



University College Dublin

Agriculture, Food Science and Human Nutrition

MAIN MENU



UNDERGRADUATE Programmes

2017 ENTRY

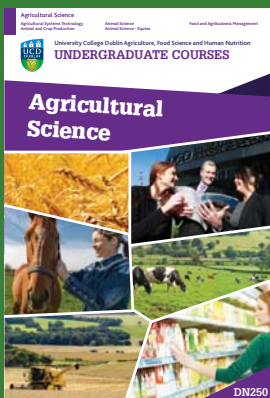
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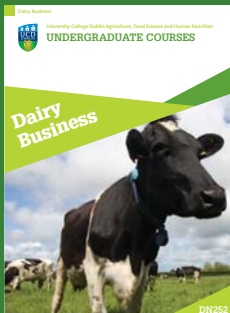
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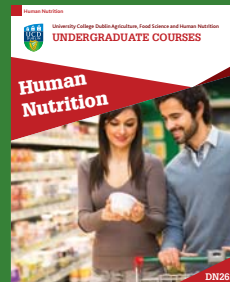
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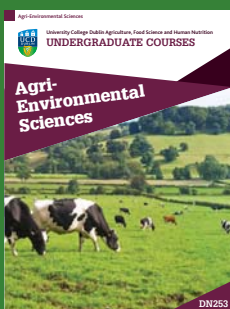
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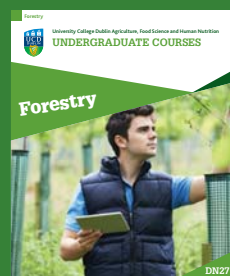
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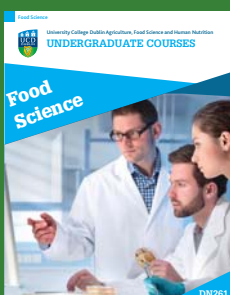
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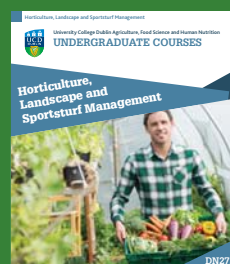
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Welcome

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 2016 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 honours 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 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 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.

14-16 SEPTEMBER 2016	Higher Options RDS, Dublin
20-22 SEPTEMBER 2016	National Ploughing Championships Scraggan, Tullamore, Co. Offaly
5 NOVEMBER 2016	UCD Open Day O'Reilly Hall, UCD
23 NOVEMBER 2016	UCD School of Agriculture and Food Science Kilkenny Information Evening* New Park Hotel, Kilkenny
30 NOVEMBER 2016	UCD School of Agriculture and Food Science Cork Information Evening * Clarion Hotel, Cork
10 JANUARY 2017	UCD CAO Information Evening* UCD
17 JANUARY 2017	UCD FETAC Open Day for Agriculture, Food Science, Science and Computer Science* Moore Auditorium, UCD O'Brien Centre for Science
8 JUNE 2017	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

Agriculture and Food Science Centre,
University College Dublin, Belfield, Dublin 4

Tel: +353 (0) 1 716 7194

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



DN250

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 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 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 AST	Agricultural Systems Technology
DN250 ACP	Animal & Crop Production
DN250 ASC	Animal Science
DN250 EQS	Animal Science - Equine
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, third and fourth year subjects for each programme are detailed on pages 7, 8 and 9.

DN250

Agricultural Science

CAO Points

Average 2016 (Round 1) 495

Minimum 2016 (Round 1) 460

Minimum A Level:

AABa (Excluding Maths Bonus Points)

ABbb (Including Maths Bonus Points)

**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.*

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DN250 AST Agricultural Systems Technology

CAO Points

Average 2016 (Round 1) 495

Minimum 2016 (Round 1) 460

Minimum A Level:

AABa (Excluding Maths Bonus Points)

ABBb (Including Maths Bonus Points)

**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.*

Agricultural Systems Technology

With a focus on design, numeracy and technology, students of Agricultural Systems Technology will be committed and engaged with food production and processing, 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 food sector.

Student View

Orla Farrell

I had always had an interest in farming, having grown up in the Irish countryside with a suckler beef farm at home, and my grades in Maths and Design and Communication Graphics meant that out of the majors available to me within Agriculture and Food Science, Engineering Technology was the most appealing. The subject area is broad and often fast moving but is engaging and interesting, covering topics including environmental and bioenergy systems, food processing and food chain technology, agricultural machinery, and agricultural basics such as animal, crop and soil science. Throughout four years I have found that the small group lectures increase available time with research leading lecturers, who are always willing to discuss and engage with you. Beyond academics, the small class has become a group of my closest friends who, regardless of cliché, I will retain for the rest of my life. I would recommend this programme area to any student who has an interest in the natural environment and the way things work.



Graduate View

John Dorrian

I chose to study this degree 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 classes I took were shared with students from other disciplines. I would recommend this programme to students who are interested in agricultural technology, sustainable energy systems, the environment and the role that these play in the agri-food sector.



University of Connecticut, USA

PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

Five months Professional Work Experience takes place in year three of the Agricultural Systems Technology programme. A dedicated Professional Work Experience advisor will help ensure you gain relevant experience during this time. In recent years, increasing numbers of students on School of Agriculture and Food Science programmes have opted to complete Professional Work Experience internationally.

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

- University of Connecticut, USA
- Iowa State University, USA
- University of Queensland
- Purdue University, USA
- Michigan State University, USA

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



DN250 ACP Animal and Crop Production

CAO Points

Average 2016 (Round 1) 495

Minimum 2016 (Round 1) 460

Minimum A Level:

AABa (Excluding Maths Bonus Points)

ABBB (Including Maths Bonus Points)

**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.*

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.

Student View

Agricultural Science in UCD was definitely the right course for me. I started as an Omnibus entrant and choose to study Animal and Crop Production in first year. Agricultural Science provides the ideal combination of theory and practical knowledge. We learn about a variety of topics over the course of our four years such as reproduction, nutrition and business to name a few.

The Ag Science community is one of kind. Although there are over 27,000 students in UCD the Ags are like one big family. I would advise this course to any student that has an interest in Agriculture and would love to pursue a career in this area. I have gained an incredible amount of knowledge and skills, while making friends and memories that will last forever.

Amie Coonan



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



Lincoln University

PROFESSIONAL WORK EXPERIENCE AND STUDY ABROAD OPPORTUNITIES

Professional Work Experience (PWE) takes place between January and August in Stage three. A dedicated PWE advisor will help ensure you gain experience in each of the relevant enterprises.

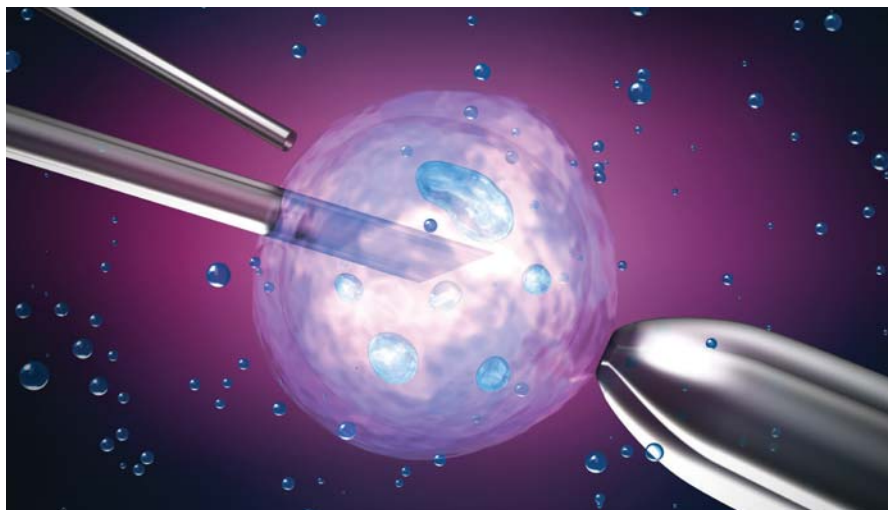
You can also study abroad for one semester, at universities including:

- Lincoln University, NZ
- Iowa State University, USA
- University of Illinois, USA
- Purdue University, USA
- Michigan State University, USA

There are a limited number of scholarships available, on a competitive basis, which support some of the costs associated with studying and completing PWE abroad.

"What we learned in the classroom was put to the test during Professional Work Experience. I spent four months on a 750 cow dairy herd in New Zealand and a further four months on sheep, dairy and crop farms in Ireland. I learned a tremendous amount during my time on placement and really enjoyed the whole experience."

- Amie Coonan



DN250 ASC Animal Science

CAO Points

Average 2016 (Round 1) 495

Minimum 2016 (Round 1) 460

Minimum A Level:

AABa (Excluding Maths Bonus Points)

ABBB (Including Maths Bonus Points)

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Animal Science

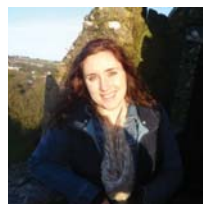
Animal Science is connected with all aspects relevant to the development, growth and health of animals including breeding, nutrition, reproduction, genomics and physiology. At the core of Animal Science is the study of the applied sciences that are fundamental to understanding how animals function and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

Student View

Before I even started college, I knew I wanted to study abroad. When looking at different programs, UCD really stuck out as being a perfect fit. I loved that I could take classes to earn credit towards my major, while also having the flexibility to take unique electives that I wouldn't be able to find at my home university. Coming from a small college near Boston, my time at UCD was a fun way to experience life at a large university and all the opportunities that go along with it, both in and out of the classroom. Through the study abroad program and the international students' groups, I felt like there was always places to go and things to do.

Overall, however, what I appreciated most about the programme, was the way it facilitated relationships with the full time UCD students, as well as other study abroad students from all over the world. I would whole-heartedly recommend studying abroad at UCD to anyone considering it. It's a definite way to experience an unforgettable semester.



Mollie Enright

Student View

Having left a previous course in Limerick after seven weeks, after one week in UCD I knew it was for me. Now with four years of Animal Science complete I can, without question, say I found my calling. The course is diverse in a way that you gain both practical and theoretical knowledge in a number of key agricultural areas. While having electives gives you the opportunity to study in areas of your choice, the core modules gave me a great insight and understanding into all things agriculture.

My involvement in UCD's agricultural society has not only helped me develop as a person but has allowed me to meet fellow likeminded students. The work carried out by this society raises thousands of Euro for charity each year while at the same time enhances the already vibrant Ag community.



Shane Murphy



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, USA
- Kansas State 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 some of the costs associated with studying and completing Professional Work Experience abroad.

"Certainly for me the best part of the degree was the PWE. Not only did I gain hands on experience on progressive pig, sheep, dairy and beef farms but I also got to work alongside some of Ireland's industry leaders in the Farmers Journal, ICBF, Teagasc and ABP. The experience I gained has enhanced my skill set massively."

- Shane Murphy



DN250 EQS Animal Science - Equine

CAO Points

Average 2016 (Round 1) 495

Minimum 2016 (Round 1) 460

Minimum A Level:

AABa (Excluding Maths Bonus Points)

ABBB (Including Maths Bonus Points)

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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.



Student View Shaileen McGovern

I chose to study Animal Science – Equine in UCD, as I knew the degree would offer me the opportunity to combine my love for science with my love for all things equine. Steeped in science from the beginning, it has given me a strong foundation in the basic sciences and degree specific knowledge; covering everything from animal and crop production right up to equine anatomy, physiology, nutrition, reproduction and genetics. I have learned from the best - from guest lecturers working in the industry to those at the cutting-edge of equine science research, giving me a well-rounded education.

This programme has really opened my eyes and helped me to get to where I am today as a researcher, studying jet-lag in the horse. I would recommend this degree to anyone with a love for horses who doesn't mind getting scientific about the industry!



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 Vermont, 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 FAM Food and Agribusiness Management

CAO Points

Average 2016 (Round 1) 495

Minimum 2016 (Round 1) 460

Minimum A Level:

AABa (Excluding Maths Bonus Points)

ABBb (Including Maths Bonus Points)

**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.*

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

Aideen Burke

Coming from a beef farming background in East Clare, Food and Agribusiness Management was the right course for me, as I have always had a huge interest in business and marketing and the agri-food industry both in Ireland and internationally. I found the science subjects in first and second year challenging but they were necessary to build the foundation for my final years. The highlight of my course was the opportunity to study abroad and the compulsory Professional Work Experience (PWE). In my third year, I studied at Purdue University, Indiana, USA for one semester. I then completed 30 weeks PWE, the majority of which I spent with an animal health company but I also spent time working on a beef and sheep enterprise and with a grain and agricultural merchant. The agricultural science society, AgSoc, is fantastic for organising social events and activities so it was easy to make friends and get to know people from the various other courses in the agriculture school. UCD has a fantastic reputation internationally, it has a friendly and welcoming campus and excellent facilities. I have no hesitation in recommending the Food and Agribusiness Management course in UCD or UCD as a college.



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.



Kansas State University

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 Illinois, USA
- Kansas State 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 some of the costs associated with studying and completing Professional Work Experience abroad.



CAREER OPPORTUNITIES

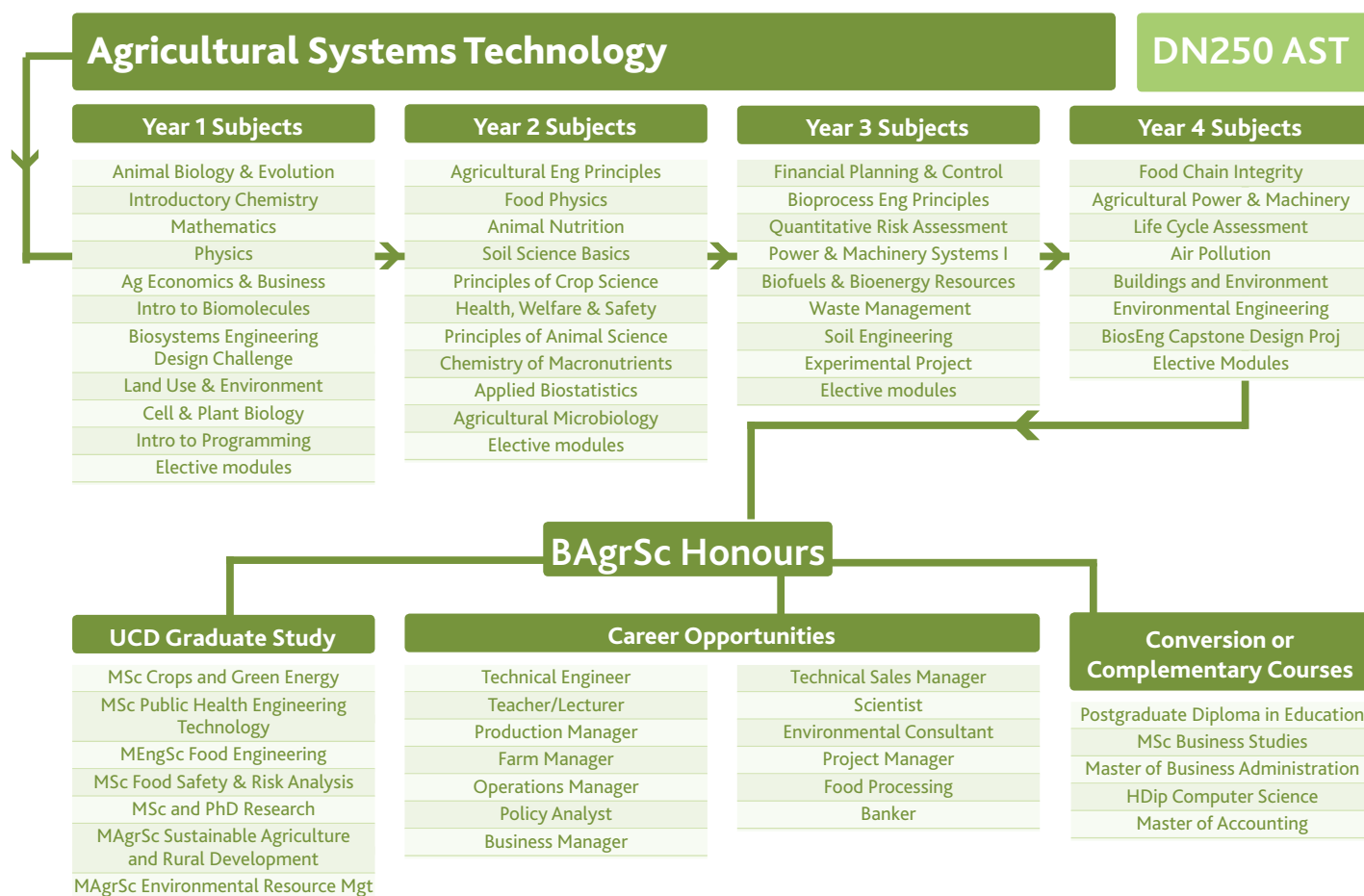
Our graduates have an excellent record in obtaining challenging and fulfilling employment in a variety of sectors, including food, agriculture, business and services, where your professional activities will include enterprise management, technical service and consultancy, management, research, education,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

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

MAIN MENU



Programme Pathway Models

Animal and Crop Production

DN250 ACP

Year 1 Subjects

Animal Biology & Evolution
Physics
Introductory Chemistry
Maths
Ag Economics & Business
Intro to Animal Science
Intro to Crop Science
Information Skills
Cell & Plant Biology
Intro to Biomolecules
Elective modules

Year 2 Subjects

Agricultural Botany
Soil Science Basics
Genetics and Biotechnology
Agricultural Microbiology
Animal Nutrition I
Health, Welfare and Safety
Business Management
Applied Biostatistics
Buildings & Environment
Arable Crop Production
Agricultural Biochemistry
Elective module

Year 3 Subjects

Animal Reproduction
Pests and Parasites
Soil Science Applications
Plant Diseases - Biology
Professional Work Experience
Elective modules

Year 4 Subjects

Grass and Forage Production
Animal Nutrition II
Professional Communications
Students visit UCD's Lyons Research Farm to get hands-on practical experience
Ruminant Animal Production
Non-ruminant Animal Production
Cereal Production
Food & Agricultural Policy
Root & Alternative Crop Production
Elective modules

BAgrSc Honours

UCD Graduate Study

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

Career Opportunities

Agricultural Consultant
Teacher/Lecturer
Production Manager
Farm Manager
Journalism
Agricultural Inspector
Communications Manager
Project Management
Technical Engineer
Policy Analyst
Government Official
Business Manager
Technical Sales Manager
Scientist

Conversion or Complementary Courses

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

MAIN MENU

Animal Science

DN250 ASC

Year 1 Subjects

Animal Biology & Evolution
Introductory Chemistry
Mathematics
Physics
Intro to Biomolecules
Ag Economics & Business
Intro to Animal Science
Information Skills
Cell & Plant Biology
Intro to Crop Science
Elective modules

Year 2 Subjects

Genetics & Biotechnology
Animal Nutrition I
Applied Biostatistics
Business Management
Agricultural Microbiology
Soil Science Basics
Buildings & Environment
Agricultural Biochemistry
Health, Safety & Welfare
Elective modules

Year 3 Subjects

Animal Reproduction
Animal Breeding
Animal Physiology
Animal Genomics
Agri-Env. Issues & Policy
Food Microbiology
Professional Work Experience
Exp Design & Data Analysis
Elective modules

Year 4 Subjects

Animal Health, Behaviour & Welfare
Grass & Forage Production
Animal Nutrition II
Students visit UCD's Lyons Research Farm to get hands-on practical experience
Ruminant Animal Production
Non-ruminant Animal Production
Farm Business Management
Food & Agricultural Policy
Professional Communications
Elective modules

BAgrSc Honours

UCD Graduate Study

MSc Humanitarian Action
MAgrSc Sustainable Agriculture and Rural Development
MAgrSc Environmental Resource Mgt
MAgrSc Agricultural Extension and Innovation
Walsh Fellowship Research Opportunities
MSc and PhD Research Opportunities

Career Opportunities

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

Conversion or Complementary Courses

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

Animal Science - Equine

DN250 EQS

Year 1 Subjects

Animal Biology & Evolution
Introductory Chemistry
Physics
Mathematics
Ag Economics & Business
Intro to Animal Science
Information Skills
Cell & Plant Biology
Intro to Biomolecules
Intro to Crop Science
Elective modules

Year 2 Subjects

Genetics and Biotechnology
Animal Nutrition
Agricultural Microbiology
Soil Science Basics
Agricultural Biochemistry
Principles of Animal Science
Business Management
Equine Industries
Chemistry of Macronutrients
Applied Biostatistics
Health, Welfare & Safety
Elective module

Year 3 Subjects

Animal Reproduction
Animal Breeding
Animal Genomics
Animal Physiology
Agri-Env Issues & Policy
Professional Work Experience
Equine Reproduction and Breeding Management
Scientific Writing & Review
Elective Module

Year 4 Subjects

Equine Anatomy & Physiology of Exercise
Farm Business Management
Animal Health, Behaviour & Welfare
Equine Genetics
Equine Nutrition
Grass & Forage Production
Food & Ag Policy
Exp Design & Data Analysis
Professional Communications
Elective modules

BAgrSc Honours

UCD Graduate Study

MAgrSc Sustainable Agriculture and Rural Development
Walsh Fellowship Research Opportunities
MSc and PhD Research Opportunities
MAgrSc Environmental Resource Mgt
MAgrSc Agricultural Extension and Innovation
MSc Food Safety & Risk Analysis
MSc Humanitarian Action

Career Opportunities

Equine Enterprise Management
Teacher
Marketing Manager
Equine leisure, recreation and tourism activities
Stud Management
Journalism
Lecturer

Equine Geneticist
Business Manager
Communications Manager
Technical Sales Manager
Equine 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
Darley International Student Programme

MAIN MENU

Food & Agribusiness Management

DN250 FAM

Year 1 Subjects

Animal Biology & Evolution
Introductory Chemistry
Physics
Mathematics
Ag Economics & Business
Intro to Food & Agbus Mgmt
Land Use & Environment
Cell & Plant Biology
Intro to Biomolecules
Elective modules

Year 2 Subjects

Business Management
Business Law
Food & Agbus Marketing
Principles of Animal Science
Principles of Crop Science
Applied Economic Analysis
Applied Biostatistics
Chemistry of Macronutrients
Agricultural Microbiology
Health, Welfare & Safety
Elective modules

Year 3 Subjects

Financial Planning and Control
Food Chain Integrity
Principles of Meat Science
Introduction to Econometrics
Professional Work Experience
Elective Modules

Year 4 Subjects

Farm Business Management
Agri-Environmental Economics
Professional Communications
Main Project
Food and Agricultural Policy
IT and E-Business
International Food Marketing
Enterprise Development
Food & Agribusiness Strategy
Social Research Methods
Agri-Taxation
Elective module

BAgrSc Honours

UCD Graduate Study

MSc Humanitarian Action
MAgrSc Sustainable Agriculture and Rural Development
Walsh Fellowship
MSc and PhD Research
MAgrSc Environmental Resource Mgt
MSc Food Safety & Risk Analysis
MSc Food, Nutrition & Health
MSc Food Business Strategy

Career Opportunities

Business Manager
Teacher/Lecturer
Marketing Manager
Farm Manager
Journalist
Project Management
Production Manager
Communications Manager

Technical Sales Manager
Business Development Officer
Government Official
Policy Analyst
Agricultural Consultant
Quality Assurance Officer
Banker
Stockbroker

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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Agriculture and Food Science Centre,
University College Dublin, Belfield, Dublin 4

Tel: +353 (0) 1 716 7194

Email: agandfoodprogrammes@ucd.ie

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University College Dublin Agriculture, Food Science and Human Nutrition

UNDERGRADUATE COURSES

Dairy Business

MAIN MENU



DN252



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 2016 (Round 1) **470**

Minimum 2016 (Round 1) **440**

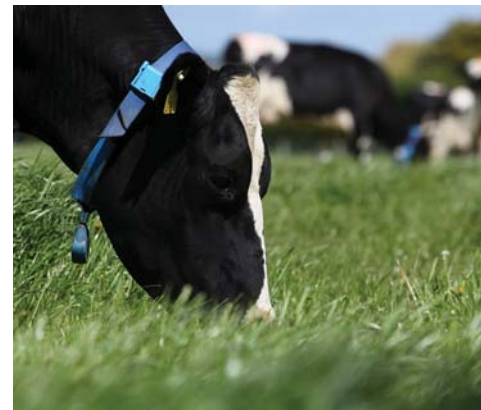
Minimum A Level:

ABBa (Excluding Maths Bonus Points)
BBBb (Including Maths Bonus Points)

**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.*



A section of the Dairy Research and Education Facility at UCD Lyons Research Farm which was officially opened in January 2016



Student View

Paul Murphy

Coming from a dairy farming background, agriculture has consistently played a huge role in my life and when it came to filling out my CAO form UCD was always going to be my first choice. I really enjoyed business subjects in secondary school so felt that this course was the ideal way to fuse and develop my two passions at University level. Upon returning from PWE in New Zealand we had the opportunity to spend our second semester at Moorepark research centre in Cork, an element that is unique to dairy business. The standard of lecturing in Moorepark was top class and through our experience here we had direct access to some of the best farms in Ireland and received excellent tutoring from progressive farmers. Initially it was agriculture that was my true passion starting in UCD however I found the Quinn business school modules hugely enjoyable and it is because of this that I have made the decision not to go home and farm after final year but to use my degree elsewhere.



For me, my graduation from UCD will be bittersweet, while I am delighted to have successfully completed such a distinguished course, UCD has been the source of without doubt the best four years of my life and has introduced me to some of my best friends both from within and outside of the School of Agriculture. My overall experience at UCD has been incredible and I would recommend anyone with an interest in agriculture to consider pursuing their studies here, you won't regret it!

Student View

Aisling Claffey

I choose the Dairy Business programme as I come from a dairy background and felt the course offered the most opportunities for me to expand my horizons within the industry by meeting some of the top figures and farmers in the industry both at home and abroad. The range of agricultural, science and business modules covered over the four years of the programme make this a very comprehensive course whether you are considering entering the food and agribusiness sector or going farming.



One of the main attractions of this degree programme for me was the opportunity to go to New Zealand as part of my Professional Work Experience. The Dairy Business programme is designed to give students the chance to travel to New Zealand for PWE to coincide with the calving and breeding season over there. I gained valuable knowledge and experience working on a large scale dairy farm whilst also getting the opportunity to travel around New Zealand and Australia with my friends. The remaining part of third year was spent in Moorepark Dairy Research Centre. This was a fantastic opportunity to meet some of the top researchers and farmers in the country. Our lectures here covered some of the more practical elements of running a dairy enterprise (Grassland Management, Dairy Nutrition and Reproduction) and gave us the chance to work closely with a mentor farmer who gave us a detailed insight into their business and imparted some of their experience and knowledge with us. Spending the semester in Moorepark was a deciding factor for me to continue my studies and begin a PhD.

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.

"What really stood out for me in this course was the opportunity to travel and work in New Zealand for six months in third year. This placement was without a doubt the highlight of my University experience. I was exposed to a range of techniques, methodologies and a way of life that I had never seen before and it truly was an eye opening and unforgettable experience."

- Paul Murphy



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

MAgrSc Sustainable Agriculture
and Rural Development
 Walsh Fellowship Research
 Opportunities
 MSc and PhD Research
Opportunities
 MAgrSc Environmental Resource
 Mgt
MSc Food Business Strategy
 MAgrSc Agricultural Extension and
 Innovation
MSc Food Safety & Risk Analysis

Career Opportunities

Farm Manager
Lecturer/Teacher
 Agricultural Consultant
Marketing Manager
 Journalism
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



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UNDERGRADUATE COURSES

Agri-Environmental Sciences

MAIN MENU





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 2016 (Round 1) 450

Minimum 2016 (Round 1) 430

Minimum A Level:

ABBc (Excluding Maths Bonus Points)

BBBd (Including Maths Bonus Points)

**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

Wenbo Hu

I love studying in UCD and enjoy living on campus where I'm surrounded with friendly Irish people and loads of interesting social activities. The high reputation of teaching and research in agriculture and the environment was one of my reasons for choosing to study at UCD.

The AES programme offers a broad range of knowledge about farming and sustainable development of the environment. In addition, various field trips in rocky shore, local stream or dairy farm settings combined with lab experiments help me further develop my practical skills in exploration and analysis. Lecturers and staff in the programme office are very approachable and considerate to international students, offering as much assistance and guidance as they can. Most importantly, abundant career fairs are held on campus and they provide me with lots of information about work opportunities and prospects related to my major in Ireland, which informs me about my future and becomes another long-term goal to strive for.



Graduate View

Patricia Torpey

My decision to study Agri-Environmental Sciences at UCD meant that I could combine my love of science with my love of farming and the natural environment. I graduated in 1995 and went on to complete a PhD which was focused on the impact of agriculture on water.

I've been working with the Department of Agriculture, Food and the Marine (DAFM) for the past 17 years and the majority of that time has been spent contributing to and developing policies that improve farming efficiencies, therefore strengthening the relationship between productive farming and conservation of our water environment. These include the Nitrates Regulations, EIA(Agriculture) Regulations, agri-environmental schemes, freshwater pearl mussel conservation, agri-environmental indicators and river basin planning. I collaborate closely with many national stakeholders including Teagasc, the Environmental Protection Agency, Inland Fisheries Ireland, National Parks and Wildlife Service, a number of government departments and farming organisations; I also represent the DAFM internationally at EU and OECD levels. I recently established a 'Water Network' within the DAFM, the aim of which is to guide, co-ordinate and communicate what the DAFM and its Agencies are doing to protect and enhance water. I am involved in monitoring progress under Food Wise 2025, the vision for growth in the agriculture sector in Ireland, to ensure that we are maximising our economic competitiveness, while at the same time ensuring environmental protection.



My degree in Agri-Environmental Sciences was an important stepping stone for me to a very enjoyable and rewarding career in a key sector of Ireland's economy.



University of Connecticut

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, USA
- University of Connecticut, USA
- University of Queensland
- Purdue University, USA
- Michigan State University, USA

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

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
Agricultural Botany
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
Grass and Forage Production
Research Project
Elective Modules

BAgrSc Honours

UCD Graduate Study

MSc Wildlife Conservation & Mgt
MAgrSc Rural Environmental
Conservation and Management
MAgrSc Environmental Resource Mgt
MSc and PhD Research
MAgrSc Agricultural Extension and
Innovation
MAgrSc 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
Science Communications

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

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 2016 (Round 1) 505

Minimum 2016 (Round 1) 490

Minimum A Level:

A*ABa (Excluding Maths Bonus Points)

AAAd (Including Maths Bonus Points)

**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

Keillin Maeda

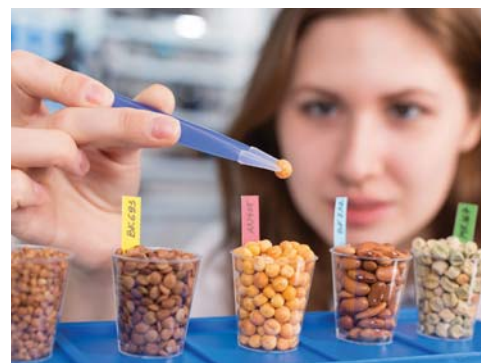
I know how hard it can be when you're choosing a university, there are so many options in lots of cities. But I'm pretty sure none of them will be as great as UCD, one of the best universities in Ireland and with the best programmes.

I chose to study Food Science because it was the closest to my programme (Food Engineering) and I did learn much more than in my university in Brazil.

All of the staff were so kind and lovely, especially those from the UCD international department, who organized the best trips and events ever. I used to participate in as many events as I could; it was a great chance to meet lots of people from all over the world. I studied Food Science in UCD for one year and I can assure it was the best year of my life. The teachers were incredibly well prepared and as English is not my first language, the teachers were very helpful with anything I needed.

The structure of the university is unbelievable and the library is one of the best I've ever seen. I really hope to go back to study a graduate programme one day. I highly recommend the university to other students, besides being in the capital city, it has so much to offer (lots of societies and events) and it has great accommodation options.

I would advise other students to take a good look at UCD as I'm sure it'll be the best option and choice anyone could make.



Student View

Jonathan Magan

I chose the Food Science programme at UCD as it offered a strong scientific and research-based approach to the diverse field of food production, in which I had long been interested. The course incorporates a broad range of modules, initially covering general scientific subjects such as chemistry and physics and gradually becoming more specific to food production itself, with subjects such as dairy products, meat products, fermented foods and food process technology. I have thoroughly enjoyed the coursework to date, which blends project work, laboratory work and group work extremely well.

I carried out my 5 months of third year professional work experience in the quality assurance department of a dairy production company specialising in UHT products and ice cream, which I found to be a fantastic introduction to the industry and a means to apply the knowledge previously gained from the course, while also gaining knowledge which would prove invaluable in my final year. A fourth year research project is also offered, which I have found to be an excellent insight into potential research roles within the industry.

I would certainly recommend this degree programme to anyone with an interest in food production as it would prepare them for a broad range of roles, such as in quality assurance, product development, food safety, nutrition, microbiology and production technology, over a similarly broad range of food industry sectors. The food production industry is set to expand significantly in Ireland in the coming years and this course provides the perfect preparation for anyone wishing to enter it, through the help of excellent teaching staff who are all extremely engaging and approachable.



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 some of the 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 Clinical Nutrition and Dietetics
MSc Food Regulatory Affairs
MSc Food Safety & Risk Analysis
MSc Food Business Strategy
MSc Research and PhD Options
MAgrSc Sustainable Agriculture and Rural Development
MAgrSc Environmental Resource Mgt

Career Opportunities

New Product Development
Teacher/Lecturer
Quality Assurance Officer
Food Safety Inspector
Marketing Manager
Nutritionist
Food Technologist
Regulatory Affairs Specialist

Researcher
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

MAIN MENU



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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 2016	(Round 1) 540
Minimum 2016	(Round 1) 530
Minimum	A Level:
A*A*Ac (Excluding Maths Bonus Points)	
A*AAa (Including Maths Bonus Points)	

**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

Doireann Sheridan

My choice to study Human Nutrition as a degree stemmed from my love of science as a subject in school and my interest in health, particularly how our diet can influence this. This course has given me the opportunity to study nutrition in depth through a range of really interesting and diverse modules, with top class lecturers.



There are countless career paths which you can pursue with a BSc in Human Nutrition across many sectors such as public health, industry, and research, to name but a few. It is a particularly exciting field of study as it is constantly evolving due to continuous emerging research. Nutrition is a very topical subject at the moment, with current health epidemics in obesity and its related diseases. Therefore, there is a high demand for graduates of this course.

Being a small course of roughly 28 students, I found it easy to make friends, which was great for me, being the only student from my school in Connemara attending UCD in my first year. It is a tight-knit course, but as part of the School of Ag and Food Science you are part of a bigger and exciting community within the college.

In addition to an academic education, UCD has so much to offer regarding student experience. There are clubs and societies to suit everyone! During my time at UCD I have been involved in both sports and societies. This has significantly enhanced my time as a UCD student and I would advise anybody attending UCD to do the same.



Student View

Jennifer Campbell

Over the course of four years the Human Nutrition degree in UCD offers students the opportunity to explore the diverse array of disciplines within the area of Human Nutrition, from food safety and regulation, to clinical and public health nutrition, this degree course is all encompassing and you are sure to find something to suit your interests. The comprehensive nature of the programme means that upon completion, not only do students know which aspects of nutrition they wish to pursue, but are equipped with the skills and knowledge to enter into several different fields. For example, in my class, graduates have gone on to work in the food industry in the areas of quality assurance, food technology, and research and development, while others are continuing their studies in global public health, dietetics, and sports nutrition.



As part of the Human Nutrition course, the entire third year consists of a professional work placement, many of which provide the opportunity to go abroad. I spent my work placement in the University of East Anglia in Norwich, England in a research assistant position – a definite highlight of the programme for me! This year away from lectures and tutorials, provides an excellent opportunity to put the knowledge and the skills you've learned into practice. Working alongside top Professors and researchers in the field, the experience gained during the placement is invaluable, and provides the opportunity to network and develop new skills that will benefit you when applying for future roles and when conducting your own research project in final year.

For students with a strong interest in food, health and science, biological sciences in particular, I would highly recommend this programme.

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 best things about this degree is the 10-month work placement. I worked abroad for this as part of a nutrition research team who were working on dietary intervention studies. It was an amazing experience and gave me a clear idea of the type of career I want to pursue on graduating."

- Doireann Sheridan

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 Clinical Nutrition and Dietetics
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 Education
MSc Business Studies
Master of Business Administration
Master of Accounting



UCD Agriculture and Food Science Programme Office

Agriculture and Food Science Centre,
University College Dublin, Belfield, Dublin 4

Tel: +353 (0) 1 716 7194

Email: agandfoodprogrammes@ucd.ie

Web: www.ucd.ie/agfood

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Forestry



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 2016 (Round 1) **340**

Minimum 2016 (Round 1) **265**

Minimum A Level:

CCD (Excluding Maths Bonus Points)

CCcc (Including Maths Bonus Points)

**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

Darragh Fadden

Initially, I chose forestry because I had an interest in wildlife and the environment. However, after studying forestry for a number of years, the complexity of the subject became more apparent. For example, with the current concern for global climate change, forestry is now more focused on both the environmental and social aspects of forest management, as well as economics.

Forestry, as I see it, also has a bright future and will continue to expand and develop due to the multiple uses that forests provide such as timber production, recreation, biodiversity conservation and carbon sequestration. The forestry course in UCD provides a deep academic understanding of the current forestry industry in Ireland, as well as internationally, and also provides practical opportunities to develop this understanding further. For example, in Stage 3, students are required to carry out Professional Work Experience for 20 weeks in Ireland or abroad. I was fortunate to work in Iceland as a forest worker for this time, where I was based in a remote forest plantation. This experience was invaluable and helped to put previously studied academic subjects into context.

Overall, forestry in Ireland and abroad will continue to develop and expand, and I believe that it has a vital part to play in the future management of our planet.

Student View

Mary Clifford

I come from a farm forestry background and have been interested in the Irish forestry industry from a young age. When it came to filling out my CAO application, Forestry in UCD was an obvious first choice. The forestry degree covers a broad range of science and forestry based modules and prepares students for careers in forest research, forest planning, forest management, and beyond.

The first year of the degree focuses mainly on general science subjects, second and third year concentrates on the fundamentals of forestry. As part of third year, my PWE provided me an opportunity to work with Coillte Teoranta here in Ireland and with the Icelandic Forest Service (Skógrækt ríkisins). The fourth and final year of the forestry degree is very assessment and project based. This is an opportunity to demonstrate the practical application of the theory covered during the first three years. As part of final year students also carry out a research project, this is an opportunity to pick a research area or aspect that is of interest to you.

I would highly recommend this degree to anyone looking for a strong academic and scientific background in forestry. The forestry department in UCD is a small and tightknit faculty, the help, guidance and camaraderie within the department is fantastic. When it comes to applying for jobs in the forestry industry, the UCD degree is highly regarded.



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 some of the 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

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
Agricultural Botany
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
MAgrSc Environmental Resource Management
MAgrSc Rural Environmental Conservation & Management
MAgrSc Sustainable Agriculture and Rural Development
MSc Humanitarian Action

Career Opportunities

Forester
Teacher
Technical Advisor
Forest Inspector
Forest Development Officer
Purchasing Manager
Operations Manager
Harvesting Manager

Consultancy
GIS Analyst
Scientist
Entrepreneur
Pricing Analyst
Marketing Executive
Government Official
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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Horticulture, Landscape and Sportsturf Management



University College Dublin Agriculture, Food Science and Human Nutrition

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 2016 (Round 1) 390
Minimum 2016 (Round 1) 285

Minimum A Level:

CCDc (Excluding Maths Bonus Points)
CCaa (Including Maths Bonus Points)

**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.*



An image of the UCD Evolution of Land Plants Garden that received a Gold Medal for Best Concept Garden at the Bloom Festival in 2016.

Staff View Caroline Elliott-Kingston

Dr Caroline Elliott-Kingston is Lecturer in Horticulture and Crop Physiology. She is passionate about plants and has worked in horticulture, botany and garden design. She researches the impact of environmental factors on plant performance. Dr Elliott-Kingston co-designed an educational garden for Bloom 2016 which won a Gold Medal and Best in Category Award. "As a lecturer I was thrilled to be invited to design an outdoor classroom, which is a new and innovative method for teaching plant science. In Horticulture at UCD, we use diverse methods of teaching including formal lectures, laboratory and field practicals, individual and group scenario-based projects, and visits to industry."



Horticultural education and research are of immense importance nationally and internationally to solve significant real-world issues, such as improving sustainable food production, understanding environmental issues and addressing climate change. In this degree, the science of plant growth is combined with an extensive knowledge of practical horticultural skills.

One of the most rewarding aspects of the degree is Professional Work Experience, undertaken at home or abroad. The final year research project develops research and transferable skills.

Student View Eva Ziggiotto

The aspect that I liked the most of my degree is the fact that horticulture encompasses so many different areas, as many as the attributes and uses that one can find in plant cultivation: food production, floriculture, landscaping, amenity horticulture, sportsturf, and post-harvesting physiology, just to name a few. The science learned in my first two years provided me with a robust base for assessing current practices in the industry and fully appreciate their impact on nature, economy and sustainability.



In my third year I was chosen by the Department of Agriculture for a Professional Work Experience internship in their Research Laboratories in Backweston, Celbridge, Co. Kildare. I can only define that experience as a key asset in my curriculum, as it allowed me to explore in detail the direct applications of my first three years of study. I was involved with the Plant Health Division, where I worked with pathogens responsible for the damage of many species widely used in amenity horticulture. I found that the critical approach taken during the PWE gave me analytical tools to read my surroundings and to identify standing issues as well as good solutions. This skill, coupled with the theoretical knowledge gained, is probably one of the aspects that I am most grateful for and is a powerful tool for my future career.

As a Mature Student the prospect of going back to college was quite daunting but the supportive environment in the School of Agriculture and Food Science and the genuine interest of the staff in assisting my development throughout the course was simply inspiring.



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



Texas A & M University

Professional Work Experience and Study Abroad Opportunities

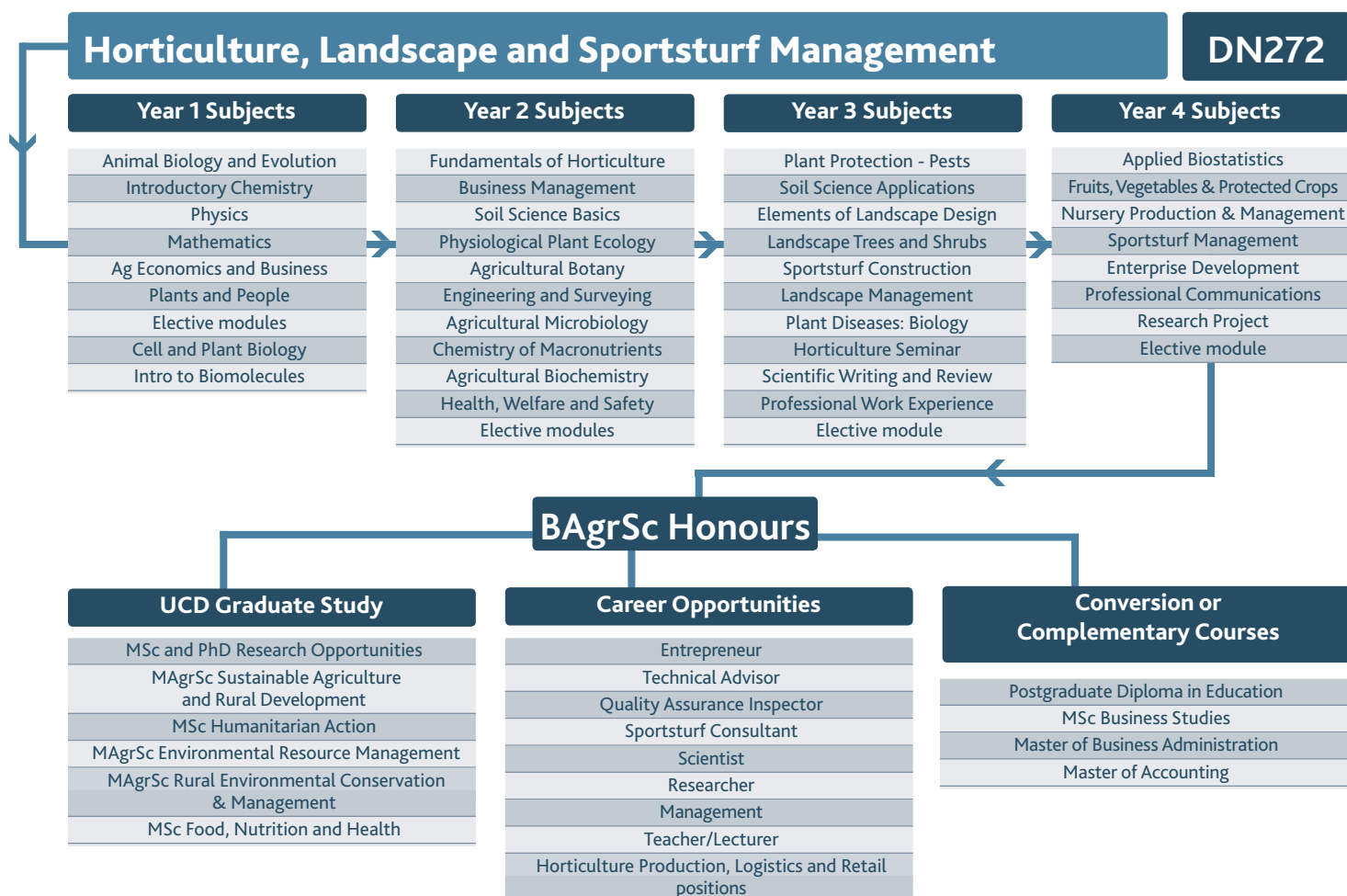
A five month professional work experience (PWE) placement is integral to your Horticulture, Landscape and Sportsturf Management degree programme and is an invaluable learning and networking opportunity. Popular options include placements in Ireland, Europe, North and South America, New Zealand and Australia.

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

- University of California, USA
- Cornell University, USA
- Iowa State University, USA
- University of Maryland, USA
- Texas A & M University, USA

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

CAREER PATHWAY



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