

Exciting new Crop Sciences programme at UCD

The new Crop Science programme at the UCD School of Agriculture and Food Science was launched in 2021 and is the only third level Crop Science degree programme offered in Ireland. There is an increasing demand for highly qualified graduates in the area of crop agronomy and graduates from this programme will be qualified to address a skills shortage in this sector as identified by the Department of Agriculture, Food and the Marine. It is estimated that over the next decade there will be growth opportunities for the tillage sector in areas such as increasing demand for barley and malt for the rapidly expanding brewing sector in the whiskey, and micro-brewing industries. Additionally, increased demand for oats, due to their health and nutritional benefits, will drive the requirement for higher value-added tillage crops. The production strategy for these crops requires a higher degree of agronomic management and supply chain management to ensure the products attain their premium markets.

This exciting new programme will also address the growing responsibility for the tillage sector with regard to climate change. The tillage sector has the potential to produce animal and human protein ingredients utilizing soil and crop carbon management strategies that reduce GHG emissions from the sector and from the food supply chain.

Programme Pathway

Crop Science

DN250

Year 1 Subjects

Animal Biology & Evolution Introductory Chemistry Mathematics for Agriculture Physics for Agricultural Science Agricultural Economics & Business Information Skills Introduction to Biomolecules Cell & Plant Biology Land use and Environment Introduction to Animal Science Introduction to Crop Science Optional Modules

Year 2 Subjects

Agri Mech: Engines and Crop equipment **Applied Biostatistics** Agricultural Botany Agricultural Microbiology **Buildings and Environment** Fundamentals of Arable Crop Production Physiological Plant Ecology Agricultural Biochemistry Health, Welfare and Safety

Optional Modules

Year 3 Subjects

Pests, parasites and Beneficials Soil Science Applications Plant Diseases: Biology Agrichemicals and Environment Biology and Control of Weeds IPM Principles and Practice Use of IPM Practices in Crop

Year 4 Subjects

Farm Business Management Organic Agriculture **Emerging Crop Pathogens Cereal Production** Climate, Carbon and Soil Plants and Stress Root and Alternative Crop Production Developments in Crop Production and Utilities Optional Modules

BAgrSc Honours

UCD Graduate Study

MAgrSc Agricultural Extension and Innovation MAgrSc Sustainable Agriculture and Rural Development MAgrSc Environmental Resource Mgt MSc Crops and Green Energy Walsh Fellowship Research Opportunities

MSc and PhD by Research

Career Opportunities

Agricultural Consultant Teacher/Lecturer **Production Manager** Farm Manager Journalism Agricultural Inspector Communications Manager Project Management

Technical Engineer Policy Analyst Government Official **Business Manager** Technical Sales Manager Scientist Crop Advisory Brewing & Malting

programme.

Conversion or **Complementary Courses**

Professional Master of Education (PME) Graduate Veterinary Medicine **MSc Business Studies** Master of Business Administration **HDip Computer Science** Master of Accounting

Consus Project



programme focused on the application of

with a particular emphasis on optimisation of agri-food production systems leading to more efficient food production with lower environmental impacts. The outcomes from this research programme will deliver a step-change in crop agronomy tools and practices, leading to enhanced global competitiveness and inform teaching on the new Crop Science degree

precision agriculture to crop production



