of plant to crop systems with an emphasis on research training

nottingham.ac.uk/pgstudy/biosciences

Innovative, high-tech learning environment

Expert research-led teaching

Strong links with industry partners

Advanced training for continuing professional development
Taught course to develop skills for a career in research institutes, plant breeding, agro-industry or undertake PhD studies

Overview
This course examines crop improvement through advances in resource use efficiency, crop protection and modern crop breeding techniques.

Emphasis is placed on practical research experience; experimentation in the laboratory, field and controlled environments; techniques and instruments for measuring crops and their environments; computer-based methods of data collection and analysis; and the interpretation and presentation of scientific information.

Content
This one year, full-time masters course (or two years part-time) consists of taught modules (120 credits) in the autumn and spring semesters followed by a research project and dissertation (60 credits).

Modules
Compulsory modules:
- Principles of Crop Science (10 credits)
- Resource Capture by Crops (10 credits)
- Monitoring and Phenotyping (10 credits)
- Genetic Improvement of Crop Plants (20 credits)
- Advanced Molecular Methods in Biotechnology (20 credits)
- Statistics and Experimental Design for Bioscientists (10 credits)
- Current Issues in Crop Science (10 credits)
- Integrated Disease Management (10 credits)
- Plant Biotechnology Industrial Visits (10 credits)
- Research project: Literature Review and Experimental Plan (10 credits)

Further information is available at: nottingham.ac.uk/pgstudy/biosciences

Dissertation
You will undertake the research project and dissertation with the help and specialist advice of an academic supervisor. A wide range of topics is available within the research interests of members of the school, and you can also choose to undertake your research project at our University of Nottingham Malaysia Campus. If you are receiving industrial sponsorship, you will normally be required to do a project in a subject area specified by the sponsor.

Previous research projects include: the effect of aphid activity on host plant resistance to Fusarium head blight; optimising crop canopy structure for photosynthesis and photoinhibition.

Entry requirements
You will normally be expected to hold an honours degree at 2:2 level or above (or its international equivalent) in a biological, chemical or physical science subject. You may be accepted with other qualifications but may be required to attend additional courses and/or register initially for the Diploma, with the opportunity to progress to the MSc.

Applicants whose first language is not English must also achieve:
- IELTS 6.0 (with no less than 5.5 in any element) or
- Pearson Test of English (PTE) Academic: 55 (minimum 51)

Test results should be no more than two years old.

Find out more
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Funding your studies
When looking at how to fund your postgraduate studies, it’s worth taking the time to research your options, as funding is available from a variety of sources.

nottingham.ac.uk/pgstudy/funding