



University College Dublin
Agriculture, Food Science and Human Nutrition

DISCOVERY INNOVATION OPPORTUNITY

UNDERGRADUATE
Programmes 2016 Entry

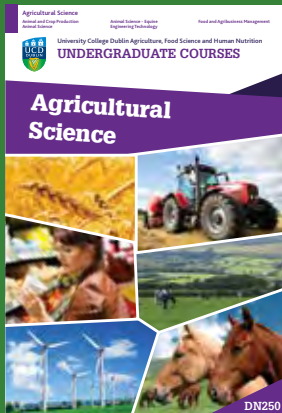
Contents

Welcome

What to Expect?

Up and Coming Events

Course Outlines



Agricultural Science

DN250

Animal and Crop Production

DN250 ACP

Animal Science

DN250 ASC

Animal Science - Equine

DN250 EQS

Engineering Technology

DN250 ENT

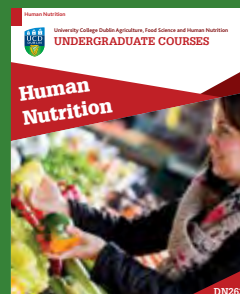
Food and Agribusiness Management

DN250 FAM



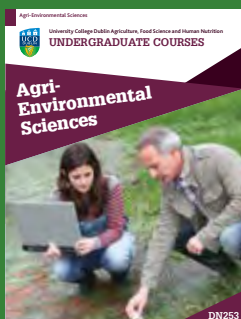
DN252

Dairy Business



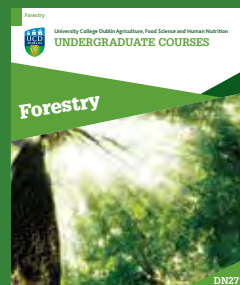
DN262

Human Nutrition



DN253

Agri-Environmental
Sciences



DN271

Forestry



DN 261

Food Science



DN272

Horticulture,
Landscape
and Sportsturf
Management

Welcome

UCD is Ireland's Global University. With over 160 years of tradition, 6,000 international students, 400 exchange partners and 218,000 alumni worldwide, UCD is at the forefront of global knowledge. We provide programmes with a curriculum that is constantly changing, informed by innovative research and driven by lecturers and professors at the cutting edge of their disciplines.

The School of Agriculture and Food Science is one of UCD's largest Schools and holds a unique position in Ireland. The School offers 12 undergraduate programmes each of which will provide you with an opportunity to study a range of subjects central to many of the major global challenges of today. These include, food production, food security, non-food land uses, environmental sustainability, rural development, nutrition, health, business and economics. The world is increasing its focus on the need for both sustainable and innovative foods for its increasing population, many of whom demand more sophisticated food and health solutions for a changing lifestyle. At the same time, environmental, sustainability and societal challenges are becoming more and more relevant in the context of agriculture and food businesses and policy making.

Our focus at the UCD School of Agriculture and Food Science is to develop the next generation of agriculture and food leaders. Agriculture and Food is Ireland's largest indigenous industry and is one that continues to show considerable growth with great potential into the future. Ranked number one in Ireland and in the top 100 in the 2015 QS University Global Subject Rankings for Agriculture and Forestry, students at the UCD School of Agriculture and Food Science will be exposed to the latest scientific discoveries and knowledge that underpins each of our four year honors degree programmes.

Graduates of our programmes obtain a holistic education giving them the capacity to contribute significantly to the Irish and global agriculture and food industries. The School of Agriculture and Food Science is unique with programmes that span the entire food chain, providing a diverse range of career opportunities in Ireland and internationally. A modular syllabus, Professional Work Experience and International Study Abroad opportunities contribute to the development of highly sought after graduates with innovation, entrepreneurship, critical thinking and problem solving skills.

Please study this brochure and see for yourself the wide range of programmes on offer at the UCD School of Agriculture and Food Science.

We look forward to welcoming you to our community.

Alex Evans

Professor Alexander Evans

UCD Dean of Agriculture



What to Expect?

Our reputation for being the most friendly and close-knit community in UCD is well known. Small class sizes enable you to get to know your class and lecturers quickly. Active student committees ensure a full itinerary of events throughout the year.

Year one on each of our programmes are similar and you will undertake core science subjects such as Biology, Chemistry, Physics (students enrolling on the Dairy Business programme (DN252) will not be required to undertake a Physics subject in year one) and Maths on each programme. This strong scientific foundation will serve you well for years 2-4 of your programme and indeed when you graduate with excellent and diverse career opportunities.

Supports and initiatives such as the Mathematics Support Centre, tutorials, laboratories and continuous assessment are designed to assist you along the way. Your timetable is fully modular and you will undertake and be examined in up to six subjects each semester, ensuring you always have a manageable workload. In later years, your programme will become more specialised and you will undertake more subjects directly related to your preferred programme.

You can't be expected to achieve unless you have access to the best facilities and technologies. Students on our programmes will have access to modern lecture and teaching facilities, a full range of laboratories and a new dedicated food science building, a 250ha research farm with its own laboratories, a horticulture field station and computer access for all students.

Professional Work Experience (PWE) and international study opportunities are available to students on each of our programmes and normally take place during year three. Students continually highlight PWE as the most enjoyable aspect of the programme and details on PWE and the UCD Agriculture, Food Science and Human Nutrition Study Abroad Programme are included in this brochure.





Up and Coming Events

We know you have to make difficult decisions about your future study plans and careers and therefore we invite you to attend the following events where you can find out more about the Bachelor of Agricultural Science, BSc in Food Science and BSc in Human Nutrition degree programmes.

16-18 SEPTEMBER 2015	Higher Options RDS, Dublin
22-24 SEPTEMBER 2015	National Ploughing Championships Ratheniska, Co Laois
14 OCTOBER 2015	UCD School of Agriculture and Food Science Kilkenny Information Evening* New Park Hotel, Kilkenny
21 OCTOBER 2015	UCD School of Agriculture and Food Science Cork Information Evening * Clarion Hotel, Cork
7 NOVEMBER 2015	UCD Open Day O'Reilly Hall, UCD
12 JANUARY 2016	UCD CAO Information Clinic and Mature Student Information Evening* UCD
16 MARCH 2016	UCD Agriculture, Food Science and Human Nutrition Non Standard Entry Progression Event* UCD Agriculture and Food Science Centre
9 JUNE 2016	UCD Agriculture and Food Science Summer School* UCD Agriculture and Food Science Centre

*** ADMISSION FREE BUT
PRE BOOKING IS ESSENTIAL**

Registration for our events is
via our website at www.ucd.ie/agfood

W: www.ucd.ie/agfood

T: 01 7167194

E: agandfoodprogrammes@ucd.ie




UCD Agriculture and Food Science Programme Office

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University College Dublin, Belfield, Dublin 4

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Email: agandfoodprogrammes@ucd.ie

Web: www.ucd.ie/agfood

 [ucdagfood](https://www.facebook.com/ucdagfood)  [@ucdagfood](https://twitter.com/ucdagfood)  [ucdagfood](https://www.youtube.com/ucdagfood)

Every attempt has been made to ensure that the information contained within this booklet is correct at the time of going to press, however the Agricultural Sciences Programme Board accepts no responsibility for any errors or omissions. New programmes are continually being introduced and existing programmes revised and therefore readers are advised to contact the UCD Agriculture and Food Science Programme Office for up to date programme details.



UNDERGRADUATE COURSES

Agricultural Science



MAIN MENU



Why Agricultural Science?

MAIN MENU



From animal science to farm management and conservation and protection of the wider environment, from the animal feed industry to enterprise development and equine science and innovation, from crop protection and agribusiness to alternative energy sources and food chain technology, Agricultural Science will provide you with the foundation to take your career anywhere in the world.

Our exciting range of programmes cover a wide variety of different subjects offering you a broad choice of lifestyle and career path.

If you are interested in Agricultural Science, but are not yet certain of which area to specialise in, you can simply enter DN250 on your CAO form. Then, during your first year at UCD, you can choose your area of specialisation. Once you receive an offer on the Agricultural Science programme (DN250) you will be guaranteed a place in any of the five specialisations from second year.

If, on the other hand, you know which of the following five programmes you'd like to specialise in, you can select ONE of these programmes on your CAO application by entering the relevant acronym after the CAO CODE DN250 as follows:

- DN250 ACP** Animal & Crop Production
- DN250 ASC** Animal Science
- DN250 EQS** Animal Science - Equine
- DN250 ENT** Engineering Technology
- DN250 FAM** Food & Agribusiness Management

If you select one of the above five programmes when applying via the CAO, you can still change between any of the above five programme options up until the end of year one.

WHAT WILL I STUDY?

All our programmes have a similar first year, designed to give you a strong foundation in the core sciences, maths and economics, which are needed for the rest of your studies. You will study subjects in

- Maths
- Chemistry
- Physics
- Cell and Plant Biology
- Information Skills & Computer Applications
- Agricultural Economics & Business
- A selection of Agricultural Science based subjects

Your subjects in year two will depend on which of the five programmes you decide to specialise in from year two. Second and third year subjects for each programme are detailed on pages 7, 8 and 9.

DN250 Agricultural Science

CAO Points

Average 2015 (Round 1) **500**
Minimum 2015 (Round 1) **470**

Minimum A Level: AAAC
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

CONTENTS

Agricultural Science DN250	1
Animal and Crop Production DN250 ACP	2
Animal Science DN250 ASC	3
Animal Science - Equine DN250 EQS	4
Engineering Technology DN250 ENT	5
Food and Agribusiness Management DN250 FAM	6
Career Opportunities	7

DN250 PROGRAMME PATHWAY MODELS

Animal and Crop Production DN250 ACP	7
Animal Science DN250 ASC	8
Animal Science - Equine DN250 ESQ	8
Engineering Technology DN250 ENT	9
Food and Agribusiness Management DN250 FAM	9



DN250 ACP
**Animal and Crop
Production**
CAO Points
Average 2015 (Round 1) **500**
Minimum 2015 (Round 1) **470**
Minimum A Level: AAAC
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

Animal and Crop Production

The science and business of producing Animals and Crops in an efficient but also sustainable and environmentally friendly manner is just one example of the challenges facing Agricultural Scientists, Farmers and Agribusinesses in Ireland, the EU and globally.

As an Animal and Crop Production student you will have access to international experts that will help you develop:

- Knowledge of the growth, development and improvement of farm animals and crops
- The capacity to formulate animal and crop production systems that are economical and sustainable
- Communication and IT skills
- The capacity for lifelong learning so as to remain informed of evolving technical, economic and regulatory frameworks
- Knowledge of the agribusiness industry.

Graduate View

It was definitely the right decision study Agricultural Science at UCD. The school itself is very tight knit, and although UCD has a massive student population, in the agriculture division you don't feel like you are a number. I was fortunate enough to be awarded the UCD Ad Astra Scholarship which provided financial assistance and one-to-one support from my academic mentor, which was especially helpful to me when it came to choosing final year electives and career guidance.

Overall my experience in UCD has been phenomenal; I got to achieve my academic goals, maintain my sports interest as well as make friends for life, what more could you ask for?

Ruth Fennell

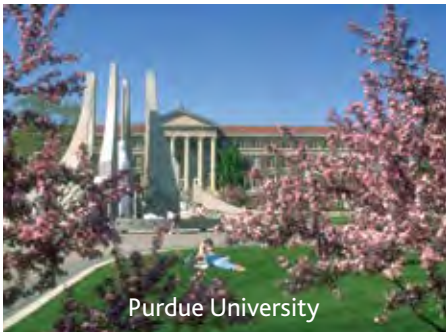


Graduate View

As the years passed during my undergraduate programme, my interest and enthusiasm for the course grew. Combining modules such as Animal Breeding and Nutrition with Business Management and Policy, ACP developed my skill-set to enter the next stage of my life. The decision between employment and further study was a tough choice.

I have undertaken a PhD in heifer puberty and pregnancy rates in beef heifers in collaboration with Teagasc and UCD. Skills developed in UCD such as grassland management, nutrition, animal production and public speaking gave me the confidence to pursue this PhD. Through involvement in AgSoc I met friends for life and as our paths have crossed since graduating, we relive the great moments shared as "Ags" in UCD.

John Heslin



Purdue University

PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

Eight months Professional Work Experience takes place between January and August in year three of the Animal and Crop Production programme. A dedicated Professional Work Experience advisor will help ensure you gain experience in each of the relevant enterprises. In recent years, increasing numbers have opted to complete Professional Work Experience abroad, with New Zealand and USA particularly popular options.

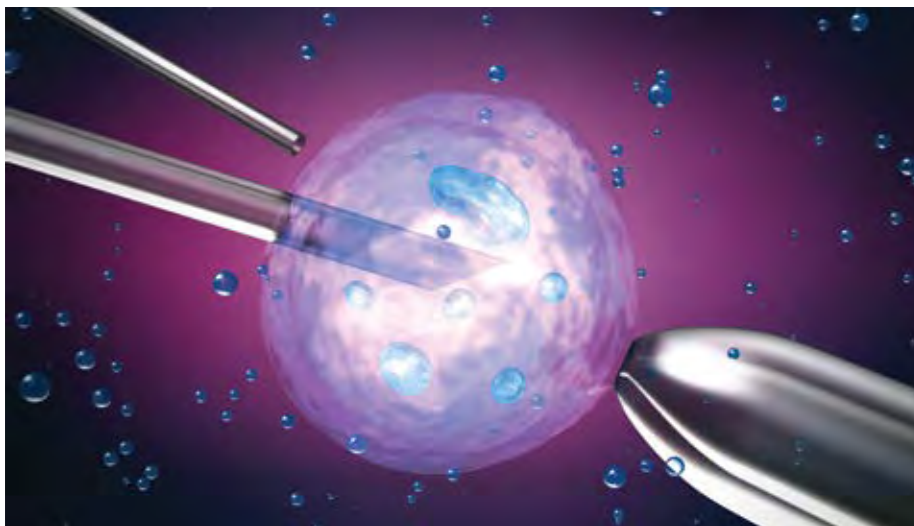
You can also study abroad for one semester, at universities including:

- University of California
- Cornell University, USA
- University of Queensland
- Purdue University
- Michigan State University

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.

"For my PWE, I travelled to Canada for two months where I got to experience farming in the prairies of Saskatchewan which was an unforgettable experience."

- Ruth Fennell



DN250 ASC Animal Science

CAO Points

Average 2015 (Round 1) 500

Minimum 2015 (Round 1) 470

Minimum A Level: AAAC
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

Animal Science

Animal Science covers all aspects connected to the development, growth and health of animals including breeding, nutrition, reproduction, genomics and physiology. At the core of Animal Science is the study of the applied sciences that are fundamental to understanding how animals function and also underpin the principles of livestock production.

The degree will give you an appreciation of:

- The growth and development of domestic farm animals, and animal behaviour and welfare
- Animal production systems and how the components are integrated and managed in an environmentally friendly and sustainable manner
- The animal industry in Ireland, the context in which it operates and its relationship to animal industries in Europe and worldwide.

Graduate View

Studying Animal Science offered me the best of both theoretical and practical learning from some of the best leaders in the industry. From day one in UCD I knew this was the place for me - friendly students and staff and an incredibly motivating atmosphere.

The Animal Science course covers all aspects of agriculture from farm business to crops to agricultural policy but with specific modules in animal production such as reproduction genetics and animal breeding. This gave me an excellent broad degree with opportunities to specialise in my particular area of interest but also to have an understanding and appreciation of other aspects of the industry.

I loved every minute of this course and the experience that is UCD. I would highly recommend and encourage anyone with an interest in Animal Science to pursue this course and, with it, take every opportunity offered to make the most of an amazing four years.

Graduate View

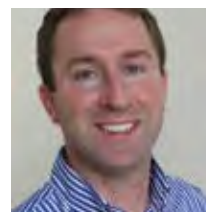
I was fortunate in that I always knew Agricultural Science was the course for me. It didn't disappoint and I really enjoyed the course and people. In my working life as Head of Farmer Relations at Glanbia, I particularly appreciate the broad science training that we received.

"Ags" tend to be the most active in UCD and I also think I developed a lot through my involvement with AgSoc and the Careers Committee. Interpersonal skills, public speaking, negotiation, dealing with problems, getting sponsorship, organising events - we did it for four years inside and out of lectures and it was fabulous training for life.

Zoe McKay



Pat O'Keefe



PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

Five months Professional Work Experience takes place in year three of the Animal Science programme. A dedicated Professional Work Experience advisor will help ensure you gain relevant experience during this time. In recent years, increasing numbers have opted to complete Professional Work Experience abroad, with New Zealand and USA particularly popular options.

You can also study abroad for one semester, at universities including:

- Cornell University
- Kansas State University
- University of Queensland
- Purdue University
- Michigan State University

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.

"My PWE, to me, was an invaluable experience where I had the opportunity to work with some of the most efficient farmers in the country. I also worked in Teagasc and with a feed company which gave me further insight into other aspects of Irish agriculture."

- Zoe McKay



DN250 EQS

Animal Science - Equine

CAO Points

Average 2015 (Round 1) 500

Minimum 2015 (Round 1) 470

Minimum A Level: AAAC (Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

Animal Science - Equine

Animal Science – Equine focuses on the applied sciences that underpin animal and veterinary biosciences, with emphasis on the horse. The degree provides the scientific knowledge and professional skills necessary for professional leadership roles within many aspects of the animal and equine science industries.

You will learn about:

- The growth and development of farm animals, how they function, their behaviour and welfare
 - Animal production systems and how the components are integrated and managed in an environmentally friendly manner
 - The equine industry in Ireland, its
- global context and entrepreneurial opportunities
 - Equine health, reproduction, genetics, breeding, nutrition and exercise physiology
 - Advances and future directions in research with emphasis on equine genetics/genomics.

Student View Tarlach MacGiolla Cheara

A career in thoroughbreds either at home or abroad has always been my ambition and I wanted a course which would give me not only a strong academic grounding but also a pathway into the breeding and bloodstock industries.

The Horse Racing Society and the Equestrian Club are also a great advantage to studying in UCD; they provide ideal opportunities to socialise with like-minded individuals who are already highly involved in the racing and breeding world as well as providing industry talks and trips you couldn't get anywhere else.

From the first day I walked onto the campus in Belfield I've enjoyed my time at UCD, and I'd encourage anyone to apply. I can say wholeheartedly making the decision to come here has been the best I've ever made.



Staff Profile

Dr Emmeline Hill

Dr Emmeline Hill is a Senior Lecturer in Equine Science and leads the Equine Exercise Genomics research group funded by Science Foundation Ireland (2012-2017) at the College of Health and Agricultural Sciences, University College Dublin. Dr Hill's research aims to understand genetic contributions to variation in exercise physiology parameters in the Thoroughbred horse.

In December 2014, Dr Hill was presented with the NovaUCD Innovation Award in recognition of the global success and impact which Equinome has achieved in the international, multi-billion euro Thoroughbred horse racing and breeding industry. Equinome, a UCD spin-out company, was co-founded in 2009 by Dr Hill in partnership with Jim Bolger the renowned Irish trainer and breeder.



PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

A five month Professional Work Experience (PWE) placement is integral to your Animal Science-Equine degree and is an invaluable learning and networking opportunity. Exciting options include placements on stud farms in the Kentucky Bluegrass region and Japan, top show-jumping and eventing yards in Ireland, and with Tattersalls Ireland and Horse Sport Ireland. Students also have the opportunity to train towards a British Horse Society Assistant Instructorship certification at a leading Irish equestrian centre (additional training costs are involved).

You can also study abroad for one semester, at universities including:

- University of California, USA
- Kansas State University, USA
- University of Queensland, Australia
- Purdue University, USA
- Michigan State University, USA

"What first attracted me to the course and what has been my highlight so far is the PWE undertaken during Stage 3. I had the pleasure of working on Paca Paca Stud Farm in Japan, breeders of several G1 winning horses. The work wasn't always easy but the experience I gained during the breeding and sales seasons was immeasurable and the perfect complement to the modules I had completed in reproduction, nutrition and management. The opportunity to do all this in an international setting was also a major bonus."

- Tarlach MacGiolla Cheara



DN250 ENT Engineering Technology

CAO Points

Average 2015 (Round 1) 500

Minimum 2015 (Round 1) 470

Minimum A Level: AAAC
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

Engineering Technology

Apply your interest in science and technology and discover how engineering science helps to develop bioenergy, mechanisation, environmental and bioprocess technologies. Engineering Technology covers broad areas of bioenergy, mechanisation, environmental technology and processing technology for agri-food and related industries.

This degree will give you a global perspective and understanding of:

- How engineering science helps to develop these technologies
- How to produce, harvest, process, preserve and distribute biological products (plant and animal) in a sustainable and environmentally friendly way.

Student View

I love studying at UCD and living on the UCD campus here in Dublin, Ireland. The official language in Ireland is English and the Irish are very friendly, which is important when studying abroad. UCD is in the top 1% of universities in the world, so it has an excellent academic reputation. Outside of my studies, I am the Chairman of the UCD –CSSA (Chinese Student & Scholars Association). There are more than 700 Chinese students in the CSSA and students enjoy living in Ireland and studying and using the facilities available at UCD.

My interests are in food safety and using new food technologies to detect food microorganisms, especially harmful micro-organisms. When I graduate, I would like to develop a career as a researcher/lecturer in food science or to start up my own food business as it is an exciting time to be studying food science given the increased demand for food.

Graduate View

I chose to study Engineering Technology as I've always had a keen interest in agricultural mechanisation and engineering.

Lectures are delivered by teaching staff who are heavily involved in the research of novel technologies and so students are given an insight into up-and-coming technologies and techniques. The small class size allows students to build a good working relationship with lecturers and peers who are very approachable and easy to work with, something which can be of great assistance during research and design projects. Practical sessions compliment lecture material and students can tailor their subject choices based on their interests.

UCD provides a warm and friendly setting to students. There is a real sense of community within the ag-science building itself and numerous engineering technology classes are shared with students from other disciplines. I would recommend Engineering Technology to students who are interested in food chain technology, sustainable energy systems, the environment and the role that these play in the agri-food sector.

Hong-Ju He



John Dorrian



PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

Professional Work Experience on the Engineering Technology degree programme is carried out by means of a major project in years three and four where you will have significant interaction with an organisation. Students are also encouraged to undertake relevant work experience during the summer months.

You can also study abroad for one semester, at universities including:

- University of California
- Kansas State University
- University of Queensland
- Purdue University
- Michigan State University

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.



DN250 FAM

Food and Agribusiness Management

CAO Points

Average 2015 (Round 1) 500

Minimum 2015 (Round 1) 470

Minimum A Level: AAAC

(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

Food and Agribusiness Management

If you enjoy science and business, the Food and Agribusiness Management degree programme provides a unique opportunity to gain an understanding of both subjects. As a result, graduates are well placed to occupy leading roles in a variety of sectors.

During the Food and Agribusiness Management degree, you will learn how the principles of economics and business management apply to farming, food production and marketing. You will gain an understanding of how the Irish and international food systems deliver food products and services that people want, and how farmers and food manufacturers can produce profitably, while also taking care of the natural environment.

The four year degree programme provides a unique opportunity to understand both business and science, focusing on the agri-food sector – Ireland’s largest indigenous industry. You will develop skills that may be used across a wide range of jobs and experiences.

Student View

Ashutosh Bagla

I chose the Food and Agribusiness programme because it offered me knowledge about the business and marketing side of agri-food, while strengthening my scientific foundation. I would have an advantage over a simple agri-business graduate, because of my additional expertise in technical aspects of the industry. Being admitted to premier universities around the globe it was tough to chose the university which was going to be my alma-mater, but I chose UCD because of its international reputation of having the best food science programmes in English speaking Europe. Ireland enjoys the reputation of being one of the safest nations and the Irish are widely regarded as one of the friendliest people on globe, which came as a reassurance to my decision of studying at UCD.



The program has been great so far, the highlight being unlike India a quick and easy access to professors of international acclaim, in case you want to learn more about certain aspects of the module or about the discipline of professor. Further the continuous assessment which include small tutorial classes, labs and field-visits gives a hand on experience in problem solving and practical aspects of the module.

Graduate View

Ailish Byrne

When I graduated I immediately started my PhD with Teagasc and UCD under the Walsh Fellowship Programme. In 2003, I joined Ulster Bank as an Agricultural Manager and was subsequently appointed as Senior Agricultural Manager in 2007.

I am now responsible for the development of agricultural strategy and agricultural marketing strategy within Ulster Bank Group RI and for the provision and dissemination of agricultural advice/ technical updates/training to all parts of the Ulster Bank Group RI.



See Programme Pathway model for Food and Agribusiness Management on page 9.



PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

Professional Work Experience in the food and agribusiness industry or related sectors is undertaken in year three of this programme. This helps you build your skills, apply the knowledge you have learnt and in many cases can lead to employment following graduation. In recent years, increasing numbers have opted to complete Professional Work Experience abroad.

You can also study abroad for one semester, at universities including:

- University of California
- Kansas State University
- University of Queensland
- Purdue University
- Michigan State University

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.

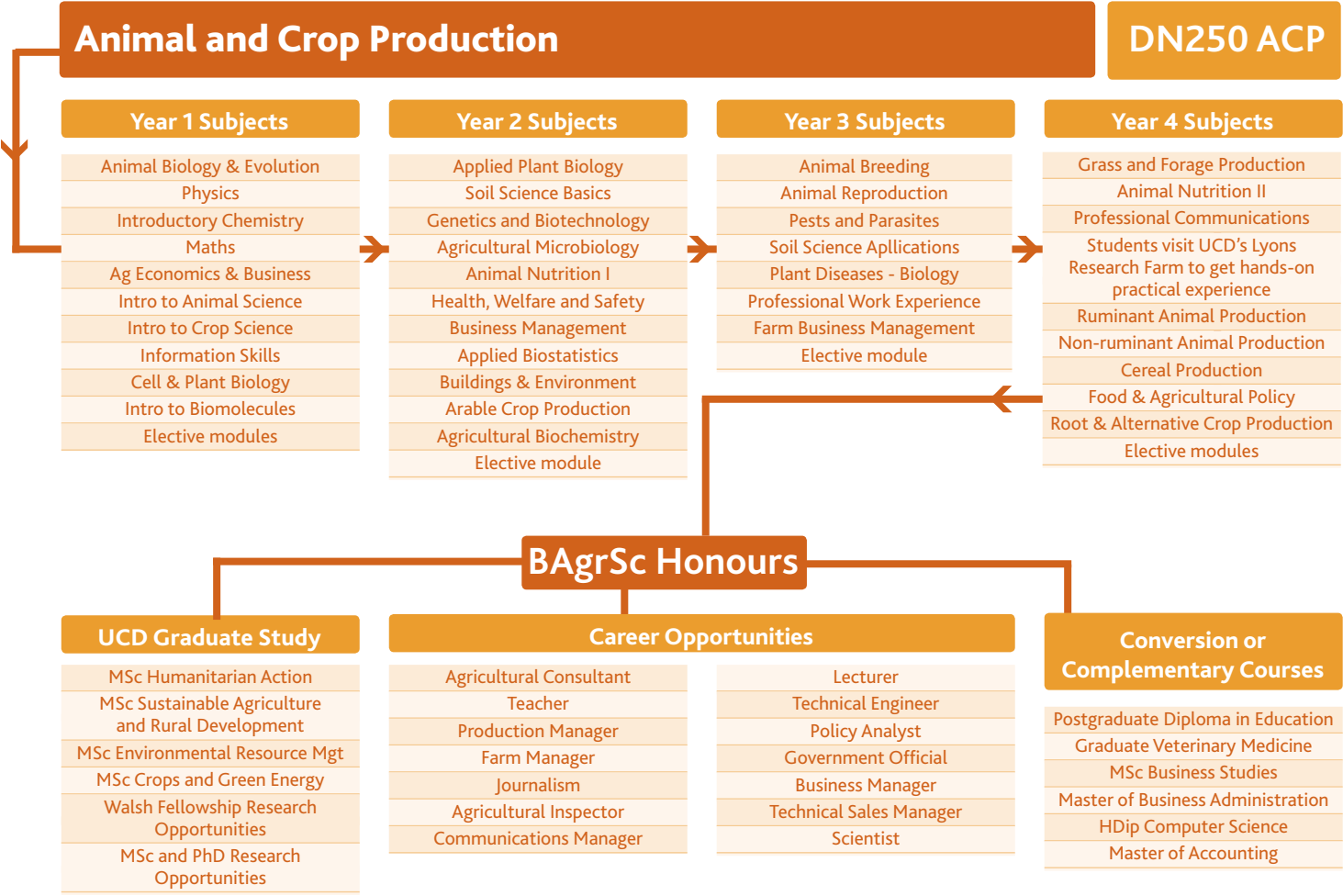
CAREER OPPORTUNITIES

Our graduates have an excellent record in obtaining challenging and fulfilling employment in a variety of sectors, including food, agriculture, business and services, where your professional activities will include enterprise management, technical service and consultancy, management, research, education, marketing, communications and primary production of quality food and fibre products.

You can access additional information with regard to career opportunities for each programme in the Programme Pathway Models.

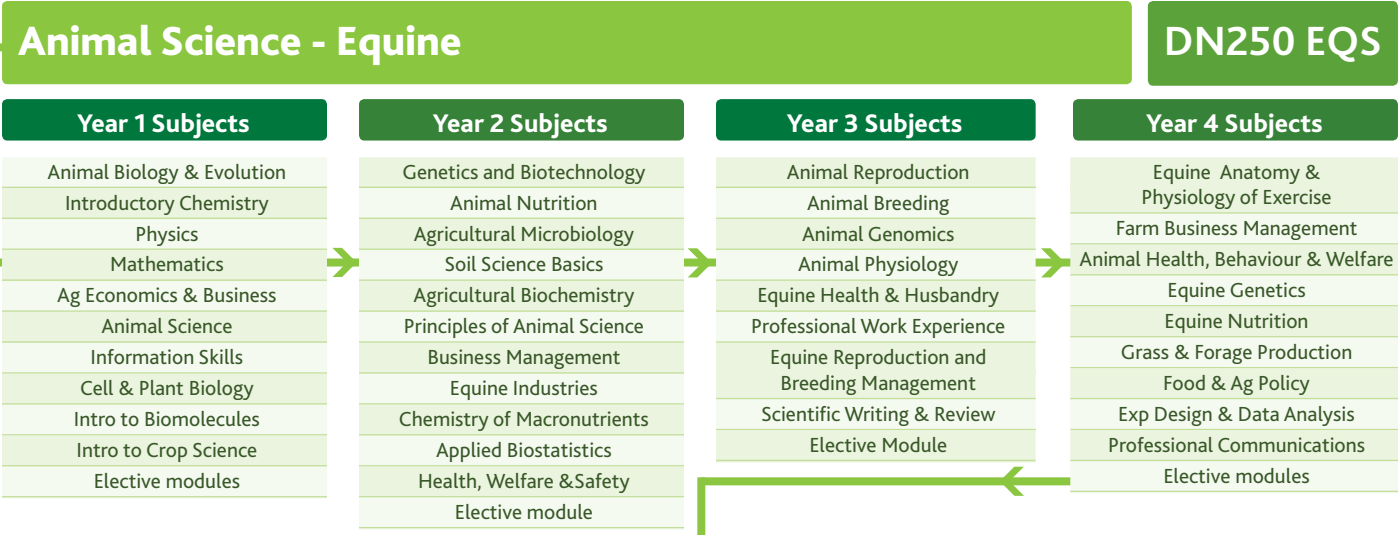
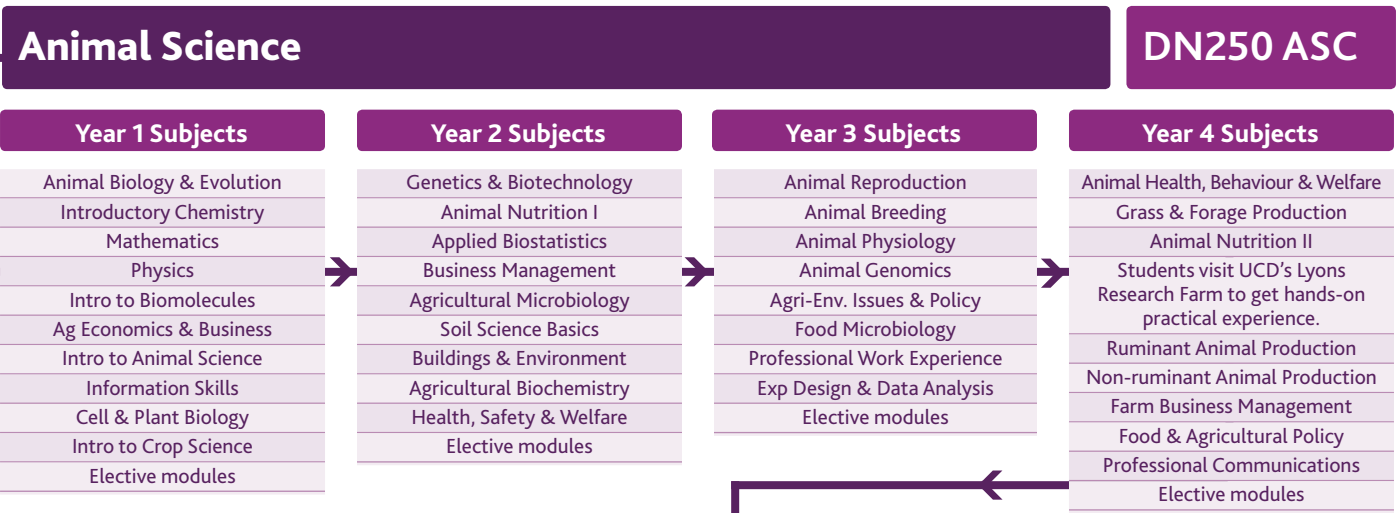
MAIN MENU

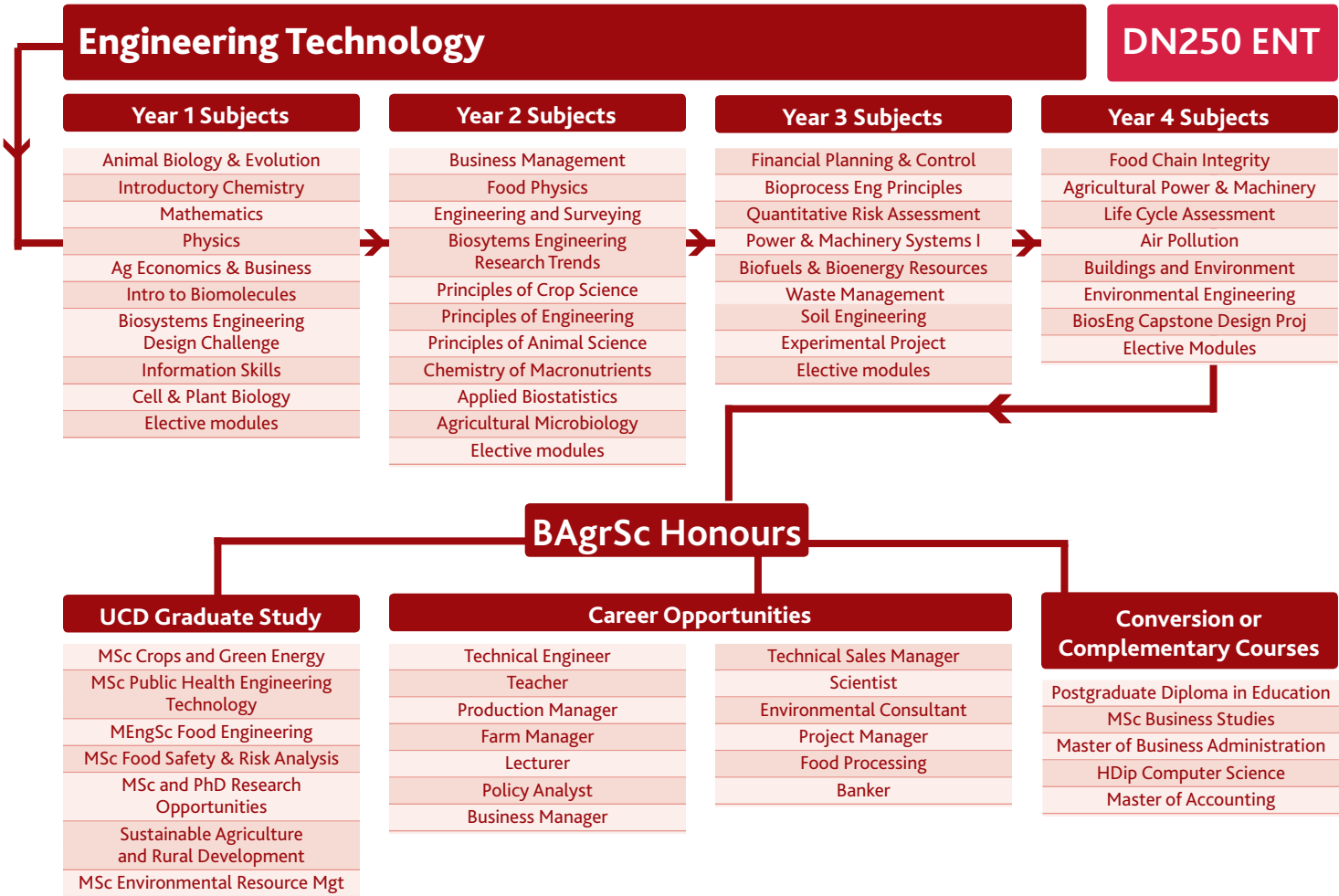
Programme Pathway Models



Programme Pathway Models

MAIN MENU





CAREER PATHWAY

Dairy Business

DN252

Year 1 Subjects

Animal Biology & Evolution
Ag Economics and Business
Introductory Chemistry
Cell & Plant Biology
Mathematics
Intro to Animal Science
Information Skills
Intro to Food & Agribus Mgmt
Introduction to Management
Business Live
Elective modules

Year 2 Subjects

Animal Reproduction
Soil Science Basics
Applied Biostatistics
Accounting for Non-Business Students
Business Law
Animal Nutrition 1
Principles of Dairy Production
Health, Welfare & Safety
Marketing: Firms, Customers & Society
Global Operations & SCM
Elective modules

Year 3 Subjects

JULY-DECEMBER

Professional Work Experience
Students encouraged to travel to New Zealand

JAN-MAY

Modules undertaken at Teagasc Moorepark Co. Cork include:
Herd Health and Milk Quality
Grassland Management & Applied Dairy Nutrition
Applied Dairy Breeding and Fertility
Dairy Systems
Dairy Business Project

Year 4 Subjects

Farm Business Management
Food and Agribusiness Strategy
Agri-Env. Issues and Policy
Leadership and Change Management
Agricultural Policy
Animal Nutrition II
Business Strategy
Professional Communications
Exp Design and Data Analysis
Nutrient Management
Elective Modules

BAgrSc Honours

UCD Graduate Study

MSc Sustainable Agriculture and Rural Development
Walsh Fellowship Research Opportunities
MSc and PhD Research Opportunities
MSc Environmental Resource Mgt
MSc Food Business Strategy
MSc Crops and Green Energy
MSc Food Safety & Risk Analysis

Career Opportunities

Farm Manager
Teacher
Agricultural Consultant
Marketing Manager
Journalism
Lecturer
Business Manager

Communications Manager
Technical Sales Manager
Scientist
Government Official
Policy Analyst
Consultant

Conversion or Complementary Courses

Postgraduate Diploma in Education
Graduate Veterinary Medicine
MSc Business Studies
Master of Business Administration
HDip Computer Science
Master of Accounting



UCD Agriculture and Food Science Programme Office

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[ucdagfood](https://www.facebook.com/ucdagfood) [@ucdagfood](https://twitter.com/ucdagfood) [ucdagfood](https://www.youtube.com/ucdagfood)



UNDERGRADUATE COURSES

Dairy Business

MAIN MENU





Dairy Business

Why Dairy Business?

The Irish dairy industry makes a major contribution to the Irish economy adding in excess of €3 billion to food exports and employing approximately 18,000 dairy farmers, 8,500 employees in the processing industry and supporting an additional 4,500 positions in ancillary services.

The dairy industry is experiencing significant change at the present time with expansion in farm and herd size, accelerated by the abolition of quotas in 2015. This programme is designed to equip future leaders in the dairy industry with the necessary scientific, technical and business skills to cope with this business and enterprise expansion.

DN252

Dairy Business

CAO Points

Average 2015 (Round 1) 475

Minimum 2015 (Round 1) 445

Minimum A Level: AABd
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.



Graduate View

John Crowe

Coming from a farming background I had always wanted to study agriculture in university. I choose Dairy Business as it is an extremely exciting time to be involved in a changing industry with the abolition of milk quotas in 2015. I believe the Dairy Business degree, with the range of science and business modules offered by the UCD School of Agriculture and Food Science and UCD Quinn School of Business, has equipped me with the skills and knowledge required to be part of the thriving dairy industry.



The highlight of my time spent in UCD has most definitely been third year. I spent first semester on PWE working on a 1,400 cow dairy farm on the south Island in New Zealand. This was an eye opening experience seeing a dairy industry at a much different scale to Ireland and being part of it for their busiest periods (calving and breeding). There was also the added bonus of having the opportunity to see the other side of the world with 18 great friends as part of my degree!

On return from NZ we spent second semester in Teagasc's Moorepark Research Centre in Fermoy being lectured by some of the top dairy researchers in the world. Along with lectures on animal reproduction/nutrition, grassland management and more, we also got out on farms to meet some of the top farmers in the country to see where this research had been tried and tested.

Having almost completed my degree I would strongly advise anyone looking at studying Dairy Business in UCD to go for it, you won't look back, I certainly haven't!

Graduate View

Cristin McDonald

Having completed the 4 years of the Dairy Business course I can honestly say it was the best choice of course for me. Dairy Business was a relatively new programme at the time when I entered UCD and it was hard to know what to expect. From the first day of introductions into the course it became very clear that all the staff and students were so friendly and helpful. The entire community of the Agricultural Science School is so tight knit and is like a home away from home.



Everything that I learned and experienced throughout my time in the Dairy Business course has carved the way for me to get on the employment ladder in the agricultural sector. I am currently a Sustainability Advisor with Glanbia and hope to progress my employment within the sector over the coming years. For anyone that is thinking of pursuing a career in the agricultural sector I would highly recommended the Dairy Business course at UCD.



Professional Work Experience

Professional Work Experience (PWE) takes place between July and December of year three, which offers students the opportunity to travel to New Zealand during the busiest time of year in the dairy farming calendar. Students can apply the skills and knowledge gained whilst also receiving exposure to cutting edge technologies.

"My personal highlight of the Dairy Business programme was the semester spent in Moorepark Research Centre. I gained so much experience and knowledge from researchers and got the chance to exercise everything that I learned in a practical sense too."

- Cristin McDonald

CAREER PATHWAY

Agri-Environmental Sciences

DN253

Year 1 Subjects

Animal Biology & Evolution
Introductory Chemistry
Physics
Mathematics
Land Use & Environment
Information Skills
Cell and Plant Biology
Intro to Biomolecules
Intro to Food & AgBus Mgmt
Elective modules

Year 2 Subjects

Diversity in the Rural Landscape
Applied Plant Biology
Soil Science Basics
Applied Zoology
Agricultural Microbiology
Principles of Animal & Crop Science
Applied Biostatistics
Genetics and Biotechnology
Env Biology and Ecology
Health, Welfare and Safety
Elective Module

Year 3 Subjects

Agri-Env. Issues and Policy
Pests and Parasites
Soil Science Applications
Systems Ecology
Plant Diseases: Biology
Scientific Writing and Review
Professional Work Experience
Agrichemicals & Environment
Climate, Carbon & Soil
Elective Modules

Year 4 Subjects

Nutrient Management
Plant Pathology & Biotechnology
Pest Management
Environmental Management
Environmental Impact Assessment and Strategic Environmental Assessment
Research Project
Elective Modules

BAgrSc Honours

UCD Graduate Study

MSc Wildlife Conservation & Mgt
MSc Rural Environmental Conservation and Management
MSc Environmental Resource Mgt
MSc and PhD Research Opportunities
MSc Sustainable Agriculture & Rural Development

Career Opportunities

Environmental Consultant
Teacher
Farm Manager
Journalism
Agricultural Consultant
Agricultural Inspector
Lecturer

Technical Engineer
Policy Analyst
Government Official
Parks Superintendent
County Heritage Officer
Scientist

Conversion or Complementary Courses

Postgraduate Diploma in Education
MSc Business Studies
Master of Business Administration
HDip Computer Science
Master of Accounting



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UNDERGRADUATE COURSES

Agri-Environmental Sciences

MAIN MENU



DN253



Agri-Environmental Sciences

Why Agri-Environmental Sciences?

Agriculture has an increasingly recognised global impact and responsibility for the quality of the natural environment. In turn, the security of food production systems at both Irish and global levels depends upon the quality of management of natural processes and resources in farming and food production systems. The Agri-Environmental Sciences programme is designed to equip its graduates with the knowledge needed for progressive development of improved sustainability in farming and food production systems.

On completion of this specialist programme, you will have:

- A wide knowledge of the applied agricultural and environmental sciences that underpin sustainable agriculture, food production and rural land use systems
- A comprehensive understanding of rural environmental issues in Ireland, the EU and worldwide
- Practical experience of agri-environmental research through personal experience in a final year project on your chosen topic
- Scientific and environmental management skills to contribute to future farming and land use industries, as either a scientist, planner or policy-maker
- Interpersonal and professional skills required to follow your chosen career path.

DN253

Agri-Environmental Sciences

CAO Points

Average 2015 (Round 1) 435

Minimum 2015 (Round 1) 410

Minimum A-Level: BBBc
(Without Maths Bonus Points)

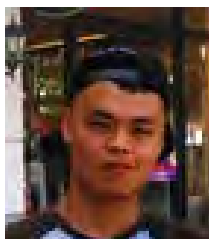
*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.



Student View

Long Teng

I am enrolled on a 2+2 programme between University College Dublin and South China Agricultural University. This means I study the first two years in China and the last two years of my programme at UCD in Ireland. I chose the programme because I really enjoy biology and I understand the crucial importance of agricultural science globally. I will study subjects that will provide me with a better understanding of climate change, water quality and sustainable food production to name but a few. UCD and Ireland has an excellent reputation with regard to agriculture and food sciences and UCD staff are patient, enthusiastic and I have really enjoyed the courses I have taken to date.



Graduate View

Mary Ann Healy

This course offers a broad range of knowledge about the environment through a broad range of challenging and interesting subjects. My particular interest was in the schemes that are available to farmers. In third year, I completed a work placement in the Department of Agriculture, Food and the Marine, at a time when the GLAS scheme was being developed. This was a great chance for me to learn about working life and gain experience. I completed work placement on a tillage farm in Roscommon that uses min-till and conventional tillage, which was a change for me as I grew up on a dairy farm.

Over the four years, we went on many class trips, all the way from The Burren to Birr and from Dun Laoghaire to Donabate. In the Burren we spent a week learning to identify different plants, which has proved an incredibly useful skill. It was a great chance to have the craic outside the lecture hall!

The career opportunities are growing as the knowledge about human impact on the environment grows, especially in agriculture. Overall, the Agri-Environmental Sciences programme has developed my skill set and knowledge in the area, and has prepared me for work in the agricultural consultancy arena, with environmental companies, on large scale farms as well as government positions.



Michigan State University

Professional Work Experience and Study Abroad Opportunities

Five months Professional Work Experience takes place in third year of the Agri-Environmental Sciences programme. In recent years, increasing numbers have opted to complete Professional Work Experience abroad. Teagasc, the Department of Agriculture, Food and the Marine, the Environmental Protection Agency, the National Parks & Wildlife Service, local authorities and commercial companies are popular destinations to conduct Professional Work Experience.

You can also study abroad for one semester, at universities including:

- University of California
- Kansas State University
- University of Queensland
- Purdue University
- Michigan State University

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.

CAREER PATHWAY

Food Science

DN261

Year 1 Subjects

Animal Biology & Evolution
Introductory Chemistry
Physics
Mathematics
Information skills
Food, Diet and Health
Elective modules
Cell & Plant Biology
Intro to Biomolecules

Year 2 Subjects

Food Physics
Sensory Analysis
Agricultural Microbiology
Human Nutrition I
Basic Food Analysis
Genetics and Biotechnology
Applied Biostatistics
Food Macronutrients
Nutritional Energy Metabolism
Health, Safety & Welfare
Elective Modules

Year 3 Subjects

Food Analysis
Food Chemistry
Product Development
Food Microbiology
Bioprocess Engineering Principles
Professional Work Experience
Scientific Writing & Review
Human Nutrition II
Elective Module

Year 4 Subjects

Milk and Dairy Products
Food Safety
Fermented Foods
Food Ingredients
Food Process Technology
Food Chain Integrity
Fresh & Processed Meat Products
Elective Modules

BSc Honours

UCD Graduate Study

MSc Food Regulatory Affairs
MSc Food Safety & Risk Analysis
MSc Food Business Strategy
MSc Research and PhD Options
MSc Sustainable Agriculture and Rural Development
Walsh Fellowship
Research Opportunities
MSc Environmental Resource Mgt
MSc Crops and Green Energy

Career Opportunities

New Product Development
Teacher
Quality Assurance Officer
Food Safety Inspector
Marketing Manager
Nutritionist
Food Technologist

Journalism
Business Development Manager
Microbiologist
Technical Sales Manager
Government Official
Supply Chain Management and Buyer

Conversion or Complementary Courses

Postgraduate Diploma in Education
Graduate Veterinary Medicine
MSc Business Studies
Master of Business Administration
HDip Computer Science
Master of Accounting
MSc Public Health Nutrition
Postgraduate Diploma in Dietetics

MAIN MENU



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University College Dublin Agriculture, Food Science and Human Nutrition

UNDERGRADUATE COURSES

Food Science

MAIN MENU



DN261

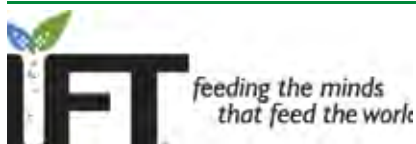


Food Science

Why Food Science?

Food Science focuses on the physical, chemical and biological characteristics of food along the production chain from farm to plate. If you choose to specialise in Food Science, you will develop your scientific knowledge of how to produce high quality, safe and healthy foods.

As a food scientist you will have a role to play in all aspects of the food chain from production to processing, storage and marketing. This unique degree ensures you have a broad knowledge of food production and processing, thus gaining the scope and opportunity to develop different types of food products.



The Food Science Programme at UCD is accredited by the Institute of Food Technologists.

DN261

Food Science

CAO Points

Average 2015 (Round 1) 510

Minimum 2015 (Round 1) 485

Minimum A-Level: A*ABb
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.

Graduate View

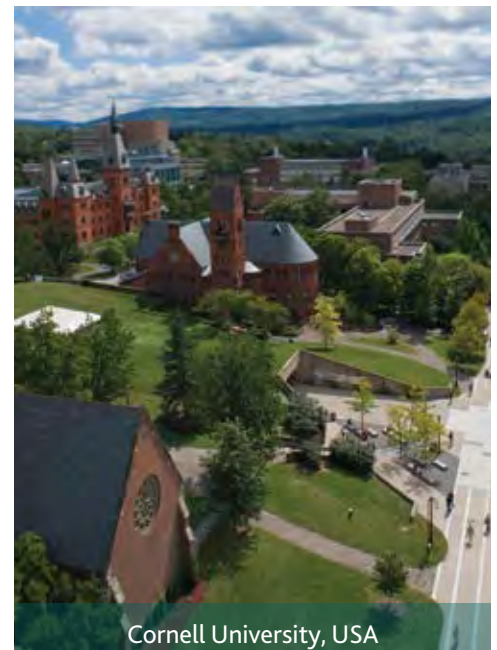
I was delighted to receive an offer to study Food Science at UCD. Ireland is a beautiful, friendly and safe country to study and UCD is very highly regarded internationally. The UCD campus is modern and welcoming and offers excellent facilities to both students and staff.

I found out about the UCD School of Agriculture and Food Science from Professor Mike Gibney, UCD Professor of Food and Health. Professor Gibney is a global expert in the area of Food and Health. Ireland is often referred to as the Emerald Isle because it is a green and environmentally friendly country and agriculture and food science is one of the largest industries here.

Staff in the School of Agriculture and Food Science are very accessible and at UCD researchers are leading the way with scientific discoveries and collaborations with industries. I hope to work in a research and development role for a major food company when I graduate. I have developed lots of skills and competencies at UCD and it is an exciting time to be a Food Science student, with many interesting opportunities available.

If you decide to study at UCD, I recommend joining the International Students Society which provides great supports for the large number of international students studying at UCD.

Sumei Hu



Cornell University, USA

Graduate View

The Food Science program gives you a practical understanding of how the global food system works. You get an in-depth understanding of the entire supply chain, from the agricultural side to the finished consumer product. The course is so comprehensive and relevant that you find yourself using the subject material in your everyday life.

The mandatory professional work place at the end of 3rd year had to be one of the major highlights of the programme for me. Everything you learned over the past three years really begins to fall into place at this point. You get to apply what you've learned in lectures to a real life situation and it all starts to click. It also drastically increases your confidence in your own ability as Food Scientist and you go into your final year with such confidence and knowledge that you simply cannot learn in a lecture or lab session. The work placement also helps you figure out what direction you would like to go in with your career. This makes your job search much less daunting after graduation.

I also had the opportunity to take part in the Study Abroad Programme in the first semester of third year and this was easily the greatest part of the programme for me. I got to experience an entirely different way of learning. I studied at Michigan State University and I made life long friends there. You meet other students from around the world who are there for the same reason you are and you will find you are all very like-minded. Studying in the US gave me the confidence and network to pursue a career in the US food industry that I may never have thought of as an option. I now work in Research and Development for an ingredients company in Chicago and when I think about how I got to this point, I just look back at my time at UCD. The variety of options available for food science students and the support of the lecturers all help to get your career on the right path.

Colm Swan



Professional Work Experience and Study Abroad Opportunities

A five month professional work experience (PWE) placement is integral to your Food Science degree and is an invaluable learning and networking opportunity.

You can also study abroad for one semester, at universities including:

- University of California, USA
- Cornell University, USA
- University of Queensland, Australia
- Purdue University, USA
- Michigan State University, USA

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.

CAREER PATHWAY

Human Nutrition

DN262

Year 1 Subjects

Principles of Cell Biology
Introductory Chemistry
Physics
Mathematics
Microbiology
Cell Biology & Genetics
Human Nutrition I
Intro to Biomolecules
Organ and Systems Physiology
Elective modules

Year 2 Subjects

Food Macronutrients
Nutrition Research Methods
Molecular basis of disease
Human Nutrition II
Basic Food Analysis
Nutritional Energy Metabolism
Nutrition & Health
Data Modelling for Science
Health, Safety & Welfare
Elective modules

Year 3 Subjects

One year Professional Work Experience

Year 4 Subjects

Food Regulation
Nutrition and Communication
Molecular Nutrition
Clinical Nutrition
Food Safety
Public Health Nutrition
Human Nutrition Project
Nutritional Metabolism
Elective modules

BSc Honours

UCD Graduate Study

MSc Public Health Nutrition
MSc Research and PhD Options
MSc Food Regulatory Affairs
MSc Food Safety & Risk Analysis
MSc and PhD Research Opportunities
MEngSc Food Engineering
MSc Food Business Strategy

Career Opportunities

Public Health/Community Nutritionist
Sports Nutritionist
Management Nutritionist
Teacher
Scientist
Marketing Manager
Health Promotion

Quality Assurance
Food Safety
Journalism
Lecturer
Business Manager
Microbiologist
Government Official
R&D Technologist

Conversion or Complementary Courses

Graduate Veterinary Medicine
Graduate Medicine
Postgraduate Diploma in Dietetics
Postgraduate Diploma Education
MSc Business Studies
Master of Business Administration
Master of Accounting



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University College Dublin Agriculture, Food Science and Human Nutrition

UNDERGRADUATE COURSES

Human Nutrition

MAIN MENU



DN262



Human Nutrition

Why Human Nutrition?

Nutrition – the interaction between food and health – is becoming increasingly important in society. This programme covers many aspects of nutritional sciences, from biochemistry to molecular and public health nutrition, and also includes topics such as nutrition communication and food regulatory affairs.

On graduating you will be able to apply your knowledge to many different areas of the food and health industry.



The Human Nutrition Programme at UCD is accredited by the Association for Nutrition.

DN262 Human Nutrition

CAO	Points
Average 2015	(Round 1) 545
Minimum 2015	(Round 1) 525
Minimum A Level:	A*A*A*d
(Without Maths Bonus Points)	

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.



Graduate View

Amanda Galvin

I've always had an interest in science, but I chose this course based on my interests, my best subjects at school and conversations with students and lecturers at Open Days. By CAO time, Human Nutrition seemed like the obvious choice. UCD was my preference and the idea of one big student community together on such a sizeable, pretty campus seemed ideal. I can honestly say that if I were to do it all again, I wouldn't change a thing.



The course has strong global credibility and on completion of four years of study, Human Nutrition students can register with the AfN to become Registered Nutritionists- only one of two courses in Ireland recognised by this body, who are currently working to make a 'Nutritionist' a protected term.

I would definitely recommend the programme to anyone who has a serious interest in science, food and health. Scientific research is a fundamental component of the programme and the course is heavily based on the biological sciences with lecturers and staff at the forefront of research in their respective areas, making sure you receive a top class education. The small class size of roughly 28 students also ensured a really easy transition from school to university and made it a lot easier to make friends.

To anyone contemplating studying at UCD, my only piece of advice is to get stuck in and involved with as much as possible, as early as possible. It will ease you into college life quickly and you'll be sure to make the most out of your time spent at UCD, while also adding to your CV as you go along.

Graduate View

Nathália Petry

My time at UCD was amazing and I'll never forget it! I joined the Human Nutrition program, in which I had the chance to have lectures with wonderful professors. Also, my lecturers offered me a different way of seeing nutritional sciences, and I acquired a different perspective in comparison to my home university in Brazil. I believe it was something very enriching.

Besides, UCD offers plenty of opportunities for its students and I could join many different clubs and societies and get in contact with many different cultures, since UCD has an amazing international program. Living and getting in touch with different people and different perspectives has made me a more mature person. I believe my time in Dublin and at UCD was an exciting experience, full of learning and discovery, like training for life!

Certainly, this incredible experience has strongly influenced my professional life and who I am today.



PROFESSIONAL WORK EXPERIENCE

A year of professional work experience in third year gives you a unique opportunity to graduate with the skills necessary to enter the working world. This work placement also provides an excellent opportunity to gain practical experience and broaden your appreciation of the food industry or nutrition related employment. You can expect to find employment in national and international companies and government departments associated with the food industry or nutrition, or within world-class research groups in international or domestic universities.

"One of the obvious highlights for me was my placement year in the UK. Along with two of my classmates, we worked alongside Professors, Doctors and PhD students at the University of Reading on Human Interventions studies, examining various aspects of the role of food and nutrition on cardiovascular health. Other students in my class had the opportunity to travel to Europe, the USA or remain in Ireland to work in both lab based and industry placements."

- Amanda Galvin

CAREER PATHWAY

Forestry

DN271

Year 1 Subjects

Animal Biology & Evolution
Introductory Chemistry
Physics
Mathematics
Ag Economics & Business
Trees and Forests in Ireland
Elective modules
Information Skills
Cell and Plant Biology
Intro to Biomolecules

Year 2 Subjects

Principles of Forestry
Professional Forestry Practice
Soil Science Basics
Physiological Plant Ecology
Tree Structure & Function
Business Management
Applied Plant Biology
Applied Biostatistics
Agricultural Microbiology
Engineering & Surveying
Health, Welfare & Safety
Elective module

Year 3 Subjects

Forest Establishment
Forest Protection
GIS & Remote Sensing
Wood Science
Silviculture of Forest Stands
Professional Work Experience
Forest Management
Forest Harvesting
GIS & Forest Sampling
Elective modules

Year 4 Subjects

GIS & Forest Inventory
Forest Management Plan
GIS & Experimental Design
SFM Assessment
Forest Planning
Elective modules
Research Project

BAgrSc Honours

UCD Graduate Study

MSc and PhD Research Opportunities
MSc Environmental Resource Management
MSc Wildlife Conservation & Management
MSc Rural Environmental Conservation & Management
MSc Sustainable Agriculture and Rural Development
MSc Humanitarian Action

Career Opportunities

Forester	Consultancy
Teacher	GIS Analyst
Technical Advisor	Scientist
Forest Inspector	Entrepreneur
Forest Development Officer	Pricing Analyst
Purchasing Manager	Marketing Executive
Operations Manager	Government Official
Harvesting Manager	Farm Management

Conversion or Complementary Courses

Postgraduate Diploma in Education
MSc Business Studies
Master of Business Administration
Master of Accounting
HDip Computer Science



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University College Dublin Agriculture, Food Science and Human Nutrition

UNDERGRADUATE COURSES

Forestry

MAIN MENU

DN271



Forestry

Why Forestry?

Forestry is the science, art and profession of managing forests. Foresters manage and create forests in sustainable and environmentally friendly ways to provide a variety of ecosystem services including timber, biodiversity, carbon sequestration, recreation, conservation and aesthetics.

You will discover how the different components of a forest – the trees, soils, water, climate, flora and fauna interact with each other and are affected by human use. The protection and enhancement of biodiversity, soils and air quality are all highly relevant in the creation and management of forests today.

Other aspects of modern forest management which are also addressed in this programme include:

- Carbon sequestration
- Renewable energy resources
- Multifunctional forestry
- Bio-complexity
- Sustainable forest management
- Social and urban forestry
- Adaptation for and mitigation of climate change
- The conservation of genetic resources.

DN271 Forestry

CAO Points

Average 2015 (Round 1) 395

Minimum 2015 (Round 1) 360

Minimum A Level: BBC
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for a particular programme.



Graduate View

Martin O'Shea

When looking at the options available to me to return to university as a mature student to study forestry, UCD was the obvious choice. A great foundation in the sciences is provided in year one and two with a greater focus on the forestry subjects coming in year three and four. Subjects like Silviculture, Forest Management, Forest Establishment, and Forest Protection give students a broad knowledge base from which to draw from in their future careers. The course also involves many informative and practical field trips to a range of forests, nurseries, and wood processing facilities around Ireland. To compliment this, in third year you are given the opportunity to complete your professional work experience (PWE) in Ireland or abroad.

In final year the class got the opportunity to visit the Black Forest in Germany. We spent a week visiting various forests and sawmills getting a unique chance to see how forests and forest products are managed differently.

Studying forestry in UCD can open a wide range of future career opportunities in forestry and resource management while also providing a great base for continuing your studies with a research masters or PhD. My time spent studying forestry was very enjoyable and I would highly recommend it to anyone with an interest in forestry or the environment.

Student View

Yan Liu

UCD Forestry provides both academic and industrial experience, and a variety of modules relating to forests, and practical opportunities working with Teagasc are available. My best experience would be the academic freedom in this department; you feel free to talk to all faculty members, who are of great help. I have really enjoyed the time discussing the research direction with my supervisor, and talking to my colleagues about the modelling methods.



I would strongly recommend anyone with interests in forestry to get involved in the great experience of UCD Forestry. To students with an interest in this programme, UCD will create a promising platform to develop your career, as there are many opportunities available to forestry students presently.



Michigan State University, USA

Professional Work Experience and Study Abroad Opportunities

A five month Professional Work Experience (PWE) placement is integral to your Forestry degree programme and is an invaluable learning and networking opportunity. Popular options include placements in Ireland, Europe and South America.

You can also study abroad for one semester, at universities including:

- University of California, USA
- Purdue University, USA
- Michigan State University, USA

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with studying and completing Professional Work Experience abroad.

"For my PWE I travelled to California to work with University of California, Berkeley in their forest research station in the central Sierra Nevada Mountains. I got the opportunity to be part of various research projects in forests and national parks all over California. I stayed in Sequoia National Park for a week carrying out research on Giant Sequoias and spent two weeks camping out in Tahoe National Park while researching the effects wildfire has on the forest ecosystem."

- Martin O'Shea

CAREER PATHWAY

Horticulture, Landscape and Sportsturf Management

DN272

Year 1 Subjects

Animal Biology and Evolution
Introductory Chemistry
Physics
Mathematics
Ag Economics and Business
Plants and People
Elective modules
Cell and Plant Biology
Intro to Biomolecules

Year 2 Subjects

Fundamentals of Horticulture
Business Management
Soil Science Basics
Physiological Plant Ecology
Applied Plant Biology
Engineering and Surveying
Agricultural Microbiology
Chemistry of Macronutrients
Agricultural Biochemistry
Health, Welfare and Safety
Elective modules

Year 3 Subjects

Plant Protection - Pests
Soil Science Applications
Elements of Landscape Design
Landscape Trees and Shrubs
Sportsturf Construction
Landscape Management
Plant Diseases: Biology
Horticulture Seminar
Scientific Writing and Review
Professional Work Experience
Elective module

Year 4 Subjects

Applied Biostatistics
Fruits, Vegetables & Protected Crops
Nursery Production & Management
Sportsturf Management
Enterprise Development
Professional Communications
Research Project
Elective module

BAgrSc Honours

UCD Graduate Study

MSc and PhD Research Opportunities
MSc Sustainable Agriculture and Rural Development
MSc Humanitarian Action
MSc Environmental Resource Management
MSc Rural Environmental Conservation & Management
MSc Wildlife and Conservation Management

Career Opportunities

Entrepreneur
Technical Advisor
Quality Assurance Inspector
Sportsturf Consultant
Scientist
Marketing Executive
Management
Teacher/Lecturer
Horticulture Production, Logistics and Retail positions

Conversion or Complementary Courses

Postgraduate Diploma in Education
MSc Business Studies
Master of Business Administration
Master of Accounting



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UNDERGRADUATE COURSES

Horticulture, Landscape and Sportsturf Management

MAIN MENU



DN272



Horticulture, Landscape and Sportsturf Management

Why Horticulture, Landscape and Sportsturf Management?

Horticulture is the art, science, business and technology of plant cultivation for ornamental plants, fruits and vegetables for human use. It covers a vast and interesting range of subjects, including all of the sciences, environmental studies, business management and, of course, growing plants. Horticulture contributes to human health through providing plant based diets, restorative landscapes and therapy.

Fresh Produce Production studies food production, food supply and globalisation and its impact on sustainable food supply, safety and quality. Sportsturf Management focuses on the science behind developing and maintaining golf courses, tennis courts, and football, rugby and other sports pitches. Nursery, Garden Centre & Ornamental Plant Production and landscape development concentrates on the business of growing plants for housing developments, road construction, community spaces and other projects. Social & Therapeutic Horticulture looks at the interaction between humans and plants. This area would be of interest for those individuals who like working with people and plants.

The objectives of this degree are to give you:

- Knowledge of the growth, development and protection of plants, and use of plants for food, leisure, sports, social and environmental benefits
- An understanding of horticultural plant production systems and how their components are integrated and managed in an environmentally friendly and sustainable manner.

DN272 Horticulture, Landscape and Sportsturf Management

CAO Points

Average 2015 (Round 1) 435

Minimum 2015 (Round 1) 410

Minimum A Level: BBBc
(Without Maths Bonus Points)

*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact UCD prior to submitting an application to determine the entry requirements for

Graduate View

Micheál Byrne

UCD's distinguished reputation on both the national and international stage for teaching and research was the driving factor behind my decision to choose the Horticulture, Landscape and Sportsturf Management degree programme.

A comprehensive grounding in the core sciences during stage 1 and 2 provided me with the fundamentals that were required throughout the course. Exceptional academic staff and facilities provided the platform through which I was able to explore every facet of horticulture. The course offers an in depth knowledge in several areas of horticulture where the sciences are reinforced with practical work and field trips.

Despite having a keen interest in Nursery Production, I was captivated by the Sportsturf Management modules. Therefore, I found the opportunity to complete a final year research project on a topic of my choice invaluable. Through close guidance from my supervisor, I found this to be one of the most challenging yet rewarding aspects in completing the HLSM programme as it allowed me to implement the various presentational, scientific and writing skillsets gained through stages 1 to 3.

Without doubt the most beneficial aspect of the course was the five month



Graduate View

Kelly Don

The HLSM programme at UCD offers students the amazing opportunity to explore the diverse sectors that encompass the horticultural industry. Students are introduced to aspects within food production, amenity landscape and the sportsturf industry. Such exposure allows students to discover what they are passionate about and guides them towards the course they are excited to follow.



While the programme offers many great opportunities and experiences, the most beneficial aspect of the programme is Professional Work Experience. It provided me with exposure to the current operations and issues surrounding the horticultural field, while allowing me to apply my skills and knowledge to my everyday tasks. I gained valuable experience, contacts and enhanced knowledge from my placement, while developing essential skills needed in the horticultural industry.

The teaching facilities provide an incredible atmosphere for practical learning classes, ranging from orchard management to nursery production and amenity landscaping. The educational experience is further enhanced by the amazing faculty within the Horticulture Department who go above and beyond. Not only do they constantly provide support to their students, but their kindness extends to donating their time for guidance or problem solving. In addition, the small class sizes permits peers to connect with one another, develop friendships and form a team oriented attitude, which contributes to the success of the students achieving their goals.

My experience at UCD has allowed me to build a good foundation in horticulture,



The majority of our graduates become professional horticulturists. The HLSM degree is a recognised qualification by the Chartered Institute of Horticulture for



Michigan State University, USA

Professional Work Experience and Study Abroad Opportunities

A five month professional work experience (PWE) placement is integral to your Horticulture, Landscape and Sportsturf Management degree programme and is an invaluable learning and networking opportunity. Popular options include placements in Ireland, Europe, North and South America, New Zealand and Australia.

You can also study abroad for one semester, at universities including:

- University of California, USA
- Cornell University, USA
- University of Queensland, Australia
- Purdue University, USA
- Michigan State University, USA

There are a limited number of scholarships available, on a competitive basis, which support the travel costs associated with



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Every attempt has been made to ensure that the information contained within this booklet is correct at the time of going to press, however the Agricultural Sciences Programme Board accepts no responsibility for any errors or omissions. New programmes are continually being introduced and existing programmes revised and therefore readers are advised to contact the UCD Agriculture & Food Science Programme Office for up to date programme details.