

# UCD AGRICULTURE, FOOD SCIENCE AND HUMAN NUTRITION

## UNDERGRADUATE PROGRAMMES 2023 ENTRY











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# **UCD School of Agriculture and Food Science**

**1st destination of choice in Ireland** for students interested in studying Agriculture and Food Science



GRADUATE EMPLOYABILITY RANK



Agricultural Sciences at UCD is ranked 1st in Ireland, 5th in Europe and 20th globally

(US News and World Report Subject Rankings 2022)



**Opportunity** 14 Undergraduate Programmes



International Opportunities 25 Exchange Partner Universities

# тор **1%**

## Expertise

UCD is ranked in the top 1% of higher education institutions world-wide



Only University in Ireland with a School of Agriculture and Food Science

350+ Undergraduate places on offer annually





## Support

Over 70 student scholarships, prizes and medals awarded annually

# WELCOME

UCD is Ireland's Global University and is currently ranked within the top 1% of higher education institutions world-wide. With over 183 years of tradition, 30,000 students from over 139 countries, 400 exchange partners and 288,990 alumni worldwide, UCD is at the forefront of global knowledge. We provide programmes with a curriculum that is constantly changing, responding to external demands, is 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 is the number one destination of choice in Ireland for students who wish to study Agriculture, Horticulture, Forestry, Food Science and Human Nutrition. We are proud of the School's long tradition, its roots dating back to the Albert College and the Glasnevin Model Farm 1838. Now, ranked number one in Ireland, twentieth globally and fifth in Europe for the study of Agricultural Science (US News and World Report Rankings 2022), students at the UCD School of Agriculture and Food Science will be exposed to the latest scientific research, discovery and knowledge that underpins each of our four-year honours degree programmes.

The School offers 14 undergraduate programme entry routes, each of which will provide you with an opportunity to study subjects central to many of the major global challenges of today. These include, food production, food security, environmental sustainability, non-food land uses, rural development, nutrition, health, business and economics. The world is increasingly focused on the need for both sustainable and innovative foods for an increasing population, many of whom demand more sophisticated food and health solutions for a changing lifestyle. At the same time, climate change, environmental, sustainability and societal challenges are becoming more and more relevant in the context of agriculture, food businesses and policy making.

Agriculture and Food is Ireland's largest indigenous industry, employing approximately 163,600 people or 7.1% of the total workforce, and is one that continues to show considerable growth and resilience with great potential into the future. 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 at UCD is unique being the only university in Ireland with a dedicated School of Agriculture and Food Science with programmes that span the entire food chain, from farm to human nutrition and health, 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. We pride ourselves not only in the quality of the educational experience our students receive but also in the School's culture which champions the principles of equality, diversity and inclusion.

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

Frank J. Monahan

**Professor Frank Monahan** Dean of Agriculture and Head of School UCD School of Agriculture and Food Science We pride ourselves not only in the quality of the educational experience our students receive but also in the School's culture which champions the principles of equality, diversity and inclusion.





# 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.

First year on each of our programmes is similar and you will study core science subjects such as Biology, Chemistry, Physics and Maths on each programme. Each of these subjects are taught from a basic level to facilitate all students. This strong scientific foundation will serve you well for years 2-4 of your programme and indeed when you graduate when this knowledge will be required. In first year you will also have an opportunity to explore subjects you may choose to specialise in later on.

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 approximately 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, technologies and support. Students on our programmes will have access to modern lecture and teaching facilities, a full range of laboratories, UCD Lyons Farm, a 280ha research farm and Rosemount Environmental Research Station. Professional Work Experience (PWE) and international study opportunities are available to students on each of our programmes and take place during third year. 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 Exchange Programme are included in this brochure.

Student welfare is a priority at UCD and a number of nonacademic support services are available. Peer Mentors' can assist with your transition to UCD offering support, advice and guidance through your first year. Throughout your time at UCD a dedicated Programme Office team and Student Adviser will be available to provide guidance and support in relation to any personal, social, academic or practical issues.

# 66

For my PWE I travelled to a dairy research farm in the Netherlands. Their efficiency, innovation and drive for sustainability was immense. I also travelled to Brazil for my Beef and Tillage placement. The experience of importing, exporting and formulating diet feeds for 28,000 beef cattle was amazing. I spent time on the tillage side with Sugarcane, Soya Bean, Maize, Para Rubber trees, Banana, orange and mango fields. The scale of fields in Brazil range from 125-130 hectares each. I feel the experience abroad helped my knowledge, confidence, communication and networking skills and has opened up an unlimited amount of options for me.

Sean Keane | Animal and Crop Production



# PROFESSIONAL WORK EXPERIENCE

Professional Work Experience (PWE) is the term the School of Agriculture & Food Science use for the student internship process which is undertaken as part of all undergraduate programmes.

We place a huge value on this applied learning experience which provides students the opportunity to experience the practical application of knowledge in their chosen area. Many students say that PWE was the most memorable part of their degree programme.

Students may arrange to take one or a number of placements during their PWE, and placements may be taken with an approved provider in Ireland or internationally. The opportunity to complete your PWE placement internationally and the network of enterprises available to apply to is a unique and based on many years of experience in providing placement and farming links with national and international partners. The duration of PWE varies depending on what programme students are undertaking and is outlined in the following table. All placements take place in third year.

Programme of Study	Duration	Start
Human Nutrition	40 weeks	September
Animal and Crop Production	30 weeks	January
Food & Agribusiness Management	28 weeks	January
Dairy Business	20 weeks	July
All other programmes*	16 weeks	April

\* Students studying Food Business with Chinese Studies study abroad in Year 3. PWE is optional on this programme.



#### Student View

Róisín Scully

I completed 12 weeks of Professional Work Experience with Drumgoon Dairy in South Dakota in the United States. Starting my PWE I knew I wanted to gain experience on a global scale after learning about it in my studies. I had the opportunity to work with an indoor farming system with around 6,500 cows. This is something that currently cannot be seen in Ireland. Initially, I found it challenging to settle into the seclusive lifestyle of the mid-west but I am so glad I pushed myself. I took away so much knowledge from the experience that I will use for years to come as I graduate and begin my career in Agriculture whether that will be in Ireland or abroad. I not only enjoyed the farming side of things, but I also embraced the American culture and I got to travel to other states and cities and experience the vast differences that exist within the country.



## In 2022:



Students took their PWE placement overseas



Students participated in over 126 international placements



Students travelled to over 13 international destinations



Industry-funded Travel Bursaries were awarded



# **STUDY ABROAD**



There are exciting opportunities for UCD students enrolled on the BAgrSc & BSc Food Science programme to study at partner universities overseas - we call this the Student Exchange Programme.

Students can avail of opportunities to spend a semester studying at some of the top universities in America, Australia, Europe, New Zealand and the United Kingdom under established exchange programmes. In 2022 a record number of 56 students will study abroad to the United States, Australia, New Zealand, Singapore and Italy.

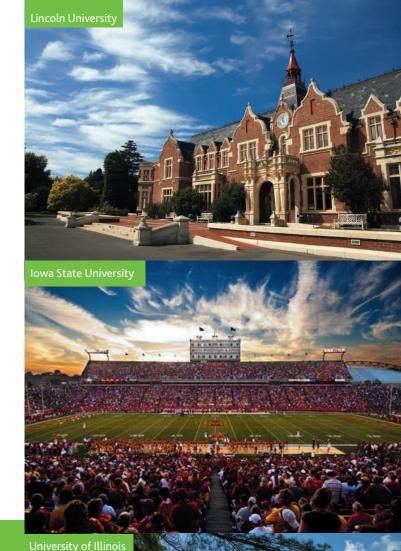
A semester on the student exchange programme provides a unique opportunity to experience a university environment in a foreign country, broaden your academic experience, earn college credits while living abroad, make lifelong friends and learn about agriculture and food science from another country's perspective, all while experiencing a different culture and lifestyle.

This opportunity can be taken in Year 3 and while no additional university fees are incurred, students are responsible for covering the cost of their own travel and accommodation expenses. There are a limited number of scholarships available which can support some of the costs associated with travelling.

Purdue University's College of Agriculture has been a long-standing partner with the UCD School of Agriculture and Food Science for more than two decades. Purdue offers a world class education, vibrant campus life, high-tech facilities, diversity, a great location and a global reputation. Purdue looks forward to continually welcoming UCD's extraordinary, high-caliber students. "



**Kara Hartman** Study Abroad Manager, College of Agriculture Purdue University





**Student View** 

The chance to study abroad at Cornell University has been a major highlight of studying Animal and Crop Production in UCD and I was delighted to be awarded a travel bursary from the school to support this experience. Study Abroad offered me a global perspective on agriculture which is essential in addressing the key issues which face the industry today. It also allowed me to build great friendships with students from around the globe and to travel to various places across the USA.

The opportunity to study at an Ivy League University has also served as a great talking point for my Professional Work Experience and people within the Agriculture sector are always curious as to what I learned there and could apply to Irish farming systems.

**DRD BIA** IRISH FOOT

INFORM TRUSTE

ON SINCE 1986

INFORM

UTUR US!

The success of the UCD Agriculture, Food and Nutrition Careers Day 2022, where we welcomed over 50 exhibitors onto campus, highlights the endless opportunities there are for graduates in the agriculture and food sector. In my role as careers chair over the last year, I have been amazed at the consistent level of interest from employers contacting me looking to come to UCD to speak with students about the opportunities on offer.

#### Neil Maher

Careers Committee Chair, Agricultural Science Society 2021-2022

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# CAREERS

Due to the broad nature of our degree programmes students gain positions of employment in a variety of roles. Graduates have an excellent record in obtaining challenging and fulfilling roles in Ireland and abroad.

Careers in sectors such as food, health, agriculture, forestry, horticulture, environment, business and services include: Enterprise management; Technical service and consultancy; Research; Education; Policy; Marketing & Communications, Accountancy &Tax and Primary production of quality sustainable food and drink products.

The School of Agriculture and Food Science has a very strong and unique relationship with industry and students are exposed to employers coming on to campus in search of talented soon-to-be graduates each year.

The final year undergraduate students in the School of Agriculture & Food Science are the only student body on campus to organise their own Careers Fair annually. The most recent Agriculture, Food Science and Human Nutrition Careers day was attended by a record number of over 50 exhibitors.

Students also have an invaluable opportunity to network with prospective employers when they are undertaking their PWE placements in year three. Each year a substantial number of graduates commence employment with organisations that provided them with placement opportunities during PWE.

# What do UCD School of Agriculture and Food Science graduates do?

Each year the Higher Education Authority (HEA) commissions a report tracking the first destination of university graduates.

The First Destination Report highlights the employment rate of graduates directly following graduation.

The most recent First Destination Report for UCD School of Agriculture and Food Science graduates found:

70.4%

24.9% In Further Study or Training

#### The Agriculture and Food Industry in Ireland

Each year the Department of Agriculture, Food and the Marine issues a report highlighting key activities of the Agriculture and Food Industry. The most recent report showed that:

163,600

€15.2bn

or 7.1% of the total Value workforce are employed in food the agri-food sector

Value of Ireland's agrifood exports in 2021

According to the HEA'S First Destination Report, the UCD School of Agriculture and Food Science class gained employment with a variety of organisations including:











## **Graduate View**

Prof. Frank O'Mara | Director of Teagasc

My undergraduate degree from UCD was the foundation for my career in agriculture which has brought me to the position of Director of Teagasc, the state agency responsible for advisory, research and education related to agriculture. After a few years working in the feed and grain sector, I returned to education to complete a PhD, again registered in UCD and based in Teagasc Moorepark, and then spent most of my career in the research and academic area, first in UCD as a lecturer and researcher and then as Research Manager in Teagasc. The broad scope of my agricultural science degree has stood to me over the years, and the science-based teaching inspired me to make my career in research. These are still the hallmarks of the UCD degree today, and as head of an organisation that hires many graduates into advisory, education or research roles, we really value the strong scientific understanding that UCD graduates have. The science underpinning agriculture was never more relevant than today given challenges like climate change, so there are great opportunities for anyone studying agricultural science to have a rewarding career and to make a real difference in the fields of Agriculture, Horticulture, Forestry, Food or Nutrition.



Watch previous Agriculture, Food Science and Nutrition Careers Day on demand ucdagfood UCD is a University for All where Access and Inclusion is everyone's business. No two students are the same and every student arrives with their own unique story to tell.

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Access and inclusion are embedded into UCD's values and strategy. Our teaching, learning and assessment practices are flexible and inclusive for all students.

UCD Access and Lifelong Learning ACCESS ACCESS LEADER LEADER

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# ALTERNATIVE ENTRY AND PROGRESSION

The UCD School of Agriculture and Food Science offer a number of alternative entry routes into our degree programmes in addition to entry from Irish school leaving examinations.

Alternative entry routes are considered from external applications to year one, or to an advanced stage of our programmes. A fixed number of places are available via alternative entry and progression pathways each year, on a competitive basis.

Detailed information is available on the UCD School of Agriculture and Food Science website: www.ucd.ie/agfood/study Alternative Entry and Progression Pathways available are

- HETAC Higher Certificate/Ordinary Degree
- QQI-FET progression
- Open Learning (New 2022 Entry)
- Application on grounds of mature years
- Higher Education Access Route (HEAR)
- Disability Access Route to Education (DARE)
- Transfer from a level 8 programme
- Re-Admission to UCD
- University Access Courses



#### **Student View**

#### Áine Corkery | Animal and Crop Production

When I entered my sixth year of secondary school, I was unsure of what I wanted to do after completing my leaving certificate, so much so that I repeated my leaving certificate to buy myself more time to decide. I always knew that I had a passion for animals and agriculture, and I had researched many different college prospectuses but couldn't find any course that really took my interest. I then attended the UCD Open Day where I went to one of the Agricultural Science talks and from that moment on I never looked back. Thankfully with the help of DARE and the team at UCD Access and Lifelong Learning, which is an invaluable resource for students entering UCD via an alternative entry or progression pathway, I was able to accept my CAO offer in 2019. UCD, the UCD School of Agriculture and Food Science and Ag Soc have provided me with an abundance of opportunities and knowledge that I never would have imagined for myself before starting my course here.



#### **Student View**

Shona Breslin | Food and Agribusiness Management

I chose to study Food and Agribusiness Management in UCD as I had a keen interest in food and business studies while in secondary

school. This programme offers a broad range of modules covering agriculture, science, and business management. After deciding on this degree I entered UCD through the Higher Education Access Route (HEAR). I also received Recognition of Prior Learning (RPL) as I transferred from another higher education institution in Ireland. The support offered by the UCD Access and Lifelong Learning Centre is excellent. I was awarded a UCD Cothrom na Féinne Scholarship which supported me financially while living in Dublin, allowing me to focus on my studies.

The larger class sizes in the first year allowed me to connect and make friends with students from other disciplines within the School of Agriculture and Food Science. As I progressed into the final years of my degree, lecturers became more familiar as they teach smaller modules specific to the degree programme. The support offered to students by lecturers is excellent, and they are always available to offer advice.

Ireland is a global player in the agri-food industry, and I feel my degree has equipped me with the necessary skills to pursue a career in this highly competitive and exciting sector.





# **UCD LYONS FARM**

Lyons Farm is a key enabler of UCD's teaching and research ambitions. It forms an integral part of the teaching and research infrastructure of the College of Health and Agricultural Sciences, and specifically of the School of Agriculture and Food Science and School of Veterinary Medicine.

UCD is unique amongst third level universities in Ireland by having its own teaching and research farm to provide students and academics with access to large animal and crop enterprises for the delivery of teaching and research programmes. These programmes are of national importance and underpin technical innovation and science-driven education and discovery for the agri-food industry, which helps maintain international competitiveness and addresses challenges and opportunities for innovation as they emerge.

Currently these include:

- Increasing globalisation and competition,
- The removal of production linked subsidies within the EU,
- The demand for production of healthy food at affordable prices,
- Food produced with due regard to animal health and welfare,
- The need for proper sustainable management of land and animals to protect natural resources (air, water and plant and animal biodiversity),

- The importance of maintaining viability of rural communities and recreational activities,
- The reduction of greenhouse gas emissions from agriculture (by 25% by 2030),
- The need to reduce the fossil fuel inputs into agricultural production.

On many BAgrSc programmes students visit UCD Lyons Farm in year two as part of the Health, Welfare and Safety module that takes place in preparation for Professional Work Experience. On some modules in year three, such as Soil Science Applications and Animal Reproduction, students visit UCD Lyons Farm for important practical classes. Animal and Crop Production and Animal Science degree programme students spend one day per week at UCD Lyons Farm during the final year of their studies.

There are also opportunities for students to obtain invaluable experience during the busy lambing season at UCD Lyons Farm which takes place in March each year. Towards Sustainable Ruminant Production

#### Education and Research at Lyons Farm

#### UCD Lyons Long-Term Grassland Platform

The UCD Lyons Long-Term Grassland Platform is an exciting new beef systems experiment established in 2019. The Platform consists of 24ha divided into three farmlets, each sown under a different sward type and grazed by its own beef herd. Swards are perennial ryegrass, perennial ryegrass and white clover and multispecies mixture with grasses, legumes and forage herbs.

This platform will allow UCD researchers to investigate the long-term sustainability and resiliance of pasture-based beef production in terms of animal performance and health, greenhouse gas emissions, biodiversity, water quality, soil fertility and carbon, and economic performance.

This site is part of the Global Farm Platform, an international network of sites working to improve the sustainability of ruminant production systems.



WATCH ONLINE Check out our new video on UCD Lyons Farm

ucdagfood

# Agricultural Science DN250

# WHY AGRICULTURAL SCIENCE?

From animal science to farm management, addressing the climate challenge, conservation and protection of the wider environment, from the animal feed industry and dairy business to enterprise development, equine science and innovation, from crop protection and global agribusiness to alternative energy sources, horticulture, forestry 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 select the No Preference (NPF) option 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 eleven specialisations from second year. If, on the other hand, you know which of the eleven programmes you would like to specialise in, you can select this on your CAO application.

Students interested in progressing to the Food Business with Chinese Studies, Agricultural Systems Technology or Dairy Business degree must undertake specific modules by 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. Your subjects in year two, three and four will depend on which of the eleven programmes you decide to specialise in and are outlined within this brochure.





## DN250 Agricultural Science

CAO Points Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)

# Agricultural Systems Technology

ung Food Awards Ceremony

Why Agricultural Systems

With a focus on design, numeracy and technology, students of Agricultural Systems Technology will be committed and engaged with farming and food production, and specifically with technology to enhance efficiency, sustainability and reliability. Technologies of interest range from computer systems, networks, data management and sensors through machinery systems to precision agriculture. This degree will appeal to students who wish to build their knowledge and skills-base to address the complexities of developing, deploying and managing technology for the agriculture and

**Technology?** 

food sector.

**DN250** 

Technology

**CAO Points** 

programme.

**Agricultural Systems** 

Average 2021 (Round 1): 504

**based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)

\*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact www.ucd.ie/registry/admissions/er.html prior to submitting an application to determine the entry requirements for a particular

**Guidelines for A-Level applicants** 

DN250

#### **Agricultural Systems Technology DN250** Year 1 Subjects Year 2 Subjects Year 3 Subjects Year 4 Subjects Animal Biology & Evolution Agricultural Eng Principles Agri Mech: Engines and Crops Capstone Project Introductory Chemistry Food Physics Agri Mech: Hydraulics & Component Life Cycle Assessment Mathematics for Agriculture Animal Nutrition **Biosystems Eng Research Trends** Waste Management Physics for Agricultural Science Soil Science Basics **Business Management** Quantitative Risk Assessment Agricultural Economics & Business Principles of Crop Science **Grass & Forage Production** Precision Livestock Mgmt Information Skills Health, Welfare & Safety Numerical Methods for Agriculture **Optical Sensing Technology Biosystems Engineering** Introduction to Programming Sensors and Sensing **Precision Agriculture** Design Challenge Food Macronutrients Applied Programming Farm Business Mgmt Cell & Plant Biology **Applied Biostatistics** Geographical Information System Elective Module **Optional Modules** Agricultural Microbiology Databases & Information Systems **Elective Modules** Professional Work Experience **BAgrSc Honours UCD Graduate Study Career Opportunities Conversion or Complementary Courses MEng Food Engineering Technical Engineer Technical Sales Manager** MSc and PhD Research Teacher/Lecturer Scientist Professional Master of Education (PME) MSc Food Safety & Risk Analysis **Production Manager Environmental Consultant MSc Business Studies** MSc Public Health Farm Manager Project Manager Master of Business Administration MAgrSc Sustainable Agriculture **Operations Manager** Food Processing HDip Computer Science and Rural Development Policy Analyst Banker Master of Accounting MAgrSc Environmental Resource **Business Manager** Students interested in progressing to the Agricultural Systems Technology degree Management

through the omnibus route are advised to study Mathematics for Agriculture I (MATH10240) in Year 1.

#### **Student View**

#### Mark O'Dowd

Having grown up on a dairy farm in Co. Cork, I have always held a keen interest in agriculture. My interest is especially captivated by cuttingedge agricultural technologies and their role in sustainable agricultural production systems. For this reason, I chose to study Agricultural Systems Technology at UCD. I felt the course offered a good mix of both agricultural and technological disciplines. In addition, the UCD School of Agriculture and Food Science is a long-established faculty with

an excellent reputation for educating leaders within the Irish and international agriculture industry. During my time at UCD, I completed a six-month professional work experience placement in the Netherlands with a leading dairy automation company for which I was awarded a certificate of excellence. During PWE I gained invaluable industry experience that will stand to me throughout my future study and career choices. Studying AST allowed me to develop professionally, academically, and most importantly socially through playing an active role in clubs and societies such as the agricultural science society.

#### **Graduate View Oisín Gryson** | Food and AgriBusiness, *ifac*

#AgCredible

Growing up on a dairy goat farm, agriculture has always been one of my major passions in life. So, when it came to deciding which college course I wanted to do, Agricultural



Science in UCD was my number one choice. Following first year in omnibus, I chose to specialise in Agricultural Systems Technology. With small class sizes, this degree allowed you to have great interaction with the lecturers and also meant you grew closer to your classmates. I joined the UCD GAA team during my second year. My current job in the *ifac* Food and AgriBusiness department allows me to work in the sector which I am most passionate about. We work as strategic consultants to food and agribusinesses whether they are looking to start a farm diversification project or an established business looking to access corporate finance. My degree played an integral role in helping me to secure my current position. It allowed me to expand my understanding of the agricultural sector and helped me to develop an alternative way of handling challenges.

Ag Credible Academy

My advice to anyone studying Agricultural or Food Science in UCD would be don't be afraid to try something different and step out of your comfort zone.

# Agri-Environmental Sciences

DN250

## 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 and skills 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 the completion of a supervised final year project on your chosen topic
- Scientific and environmental management skills to contribute to future farming and land use industries
- Interpersonal and professional skills required to follow your chosen career path.

## DN250 Agri-Environmental Sciences

#### CAO Points

Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)

**DN25(** 



### **Student View**

#### Seán Nagle

I always had a keen interest in agriculture and sustainability. Agri-Environmental Sciences provided a perfect opportunity to combine these interests. The wide range of

modules offered throughout the course allowed me to gain invaluable knowledge and practical skills that will support me throughout my future career. I found my time at UCD to be highly rewarding. The modules and labs were always interesting and the lecturers and staff in the UCD School of Agriculture and Food Science were always engaging and supportive.

A highlight of my time at UCD was the Professional Work Experience. I spent time working in various agricultural enterprises and had the opportunity to get involved in cuttingedge research at UCD Lyons Farm. With increasing emphasis on improving Agricultural Sustainability, Agri-Environmental Sciences is certainly a relevant programme focusing on this important area.

Outside of academics, UCD provided me with the opportunity to get involved in rowing with UCD Boat Club. There are plenty of opportunities for students to get involved with the many societies and sports clubs present at UCD. Getting involved with these is a great way to meet new people and develop new skills and interests.



#### **Agri-Environmental Sciences**





## **Student View**

#### Caroline Dardis

Watching the agricultural sector evolve into a new era driven by sustainability and environmental viability led me to choose this course. This degree has allowed me to further expand and develop my interest in this field. It is taught in a manner that combines lectures, tutorials, fieldwork and laboratories that give students a broad range of skills that are invaluable for the future. Professional Work Experience was a great opportunity to experience the real working world in a wide range of environments from farms to environmental agencies.

Throughout the course there has been numerous trips to Lyons farm and Rosemount Environmental Research Station, which was an excellent opportunity to gain exposure to ongoing research.

# Animal and Crop Production

DN250





## Why Animal and Crop Production?

The science and business of producing animals and crops in an efficient, sustainable and environmentally friendly manner is one example of the challenges facing Agricultural Scientists, Farmers and Agribusinesses. 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.

## DN250 Animal and Crop Production CAO Points Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)



#### **Graduate View**

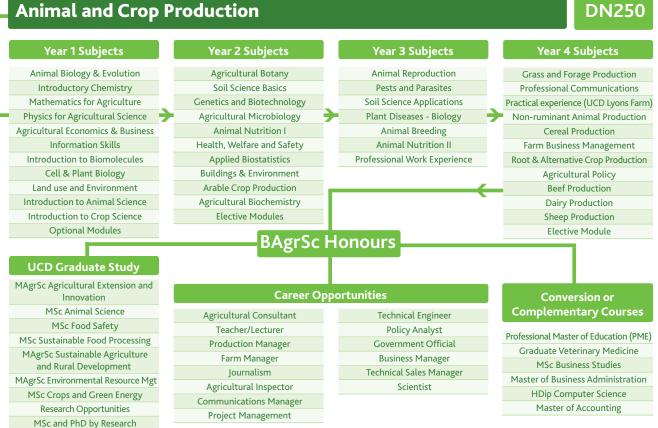
#### David Fogarty | Dairy Farmer

When I heard about Agricultural Science at UCD during 6th year at school, I was quietly confident that it was the 3rd level course for me. It would combine my main interests of

Science, Agriculture & Business all-in-one. I studied Omnibus in first year and opted for Animal & Crop Production from there on.

PWE in 3rd year affords a great opportunity to get out and experience the Agri-sector for yourself. I was lucky to have worked with top-class farmers and progressive businesses during this period and it definitely helped me decide what direction I wanted to develop my career in after graduation.

After my four years at UCD, I decided I wanted to travel overseas and experience grass-based dairying in New Zealand. My UCD degree was instantly recognised by the farmer I applied to for a job. Spending 3 years farming in New Zealand firmly set my mind on dairying when I returned to Ireland. Since moving home, I have managed two large dairy farms in Kilkenny & Wexford. Looking back on my career to date, UCD gave me a solid foundation from which to build my future in the agricultural industry.





#### **Student View**

#### Sarah Begley

The Agricultural Science programme at UCD was always the obvious choice for me. Having grown up on a beef suckler farm with a keen interest in animals and an ambition to establish my own sheep enterprise, I decided to specialise in Animal and Crop Production. This strand yields endless career opportunities for graduates and the programme covers a broad range of scientific and industry-related topics. This course was academically and practically challenging. One major learning curve was the 30 weeks of PWE which I completed in third year. I also really enjoyed the opportunity to spend some time at UCD Lyons Farm.

Studying Animal and Crop Production at UCD was undoubtedly an enjoyable experience and this field of study is of growing importance in an ever-evolving industry.

# **Animal Science**

DN250



# DN250 Animal Science

Europe and worldwide.

**CAO Points** Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)



#### **Student View**

#### Simon Lanigan

The Agricultural Industry is always advancing and the need for up-to-date research and the development of new technologies is key to sustainable efficient food production systems.

At the core of this research in Ireland is the UCD School of Agriculture and Food Science.

My aspiration to be involved in the Agricultural Industry stemmed from a young age, working on my family farm. Studying Agricultural Science at UCD has fostered my ambition and allowed me to develop a wide range of possible career choices. It became clear to me that my agricultural interests aligned with that of the Animal Science programme as subjects such as Nutrition and Genetics and Reproduction of farm animals were of great interest to me. Professional Work Experience allowed me to travel all over Ireland, Germany, and the Netherlands where I got to experience large-scale Dairy, Pig and Sheep operations along with the opportunity to complete an Animal Breeding Internship with a genetics company. It was an unforgettable experience that allowed me to apply my lecture-based learning to practical situations.

UCD offers a wide range of extracurricular activities which fulfilled my college experience. I was an active member of the School Debating Team in which we won The All Ireland Great Agri-Food Debate. My involvement within AgSoc, contributing to the University Observer Newspaper, being a peer mentor and finally being a UCD Student Ambassador have all been great opportunities for me.

Animal Science			DN250
Year 1 Subjects	Year 2 Subjects	Year 3 Subjects	Year 4 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	Genetics & Biotechnology Animal Nutrition I Applied Biostatistics Business Management Agricultural Microbiology Soil Science Basics Buildings & Environment Agricultural Biochemistry Health, Welfare and Safety Elective Modules	Animal Reproduction Animal Breeding Animal Physiology Animal Genomics Food Microbiology Exp Design & Data Analysis Animal Nutrition II Elective Modules Principles of Animal Health and Welfare Professional Work Experience	Grass & Forage Production Students visit UCD's Lyons Research Farm to get hands-on practical experience Non-ruminant Animal Production Farm Business Management Professional Communications Agricultural Policy Beef Production Sheep Production Dairy Production Elective Modules
	BAgrSc Ho		
UCD Graduate Study	Career Opp		Conversion or
MSc Animal Science MSc Humanitarian Action MAgrSc Sustainable Agriculture and Rural Development MAgrSc Environmental Resource Mgt MAgrSc Agricultural Extension and Innovation Walsh Fellowship Research	Teacher/ Lecturer Production Manager Farm Manager Journalism Agricultural Consultant Agricultural Inspector Communications Manager Embryologist	Nutritionist Quality Assurance Officer Technical Engineer Policy Analyst Government Official Business Manager Technical Sales Manager Scientist	Complementary Courses Professional Master of Education (PME) Graduate Veterinary Medicine MSc Business Studies Master of Business Administration HDip Computer Science Master of Accounting
Opportunities MSc and PhD by Research	Lindryologist	Scientist	

#### **Graduate View**

**Eadaoin Conway** | Swine Technical Executive, Interchem

Growing up on my family farm, I always knew I wanted to pursue a career in agriculture but didn't know exactly what route I wanted to take. The broad range of modules offered as part of the Animal Science degree in UCD, the hands-on experience of my professional work experience and the opportunity to study abroad at Purdue University, allowed me to gain extensive knowledge into the agricultural industry. Upon graduating from Animal Science, I decided to stay in education and began a PhD in the School of Agriculture and Food Science specialising in monogastric nutrition. I am now working as a swine technical executive for Interchem, an animal health company. My undergraduate degree certainly played an integral role in securing my current position. I would recommend the Animal Science programme in UCD to anyone who wants to pursue a career in the agricultural industry.



# Animal Science -Equine



## Why Animal Science - Equine?

If you want to keep your career options open within the Agriculture industry, but have a passion for horses, then this degree is for you. The Animal Science - Equine degree provides the scientific knowledge and professional skills necessary for 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 on equine reproduction and genetics/genomics.

## DN250 Animal Science - Equine

**CAO Points** Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)



#### **Graduate View**

#### Megan Sheedy

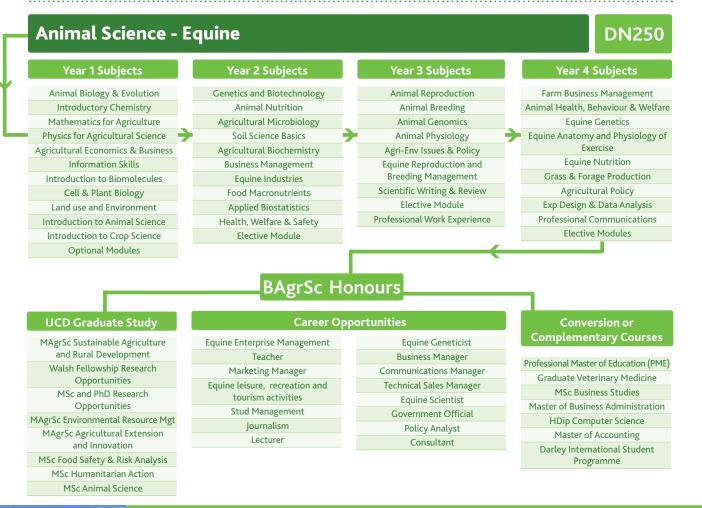
Having grown up surrounded by horses in the heart of Tipperary and being an active member of the Irish Pony Club and Riding Club Association, choosing Animal Science-Equine at UCD was a given for me.

During my 4 years at UCD I learnt about the theoretical and practical aspects of the equine industry through lectures and field trips. Classes included exercise physiology, nutrition and genetics and were delivered by experts that are passionate about this subject area. This course provided me with the foundation I need to pursue a career in the equine industry.

Outside of class I enjoyed engaging in college life and was an active member of AgSoc, RacingSoc and the Equestrian club. I completed my PWE in third year with the horse racing trainer Aidan O'Brien in Ballydoyle for which I was awarded the Grant Thornton Professional Work Experience award. During this time I gained practical experience riding and caring for racehorses during their racing career. I got an insight to the tremendous work and passion that goes into creating a successful racehorse. I was given the opportunity to learn about all aspects of it from riding out in the morning to working with water treadmills and pools in the evening. I thoroughly enjoyed my time there.

UCD has been unforgettable and has provided me with lifelong friends and memories.

Since graduation I completed the Irish National Stud Thoroughbred Breeding Management course and will shortly commence work for one of Australias top trainers Chris Waller in Rosehill Sydney.





#### **Rhiannon Maher**

Studying Animal Science Equine in UCD has allowed me to get a glimpse into my future in the equine world. I have been involved with horses from a young age and always knew I would study an equine related course in university. Equine Science is the perfect course for anyone looking to improve their knowledge and broaden their horizons. The part I most enjoyed throughout my degree was Professional Work Experience in third year. I worked for Emil Spadone at Redfield Farms, a show jumping and hunter jumper farm in America. I spent six months working and riding in both Ocala, Florida and Califon, New Jersey. I learned a lot about the equine world in America, improved my riding and made some great connections, while also getting to travel to places like the World Equestrian Centre and New York City.

# Crop Science



## Why Crop Science?

Agronomy is the science of crop production and soil management, leading to improvements in crop yield and quality. Environmental challenges, production of biofuels, and the growing demand for major food crops like wheat and rice, make agriculture and crop science a vital subject for our future well-being.

You will learn about the science, production and management of crops, from genes and cells through to fields, farms and the development of future crops from subject experts who are active researchers in the most rapidly developing area of agriculture and agri-business. This is a very suitable degree if you intend to pursue full-time farming or combine part-time farming with a professional career.

# DN250 Crop Science

#### CAO Points Guide Average 2021 (Round 1): 504

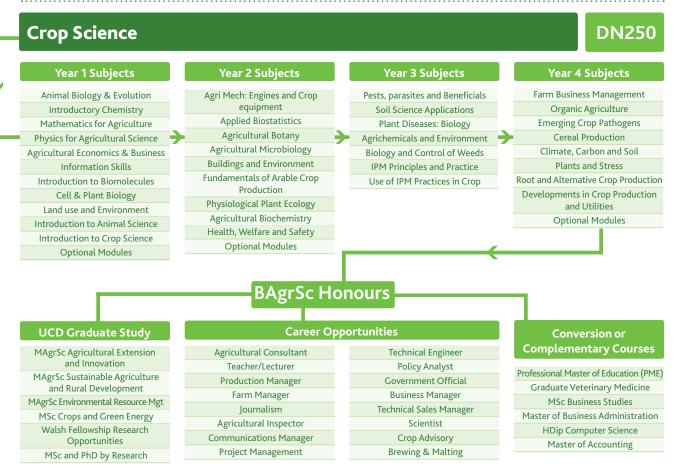
**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)



# 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.



### Consus Project

UCD has partnered with the leading agribusiness company, Origin Enterprises plc to develop the next generation of digital tools for use by the farmer and agronomist. CONSUS is a €17.6m programme over 5 years, which is jointly funded by Science Foundation Ireland and Origin Enterprises.

CONSUS, is a collaborative research programme focused on the application of

## 🛞 CONSUS

precision agriculture to crop production 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 programme.

# Dairy Business DN250



## Why Dairy Business?

The Irish dairy industry makes a major contribution to the Irish economy with €5 billion of dairy products exported to approximately 147 countries in 2021, employing approximately 18,000 dairy farmers and a similar number working on farms, in the processing industry and 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.

# DN250 Dairy Business

**CAO Points** Average 2021 (Round 1): 504

Guidelines for A-Level applicants based on 2021 entry requirements: A\* AAe (Calculations do not include maths bonus)



#### **Graduate View**

Brendan Walsh | Dairy Farmer

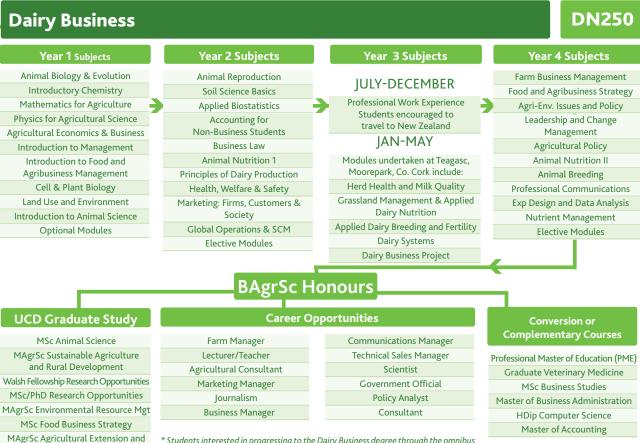
My time studying Dairy Business at UCD was a fantastic experience. Initially, it can feel a little daunting as with anything new, but you find your feet very early. The UCD School of S

Agriculture and Food Science makes you feel welcome and helps you to settle into college life.

The highlight of my time at UCD was the trimester spent at Teagasc Moorepark where we got the chance to learn from some of the top researchers in the industry. The opportunity to listen, question and discuss important topics of relevance with our lecturers was fantastic and allowed us to get indepth knowledge of the dairy industry.

I spent 6 months in New Zealand for my PWE gaining handson experience of the day-to-day tasks involved in running a large-scale dairy farm. This was a really rewarding experience. So much so that my classmates and I still talk about New Zealand to this day!

After I graduated I worked as a Sustainability Advisor and later as a Milk Quality manager with Glanbia. I am now dairy farming full-time on the family farm. We are one of 100 farmers participating in the Signpost Programme which aims to lead and engage farmers to reduce their environmental footprint. In 2017 our family won the overall NDC Kerrygold Quality Milk Award. While these jobs are all quite different, the knowledge I got from my degree played a big part in each of them.



\* Students interested in progressing to the Dairy Business degree through the omnibus route are advised to study Introduction to Management (BMGT10060) and Business Plan (BMGT10140) in Year 1.



Innovation

MSc Food Safety & Risk Analysis

#### **Student View**

#### Shane Galligan

Studying Dairy Business in UCD has being the most fulfilling experience. The course has provided me with vast knowledge and skills in what is a hugely exciting sector. 3rd year was the highlight for me. I spent 20 weeks working on a large-scale dairy farm in New Zealand. Subsequently, learning from renowned researchers in Teagasc Moorepark on topics such as grassland management & breeding was a brilliant experience. Being exposed to some of the experts in the country and being partnered up with a mentor farmer on whom we completed a farm project really helped me in understanding the key metrics and practices which make these farmers so efficient. I hope to pursue an exciting career in the dairy sector and I believe this course has equipped me with the necessary skills and technical ability to succeed in what is a hugely exciting but everchanging sector.

# Food and Agribusiness Management

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DN250



# Why Food and Agribusiness Management?

If you enjoy science and business, the Food and Agribusiness Management degree programme provides an excellent opportunity to obtain an understanding of both subjects.

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 that consumers 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.

## DN250 Food and Agribusiness Management

**CAO Points** Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)



#### **Student View**

#### Jamie McHugh Dolan

Growing up I have always had a keen interest in science and business. The Food and Agribusiness Management programme

combines both of these, which played a major role in my decision to choose this course. Initially students study core science subjects before specialising in agribusiness by studying different business principles in subject areas like law, economics, finance and marketing.

PWE is a key component of the degree. I completed my PWE with Grant Thornton, a professional services firm that provide assurance, tax and advisory services to clients. I was an intern on the transaction taxes team and I learned and developed a broad range of skills. I feel this experience will stand to me in my future career and I am considering returning to this intriguing industry or perhaps pursuing further study opportunities in this area.

I particularly enjoyed the Enterprise Development module which is completed by students in their final year. The module takes a practical and real-life approach by giving students the opportunity to prepare and develop a business plan for a new business venture giving them exposure to a critical aspect of entrepreneurship.



**Graduate View** 

**Clodagh Dolan** | Market Executive, Enterprise

Working in an entrepreneurial family, I was fortunate to see the fantastic business opportunities Ireland has to offer. I was always passionate about food and the burgeoning Irish food industry really sparked my interest in agriculture and influenced my decision to study Food and Agribusiness Management. During my third year at UCD, I got the opportunity to study abroad at the University of Illinois as well as completing a work placement at Keelings.

It was the biggest learning experience of my life. Studying in another country allowed me to gain a greater understanding of the world, while my work placement provided me with the opportunity to work with a more diverse group of people and develop various skills. Upon graduating from UCD, I completed my MSc in Strategic Management at Smurfit Business School. My MSc allowed me to develop the businesses skills my undergraduate had laid the foundation in. I'm currently, working as a Market Executive at Enterprise Ireland, based in London. It is fantastic to be able to see the innovation coming out of Ireland.



# Food Business with Chinese Studies

DN250

## DN250 Food Business with Chinese Studies

Why Food Business with Chinese

The Food Business with Chinese Studies programme reflects the changing market landscape, and aims to develop graduates with the skills and talent urgently required by the Irish food industry. With Brexit and the uncertainty involving

the UK market, export expansion to the emerging markets has critical strategic importance to the Irish food industry and the overall economy. The changing market landscape requires improved foreign language capability of Irish companies to facilitate access to new markets, and to help sustain and strengthen the modern agrifood and agribusiness companies.

Students will complete year three of their studies in Renmin University in Beijing, one of China's top universities, where you will take intermediate or advanced Chinese language courses

and a range of interesting and relevant modules.

Studies?

**STUDY ABROAD IN CHINA** 

**CAO Points** Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)





#### **Staff View**

Dr. Chenguang Li | Lecturer in Food Economics and Marketing and Deputy Provost, Guangzhou-Dublin International College of Life Sciences and Technology (GDIC), China

China is Ireland's fourth largest agri-food export market, and second largest market for dairy and pork. In 2020, the Irish food & drink exports to China exceed €872 million. With rapid economic growth, continuous urbanization and fast increasing middle-class population, China's demands for high quality imported food and ingredients will continue to expand. Given the strategic importance China has to the Irish food and drink industry, it is crucial that we

have quality programmes in the Irish higher education system to equip talented young people with global outlooks, food economics and business skill, language ability and a good understanding of Chinese culture and the market. The UCD Food Business with Chinese programme is designed to deliver future leaders of the Irish food and drink industry to navigate successfully in this market.

#### **Student View**

#### Luke Greene

I chose to study Food Business with Chinese Studies as I had a keen interest in the Chinese language, culture and business. China is a major opportunity market for Irish food

products, and I believe the skills acquired on this course will be highly desirable to future employers.

The Confucius Institute in UCD is a state-of-the-art institute for learning Chinese in Ireland. The class sizes are small and personal, and you get the opportunity to meet many different students from other faculties that are also studying Chinese.

The food business aspect of the course is delivered by the well-renowned UCD School of Agriculture and Food Science. It incorporates general Agricultural Science modules in first year with plenty of lab, practical work and several field trips to farms and processing plants. From second year, there is more of a focus on business modules while also getting the option to choose an elective module.

The third year of the course is the highlight in that you get to spend the entire year studying in Renmin University, Beijing. This is a great opportunity to immerse yourself in the language and experience the Chinese culture first-hand.



## Why Forestry?

Forestry is the science, art and profession of managing forests. Foresters create and manage forests to provide a variety of ecosystem services including timber, biodiversity, carbon sequestration, recreation, conservation and aesthetics. Forestry operates under the paradigm of 'Sustainable Forest Management' which seeks to balance environmental, economic and social factors.

Students 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 of paramount importance in the creation and management of forests today. Forestry employs high spec technology in planning, forecasting and supporting the long-term management of forests.

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

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

DN250 Forestry CAO Points Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)

\*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact www.ucd.ie/registry/admissions/er.html prior to submitting an application to determine the entry requirements for a particular programme.



#### **Student View**

#### Matthew Sweeney

The UCD Forestry course offers a wide range of practical and academic modules. PWE provides students with practical experience from within the forestry sector and allows students to



apply the skills they have learned in the classroom in the real world. I completed my placement with a forest nursery company.

Throughout the first two years, you are provided with a range of core science modules. The final two years are filled with engaging and exciting forestry-related modules. As part of final year, you go on a tour of different forestry areas in another country. In my case, we travelled to Northern Ireland, but in other years students have travelled to Northern England and even Iceland and Germany. The forestry industry in Ireland is growing and the demand for graduates in this field is increasing each year. For many students, their PWE placements will become their future careers. For others, they meet their future employers at on-campus career events and employer presentations.

The UCD forestry course is one of the top forestry courses in Ireland and many graduates go on to have impactful careers that shape the industry. As a result of my experience in UCD, I would highly recommend the UCD forestry course to anyone who is interested.



#### WATCH ONLINE Learn more about where a degree in forestry can take you.

ucdagfood

Assisted Dislams 0. Evolution	Year 2 Subjects	Year 3 Subjects	Year 4 Subjects
Animal Biology & Evolution	Principles of Forestry	Silviculture	Forest Inventory and Management Pla
Introductory Chemistry	Professional Forestry Practice	Forest Harvesting	Research Project
Mathematics for Agriculture	Soil Science Basics	Forest Management Economics	Forest Policy and Law
Physics for Agricultural Science	Physiological Plant Ecology	Wood Science	Forest Planning and Optimisation
gricultural Economics & Business	Tree Structure & Function	Forest Protection	Experimental Design
Information Skills	Business Management	Geographical Info Systems	Elective Modules
Introduction to Biomolecules	Agricultural Botany	Forest Inventory & Sampling	
Cell & Plant Biology	Applied Biostatistics	Elective Modules	
Trees and Forests in Ireland	Agricultural Microbiology	Professional Work Experience	
Optional Modules	Engineering & Surveying		
	Health, Welfare & Safety		
	Elective Module		
	BAgrSc Ho	onours	
UCD Graduate Study	Career Opp	oortunities	Conversion or Complementary Courses
UCD Graduate Study MSc and PhD Research Opportunities	Career Opp Forester Teacher	Consultancy	
MSc and PhD Research	Forester	oortunities	Complementary Courses
MSc and PhD Research Opportunities	Forester Teacher Technical Advisor	Consultancy GIS Analyst Scientist	Complementary Courses Professional Master of Education (PM MSc Business Studies
MSc and PhD Research Opportunities MAgrSc Environmental Resource Management MAgrSc Rural Environmental	Forester Teacher Technical Advisor Forest Inspector	Consultancy GIS Analyst Scientist Entrepreneur	Complementary Courses Professional Master of Education (PM MSc Business Studies
MSc and PhD Research Opportunities MAgrSc Environmental Resource Management MAgrSc Rural Environmental Conservation & Management	Forester Teacher Technical Advisor Forest Inspector Forest Development Officer	Consultancy GIS Analyst Scientist Entrepreneur Pricing Analyst	Complementary Courses Professional Master of Education (PM MSc Business Studies Master of Business Administration
MSc and PhD Research Opportunities MAgrSc Environmental Resource Management MAgrSc Rural Environmental	Forester Teacher Technical Advisor Forest Inspector	Consultancy GIS Analyst Scientist Entrepreneur	Complementary Courses Professional Master of Education (PM MSc Business Studies Master of Business Administration Master of Accounting



## Graduate View

#### **Orlaith Tobin**

Studying forestry in UCD has enabled my love for the outdoors to branch out in new directions. While I come from an agricultural background, forestry was an area that I lacked experience in. However, the immense range of modules, field trips, and PWE has provided me with the basis of essential knowledge and skills needed for the ever-evolving industry. I was fortunate to complete a 14-week period of work experience with Coillte in the timber harvesting area, while also independently gaining additional management experience from the private sector.

I look forward to building a career with this knowledge and set of skills and am delighted to have secured a role as an Operations Forester with Veon for the Mid-west region directly after completing this course.

# Horticulture

### Why Horticulture?

Horticulture is the art, science, technology and business of plant cultivation for human use.

Our world faces immense challenges; climate change, mass migration from the countryside to mega cities, food shortages, excess consumption, food waste and pollution. Through the sustainable cultivation of plants and an increase in plantbased diets, many of these challenges can be overcome. Plants provide the oxygen we breathe, the food we eat, our shelter and medicines, and they bring living colour to our lives. This course covers the sciences, environmental studies, business, management and communication skills related to growing food and non-food plants. You will also study the science behind developing and maintaining Ireland's designed landscapes, golf courses, tennis courts and sport pitches.

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
- The skills to become a competent, competitive and confident leader who will excel in the national or global horticulture community as a professional horticulturist or horticultural scientist.

### DN250 Horticulture Average 2021 (Round 1): 504

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* AAe (Calculations do not include maths bonus)

\*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact www.ucd.ie/registry/admissions/er.html prior to submitting an application to determine the entry requirements for a particular programme.



#### **Student View**

#### Feiru Deng

I am studying the Horticulture degree programme in UCD for two years as part of my four-year degree in South China Agricultural University. After arriving at UCD I discovered

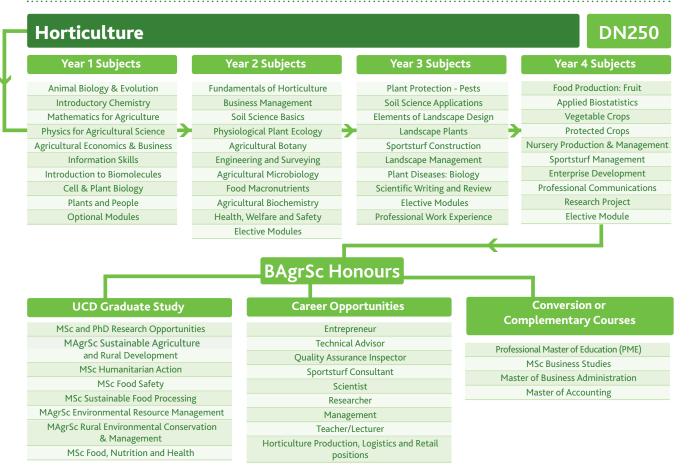
that this programme includes much more than just traditional horticulture. The course also includes lawn management and landscape aspects.

We have visited many local commercial greenhouses, farms and production sites in Ireland, which was a great help in understanding and choosing a future career path. UCD also has its own on-campus orchard and greenhouse for experiments and research, which together with the excellent analytical facilities in the laboratory helped me a lot with my final year project.

For international students, UCD offers a range of supports to help with integration into university life, and societies run activities during traditional festivals. I really enjoyed the beautiful campus and the campus life. If you are interested in studying horticulture, this course will not only give you practical knowledge but will also broaden your horizons. I am looking forward to perhaps going further in this field of study at the UCD School of Agriculture and Food Science.



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



## **Graduate View**

**Mary Harty** | Assistant Professor in Horticulture, UCD School of Agriculture and Food Science

After fifteen years working in IT, I decided to pursue a career change. I had always loved plants and gardening and enjoyed working outdoors so I decided to study horticulture as a mature student. I initially studied in the National Botanic Gardens, then transferred to the Level 8 degree at UCD. I didn't have a clear plan for my future but my time in UCD really opened my eyes to understanding the science behind horticulture and I was hooked. I made the decision to pursue an academic career. I completed an MSc Environmental Science at UCD and a PhD.

I have recently joined UCD as a Lecturer in Horticulture. I am very excited to join the team at a time when plant-based food is so critical to providing essential nutrients for a balanced diet and helping to reduce the environmental impact of food production.

## **Food Science**

DN261



## Why Food Science?

Food Science focuses on the biological, chemical and technological aspects of food products and how they are manufactured. If you choose to specialise in Food Science, you will develop your scientific knowledge of how to produce high quality, safe and healthy foods and beverages.

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 is accredited by the Institute of Food Technologists and ensures students develop the knowledge and skills required for a successful career in the food industry.

## DN261 Food Science

UCD INSTITUTE OF FOOD & HEALTH

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**CAO Points** Average 2021 (Round 1): 543

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\* A\* Ab (Calculations do not include maths bonus)

\*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact www.ucd.ie/registry/admissions/er.html prior to submitting an application to determine the entry requirements for a particular programme.



### **Student View**

#### Anna Kerr

Deciding to study Food Science at UCD was one of the best decisions I have ever made. I transferred into this programme from another university after realising I wanted to pursue

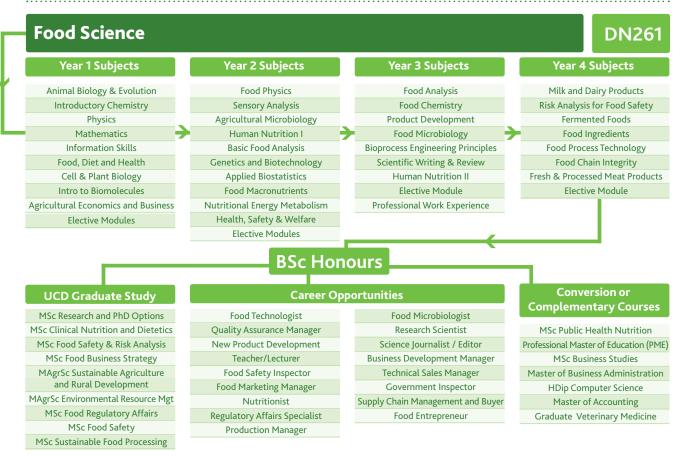
a career in the Irish food industry, following a year travelling around Europe working on small organic farms. The Food Science programme in UCD teaches you to look at food from a range of different scientific perspectives, with modules covering chemistry, physics, microbiology and nutrition. You will also gain a more practical insight into the food industry with modules such as Food Processing Technology and Product Development, in which you and your team develop a product, transforming it from a concept to a market-ready product.

I completed my PWE placement with The Culinary Food Group which was a fantastic opportunity to experience the food industry first-hand and showed me what direction I want my career to take.

Graduating with a degree in Food Science, I feel ready to begin my career in an exciting and evolving industry. I would encourage anyone with a keen interest in where their food comes from, what it's made of and how it ends up on their plate to consider this programme.



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





**Brian O'Connell** | Regulatory Technologist - Kerry

The Food Science degree offered in UCD is a very dynamic, broad course that is perfect for anyone with a scientific interest in food and nutrition. There are many interesting modules throughout the course such as Product Development, Food Chemistry and Human Nutrition which involve completing well designed projects, assignments and laboratory work. One of the highlights of the course is PWE in third year, which I completed with Glanbia as a whey quality assistant. This was a hugely enjoyable and beneficial part of the course and gave me a good insight into the food industry. The skills I obtained throughout my time in UCD have stood to me in my current role with the Regulatory Department in Kerry Group, where I manage technical data for new and existing products, ensuring that accurate and timely information is supplied to major customers in the food industry, R&D, manufacturing and commercial teams.

## **Human Nutrition**

DN262



## Why Human Nutrition?

Nutrition - the interaction between the food we eat and our health - is becoming increasingly important in today's society.

This programme delves deep into many aspects of nutritional science, covering physiology, biochemistry & molecular science. Students will learn how to apply their knowledge of these subjects in the context of public health & clinical nutrition, 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.

### DN262 **Human Nutrition CAO Points** Average 2021 (Round 1): 580

**Guidelines for A-Level applicants based on 2021 entry requirements:** A\*A\*A\*a (Calculations do not include maths bonus)

\*Students should note that entry requirements and programme quotas are subject to change and students are advised to contact www.ucd.ie/registry/admissions/er.html prior to submitting an application to determine the entry requirements for a particular



**Graduate View** 

**Dr Laura Kirwan |** Sustainability Lead, Nutritics | Vice-chair of the Sustainable Health Systems committee on the European Health Parliament

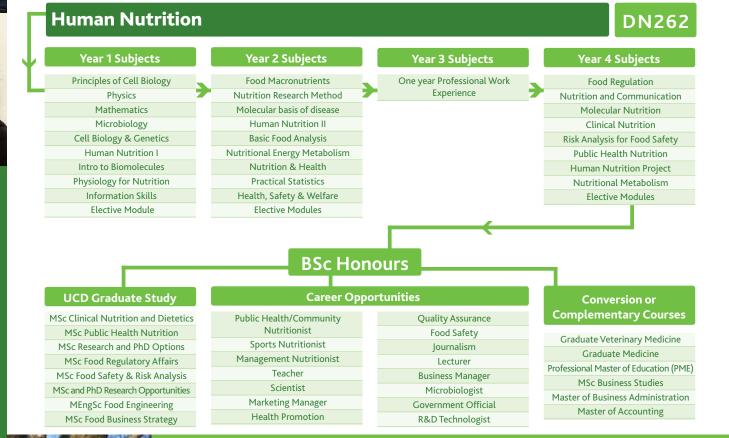
I completed the BSc in Human Nutrition and graduated in 2017. The course covered a very diverse range of topics and nutrition

was quite a new area at the time. The personal highlight of my time at UCD has to be the people. There is a great community and atmosphere in the school of Agriculture and Food Science, and I made some great friends for life. Networking and socialising is an important element of the University experience for developing strong communication and interpersonal skills.

This programme includes a 10-month placement in third year. I found this gave me valuable insight into different jobs that I never knew existed. I completed my placement at the Rowett Institute of Nutrition and Health in Aberdeen in Scotland which was a great experience, and a strong learning curve. After I graduated in 2017 I was accepted into the European Food Safety Authority (EFSA) DATA traineeship which was an amazing experience. My placement experience with UCD definitely played a role in being accepted to this. I then went back to UCD to complete a PhD. In 2021, I was selected as vice chair of the Sustainable Health Systems committee in the European Health Parliament, and I am continuing to do consultancy work for EFSA on data modelling for food safety. I am now working with Nutritics, developing climate technology solutions for the hospitality and food service sector, which is a crucial area for climate action.



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



## **Student View**

#### Luke McMonagle

I have always loved science and saw studying human nutrition as a way to apply this in a practical, health-focused manner, in particular to the rapidly growing area of personalised health. Eating is an integral part of our lives and an understanding of how our relationship with food and nutrition influences health has always fascinated me. A real highlight for me was my 10-month professional work placement with the Food Safety Authority of Ireland. I learned a huge amount during my placement about the complex and important food regulatory process and about the food industry more broadly.

Aside from my academic studies at UCD I also had the chance to work and perform with the Choral Scholars chamber choir. During my time with the choir, we had the opportunity to perform in venues like the Newman University Church, the National Concert Hall, and even Carnegie Hall, New York. In addition to this, we recorded a Christmas album with the Signum Records label, an experience that was a highlight of my time at UCD.

## **ALUMNI SPOTLIGHT**



**Jim O'Toole** CEO, Bord Bia



Zoe Kavanagh CEO, National Dairy Council



**Mike Brady** Agricultural Consultant, Brady Group



Aoife Marie Murphy Sustainable Nutrition Manager, Kerry



Yvonne Lenighan Senior Manager Dietary Intakes, Intertek





Daragh Little Managing Director – Forestry, Veon



**Doireann Mulhall** Farm Support Advisor, *ifac* 



**Pat O'Keeffe** Corporate Affairs Director, Tirlán

## **FURTHER INFORMATION**

In addition to this prospectus further information on the Bachelor of Agricultural Science, BSc in Food Science and BSc in Human Nutrition degree programmes are available through a variety channels as outlined below.



#### **TESTIMONIALS**

Students and alumni share their experience of their time at the UCD School of Agriculture and Food Science.

www.ucd.ie/agfood/study



#### **INFORMATION VIDEOS**

Watch a series of virtual information videos featuring academic staff and students from across all programmes.

www.youtube.com/ucdagfood



#### **CHAT WITH STUDENTS**

Want to find out more about student life? Chat with our student ambassadors and ask any questions you have.

www.myucd.ie/chat

## UPCOMING EVENTS

21 – 23 September 2022 Irish Times Higher Options RDS, Dublin

12 November 2022 **UCD Open Day** O'Reilly Hall, UCD

21 November 2022 UCD School of Agriculture and Food Science Information Evening Newpark Hotel, Kilkenny

#### 30 November 2022

UCD School of Agriculture and Food Science Information Evening Clayton Hotel Silver Springs, Cork

#### 10 January 2023

UCD QQI-FET Entry to Agriculture & Food Science, Science, Computer Science and Sustainability Information Event (online)

#### 15 March 2023

Farm Walk and Talk

UCD Lyons Farm, Celbridge, Co. Kildare (Information/registration via agriaware.ie)

#### 12th April 2023

Experience UCD - Agriculture, Food and Nutrition

Information event for 6th Year students UCD Agriculture and Food Science Centre

8th June 2023 UCD Summer School 2023 -Agriculture, Food and Nutrition Information event for 5th Year students UCD Agriculture and Food Science Centre

## **FOLLOW US**

Follow our social media channels for up to date information and announcements





#### UCD School of Agriculture and Food Science

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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.