

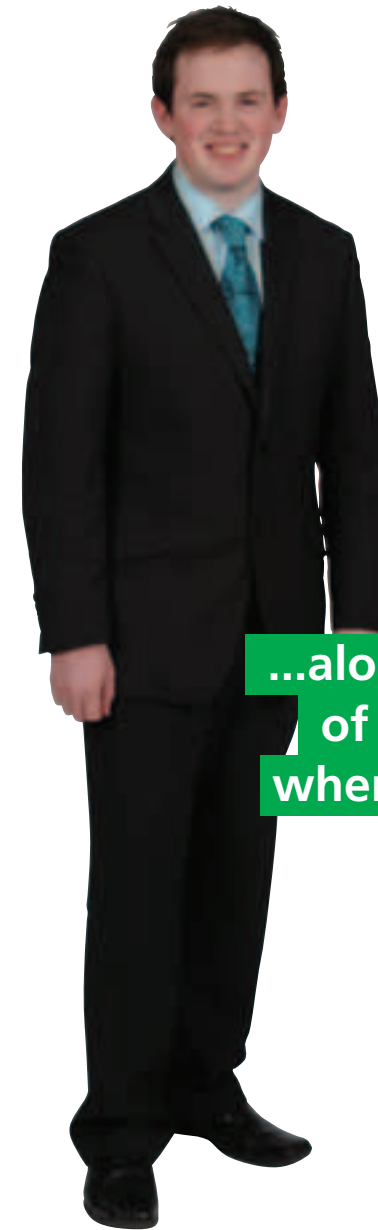


Agriculture

- **BSc (Hons) in Agricultural Technology and BSc (Hons) in Agricultural Technology with Professional Studies**
- **Higher National Diploma in Agriculture**
- **Higher National Certificate in Agriculture**

In Northern Ireland farming and its related service and processing industries provide over 54,000 jobs and produce a gross output of £1.2 billion per year. There are many complex issues facing the agricultural industry, including global competitiveness, cross compliance and the CAP review and it is important that those considering a career in the industry are capable of adopting and embracing new technologies, policies and marketing opportunities.

There are rewarding employment opportunities for students who have completed recognised qualifications within the land-based sector. Employers are continually seeking graduates with a sound grasp of new developments and a proven ability to manage commercial businesses and enterprises. At Greenmount Campus, our agriculture programmes are tailored to produce such graduates and have repeatedly received the endorsement of the industry.



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Career profile: Mark Beattie

"When I finished my Higher National Diploma I went to work with a animal feed manufacturer not far from my home in Tyrone. My career path soon changed and I am now an agricultural adviser to a Member of the European Parliament for Northern Ireland. During my third year at Greenmount, I was elected President of the Student Council. I was the students' representative and I had to chair meetings and help organise the charity links for the council, like Children in Need and the UFU Africa Appeal. During my second year I went on placement to New Zealand working in the Canterbury Plains along with other Greenmount students. I'm glad I worked abroad during my placement as it opened so many avenues for me. This was one of the most enjoyable aspects of my time at Greenmount, along with the practical nature of the course itself; it's a place where you can't help but learn."

Agriculture careers

The agri-food industry is very competitive and is constantly changing to react to consumer demand and technological innovations. New technological developments and quality control measures are increasingly demanding graduates who have a clear understanding of agricultural and food production systems.

Sales/Marketing representatives

Employment opportunities exist in a wide variety of industries ranging from animal feed companies to agrochemical and fertilizer companies. Graduates need to have a good understanding of their customers' needs and the products they are selling. Service industries such as insurance companies or machinery dealerships occasionally employ people with agricultural backgrounds to provide a better service to their farming clients. This sector seeks graduates with good initiative and well developed interpersonal skills.

Teachers/Lecturers

Graduates may find interesting and rewarding careers in this area. College lecturers normally require Degree level qualifications, a good technical knowledge of farming and the industry and the ability to interpret data and communicate information to their audience.

Farmers/Farm managers

Some graduates return to farming either as owners or managers. Successful farmers need to be technically and practically competent and be able to make sound business decisions in a changing environment. They also need to appreciate consumers' requirements for safe, wholesome, high quality food produced in an environmentally-friendly manner.

Consultants/Technical advisers

Graduates employed in this sector require a sound technical background so that they can help farmers identify and deal with technical problems and advise on the options for the development of farm businesses. Good communication skills, an entrepreneurial, innovative outlook and the ability to advise individuals and companies on the impact of proposed actions are very important in this job area.

Journalists

Agricultural journalism is a rewarding career for anyone wishing to combine their knowledge of agriculture and current affairs with writing skills in producing articles for newspapers and journals. Being an agricultural journalist is all about meeting deadlines and looking at new and different ways to cover a story. The variety of agricultural newspapers, journals and magazines which exists ensures a diverse range of

job opportunities in this sector. The opportunity to travel and meet people across the industry is provided through this career route.

Researchers

Continuous research is vital if any industry is to progress and this applies very much to the agriculture sector. Interesting and rewarding careers exist in this area for those who enjoy scientific investigation, research design and implementation, or who have an aptitude for statistical research and forecasting based on industry trends.

Farm liaison representatives

Food processing companies employ farm liaison representatives to strengthen links with the farmers who supply the raw materials. They must have a sound technical knowledge of the relevant agricultural enterprise, an understanding of the processing operation and good negotiation and communication skills. Farm liaison representatives may be involved in marketing, identifying and selecting new suppliers and updating existing producers on changing technical requirements.

Students enter the agricultural industry at different levels depending on their qualifications and experience. Our graduates now hold many senior positions in the agricultural industry.

The Greenmount Estate farms are the focus for the educational activities at the Campus. They are an excellent practical learning resource for students undertaking Higher Education programmes in agriculture. The Campus Farm comprises the Farm Development Centre (200 hectares) and the Livestock Development Centre (1,100 hectares). These two Centres provide a unique resource for students to adopt a 'learning by doing' approach to their studies. At Greenmount Campus, vocational elements are integrated into the courses to allow students to put into practice what they have learned in the lecture theatre. The 'learning by doing' concept is based on giving students responsibility to take real management decisions for selected enterprises within campus units and farms. Where possible, students perform all the duties involved in managing an enterprise, assess performance and implement management changes to help improve overall performance. Greenmount now operates three student learning projects within its Higher Education programmes.

C.R.E.A.M.

(Co-operative for Real Education and Agricultural Management) Students manage this unique project which comprises 30 high genetic merit dairy cows. Currently this herd is one of the top yielding recorded herds in Northern Ireland.

U.P.L.A.N.D.S.

(Uniting the Production of Livestock and Nature Development for Sustainability) Students on the U.P.L.A.N.D.S project have responsibility for 1,000 ewes and 100 suckler cows on the 1,000 hectare Hill Farm, which is managed in an environmentally positive and sustainable manner. Students analyse farm financial performance and contribute to future management and policy decisions. Students also are involved in suckler herd management and beef husbandry at the college's Livestock Development Centre.

CROPS

Each year the Farm Development Centre grows approximately 50 hectares of arable crops. While cereals and potatoes are the main crops grown, energy crops, such as industrial oilseed rape and willow are also grown. Students practise many of the arable skills such as cultivating, planting, disease identification and harvesting as well as electronic field scanning and yield mapping.

Agriculture facilities



BSc (Hons) in Agricultural Technology (3 years)**BSc (Hons) in Agricultural Technology with Professional Studies (4 years)**

This course is jointly provided by Queen's University, Belfast and CAFRE at Greenmount Campus. The first and second years of the programme are spent at Greenmount Campus, followed by a period of work placement, with the final year based at Queen's University, Belfast.

Fact file:**How to apply:**

UCAS course code:
Q75 D470 (4 year),
Q75 D473 (3 year)

Course duration:

3 or 4 years including work placement

Course location:

Greenmount Campus (Years 1 and 2) and Queen's University (Final year)

Contact details:**Course Manager:**

Ciaran Mulholland

Telephone:

028 9442 6659

Email:

ciaran.mulholland@dardni.gov.uk

The teaching programme has been developed in consultation with employers, industry representatives and academics to offer students a combined curriculum of formal instruction and practical experience, aimed at enhancing their employability. This Honours Degree is available in two pathways; the three-year course incorporates a four-month work placement whilst the four-year Professional Studies option allows students to take a one-year work placement.

The aim of the course is to develop professional, technical, management, interpersonal and problem solving skills to prepare graduates for successful careers in the agriculture and ancillary industries. The partnership arrangement between CAFRE and Queen's University, Belfast capitalises on the strengths of both institutions to provide a course which is academically challenging but also focused on the application of business, economic and scientific principles.

Bursaries

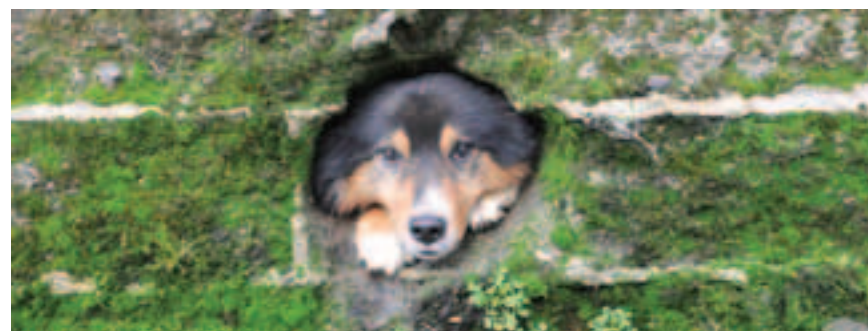
A number of bursaries each worth £1000 are available to students studying on Higher Education courses at CAFRE (see page 23).

Placement

Students spend four months (3 year programme) or one year (4 year programme) on work placement. Students are responsible for arranging their own work placements.

Progression opportunities and career destinations

Graduates can progress to appropriate postgraduate studies or research. Agricultural graduates are employed in a range of managerial posts in government services, agricultural banking, consultancy, research, education and training, ancillary industry or farm management. The course is designed to provide students with the flexibility to adapt to a changing job market and each year a number of graduates obtain employment outside the sector.

**BSc (Hons)****Course content****Year 1**

- Animal husbandry
- Animal science
- Crop husbandry
- Enterprise technology
- Information technology and core skills
- Introduction to farm business management
- Mechanisation and farm buildings
- Plant science

Year 2

- Agriculture and the environment
- Crop production
- Diversification and alternative land use
- Enterprise management
- Farm business management
- Farming and environmental management
- Grassland management
- Livestock production 1
- Livestock production 2
- Supply chain management and marketing
- Work placement (3 year option)

Year 3

- Professional Studies work placement option

Year 3/4

- Advances in crop and animal technology
- Animal health and welfare
- Business innovation and entrepreneurship
- Current issues in food safety and nutrition
- Environmental assessment
- Environmental management and policy
- Environmental sustainability
- Governance and economy in the EU
- Introduction to EU law.
- Professional Studies (4 year option)
- Project (3 year option)

Entry requirements

Three A2 level Grade Bs or higher including a science subject.

The Admissions and Access Service at Queen's University Belfast are responsible for the entry requirements to this course; for further details please visit www.qub.ac.uk/ado.

Practical experience

All candidates are required to have at least three months relevant practical farming experience.

Student profile:
Aimee Louise Leslie

"I chose the Agricultural Technology degree because of the applied learning approach and the range of subjects. I have chosen CROPS as my Enterprise Management option and hope to continue onto the UPLANDS option later. I was lucky enough to receive a bursary from the Tyrone Farming Society which will help finance my studies and my placement year, hopefully in Asia."



The Higher National Diploma (HND) course aims to help students develop the production, management and marketing skills required to work in the agricultural industry. Successful students will be well prepared for employment in production agriculture, ancillary industries or government service.

Fact file:

How to apply:

UCAS course code: 004D

Course duration:

3 years including work placement

Course location:

Greenmount Campus

Contact details:

Course Manager:

Ciaran Mulholland

Telephone:

028 9442 6659

Email:

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The course places an emphasis on 'learning by doing' and personal development training to ensure that graduates have the technical and life skills which are demanded by the industry.

Bursaries

A number of bursaries each worth £1000 are available to students studying on Higher Education courses at CAFRE (see page 23).

Placement

A minimum of 24 weeks is spent on a farm-based placement with a further twelve weeks (minimum) placement in industry.

Progression opportunities and career destinations

Students who meet the necessary requirements may progress onto the BSc (Hons) in Agricultural Technology course run in partnership with Queen's University, Belfast.

The course has been developed to meet industry needs with a particular emphasis on developing initiative and the flexibility to adapt to different employment situations. There are career opportunities in farming and enterprise management as well as marketing, sales, contracting and consultancy. The College maintains close links with farmers and industry and this provides students with an excellent opportunity to develop contacts with potential employers.



Course content

Students must complete 16 units from a range of core and optional units. There is a choice of modules available in Year 3.

Year 1

- Agricultural systems
- Animal science
- Applied environmental studies
- Enterprise management 1
- Grass and forage crop production
- Mechanisation
- Plant and soil science
- Principles of land based business

Year 2

- Work placement

Year 3

- Agricultural business environment
 - Agricultural marketing
 - Beef and sheep production systems*
 - Dairy production systems*
 - Enterprise and financial management
 - Enterprise management 2
 - Human resource management*
 - Investigative project
 - Mechanisation of crop production*
 - Mechanisation of livestock production*
- * optional modules

Enterprise management

A vital aspect of the educational experience at CAFRE is the student learning project. Students are expected to play an active role in the operation, organisation and supervision of an enterprise at the college. As part of this, students present management results to a Board comprising industry representatives, agricultural technologists and teaching staff.

Entry requirements

Students should normally have 100 UCAS tariff points at A2 level plus four appropriate GCSEs or equivalent, including English and Mathematics at Grade C or above.

A level Chemistry or Biology are preferred but Mathematics, Physics, Accounting, Economics, Computing, Home Economics, Business Studies, Geology, or Geography are acceptable if a Grade C or higher has been achieved in Biology at GCSE level.

For other qualifications, please refer to table on page 27 or consult the UCAS website http://www.ucas.ac.uk/students/ucas_tariff/qualifications

Practical experience

Applicants must also have at least three months practical farming experience.

Higher National Diplomas are currently being reviewed and may be replaced with Foundation Degrees. Please refer to our website for the latest course information.

Student profile: David Armstrong

"I'm from a dairy farm in Co. Tyrone so the obvious option choice for me was to study the CREAM Enterprise management module. I'm interested in going to the USA during the work placement year and I'm grateful to the Northern Bank for the Bursary I received which will help finance my placement. I like the hands-on aspect of the learning offered at CAFRE and I'm looking forward to the final year when I will get the opportunity to supervise the first year students on the CREAM project."



The Higher National Certificate (HNC) in Agriculture is an applied course delivered on a part-time basis to suit people working in the agriculture and ancillary industries. The course aims to develop the production, business and marketing skills required to successfully pursue or develop careers within the agricultural industry.

Fact file:

How to apply:

Direct to CAFRE

Course duration:

Minimum of 2 years part-time

Course location:

Greenmount Campus

Contact details:

Course Manager:

Ciaran Mulholland

Telephone:

028 9442 6659

Email:

ciaran.mulholland@dardni.gov.uk

Placement

If you choose to complete the optional industry experience unit, your previous work experience may be eligible for accreditation.

If previous work experience does not meet with work experience placement requirements, then a 48 week placement should be completed, similar to the requirements for Higher National Diploma.

Progression opportunities and career destinations

Completion of a further six units can lead to the achievement of a Higher National Diploma in Agriculture which in turn can lead to Degree level courses. Depending on the units selected, the HNC will cover much of the theory for students wishing to provide the evidence for several NVQ Level 4 qualifications.

The HNC is aimed at developing the business management and technical knowledge of people already working in, or with an interest in the agricultural industry.



Course content

Students must complete ten units, including the four core units:

- Agricultural business environment
- Agricultural systems
- Mechanisation
- Principles of land based business

A further six units are selected from the following list of optional units:

- Agricultural marketing
- Animal science
- Applied environmental studies
- Beef and sheep production systems
- Combinable crop production
- Dairy production systems
- Enterprise and financial management
- Enterprise management
- Grass and forage crop production
- Human resource management
- Industry experience
- Investigative project
- Mechanisation of crop production
- Mechanisation of livestock production
- Plant and soil science

Entry requirements

Students should normally have 100 UCAS tariff points at A2 level plus four appropriate GCSEs or equivalent, including English and Mathematics at Grade C or above.

A level Chemistry or Biology are preferred but Mathematics, Physics, Accounting, Economics, Computing, Home Economics, Business Studies, Geology, or Geography are acceptable if a Grade C or higher has been achieved in Biology at GCSE level.

For other qualifications, please refer to table on page 27 or consult the UCAS website
http://www.ucas.ac.uk/students/ucas_tariff/qualifications

or
At least three years industry experience.

Industrial experience and prior qualifications of applicants who have worked for a minimum of three years are taken into account and for some modules it may be possible to apply for Accreditation of Prior Learning (APL).

Applications from prospective students with work experience directly related to the learning objectives of the course are particularly welcome.

Higher National Certificates are currently being reviewed and may be replaced with Foundation Degrees. Please refer to our website for the latest course information.

