



DEPARTMENT OF SCIENCE



If you wish to investigate, understand and shape the world we live in then the Department of Science offers you a choice of programmes that will allow you to do this. Whatever your passion, our practically focused programmes in areas such as Agriculture, Bioscience, Food Science and Nutrition, Pharmaceutical and Medicinal Science, Veterinary Nursing and others will ensure that you have the knowledge and practical skills required to build a future. Studying a programme in the Department of Science leads to exciting and varied career opportunities both at home and abroad.

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CAO Course Listing

CAO Code	CAO Course Title
LY818	Bachelor of Science (Hons) with Degree Award Options: Bioanalytical Science or Food Science & Nutrition or Pharmaceutical & Medicinal Science
LY828	Bachelor of Science (Hons) in Agriculture with Degree Award Options: Animal & Crop Science or Environmental Management
LY817	Bachelor of Science in Bioscience
LY837	Bachelor of Science in Food Science & Nutrition
LY867	Bachelor of Science in Pharmaceutical & Medicinal Science
LY847	Bachelor of Science in Veterinary Nursing
LY877	Bachelor of Science in Agriculture
LY806	Higher Certificate in Science in Pharmacy Technician
LY816	Higher Certificate in Science in Dental Nursing
LY826	Higher Certificate in Science in Health Science with Physiotherapy Studies
LY836	Higher Certificate in Science in Health Science with Occupational Therapy Studies
LY846	Higher Certificate in Science in Health Science with Dietetics Studies

Science

(Common Entry)

**Bachelor of Science (Hons)
with Degree Award Options:
Bioanalytical Science or
Food Science & Nutrition or
Pharmaceutical & Medicinal
Science**

National Framework: Level 8
CAO Code: LY818
Duration: 4 years
Number of Places: 32
Reserved Quota: 10 - QQI FET Applicants

Points in Recent Years:

Year	Final	Median
2018	307	369
2019	302	371

Is this course for you?

This course is designed to allow for broader entry to the undergraduate Level 8 Science programmes of: Bioanalytical Science, Food Science and Nutrition or Pharmaceutical and Medicinal Science at LYIT. This course will give you the opportunity to have a year to decide which area of science appeals to you and to then pursue this in years 2 to 4. At the end of year 1, subject to the availability of places, you can decide which course to choose from one of the following: Bioanalytical Science, Food Science and Nutrition or Pharmaceutical and Medicinal Science.

Minimum Entry Requirements:

Minimum Six O6/H7

Maths O6/H7

English or Irish O6/H7

At least two H5



What will I study?

SCIENCE (COMMON ENTRY) FIRST YEAR MODULES				
	Semester 1	Credits	Semester 2	Credits
Year 1	Introductory Biology (M)	5	Animal & Plant Biology (M)	5
	Chemistry 1 (M)	5	Chemistry 2 (M)	5
	Physics 1 (M)	5	Physics 2 (M)	5
	Mathematical Skills for Science 1 (M)	5	Mathematical Skills for Science 2 (M)	5
	Transferable Skills 1 (M)	5	Communications & IT Skills (M)	5
	Laboratory Skills and Safety (M)	5	Science and Society (M)	5

(M) = Mandatory

Degree Award Option: Bioanalytical Science

	Semester 1	Credits	Semester 2	Credits
Year 2	Data Methods for Science (M)	5	Instrumentation 2 (M)	10
	Instrumentation 1 (M)	10	Biomolecules & Disease (M)	5
	Biochemistry (M)	10	Fundamentals of Microbiology (M)	10
	Ecosystems (M)	5	Anatomy & Physiology (M)	5
Year 3	Genetics & Recombinant DNA (M)	10	Applied Immunology (M)	10
	Applied Microbiology & Clean Room Technology (M)	10	Environmental Analysis (M)	10
	Research Skills (M)	5	Quality & Regulations (M)	5
	Pharmacology (M)	5	Cell Culture (M)	5
Year 4	Analytical Science (M)	10	Research Project (M)	10
	Molecular Biology (M)	10	Biopharmaceutical Processes (M)	10
	Research Project Design (M)	5	Medicinal Protein Chemistry (M)	5
	Biotechnology (E)	5	Operational Management & Lean Techniques (M)	5
	Medicinal Chemistry (E)	5		

(M) = Mandatory, (E) = Elective

Career opportunities

Successful graduates find themselves working in the following sectors:

- Biopharmaceutical
- Environmental
- Education

Graduate careers typically include:

- Biology Teacher
- Quality Manager
- Biopharmaceutical Scientist

Follow-on courses

- Masters (by research)
- Masters and Doctoral degrees in institutes and universities at home and abroad

Degree Award Option: Food Science & Nutrition

	Semester 1	Credits	Semester 2	Credits
Year 2	Food Technology 1 (M)	10	Human Nutrition (M)	10
	Data Methods for Science (M)	5	Food Chemistry (M)	5
	Biochemistry (M)	10	Anatomy & Physiology (M)	5
			Fundamentals of Microbiology (M)	10
	Food Instrumentation 1 (M)	5	Food Instrumentation 2 (M)	5
Year 3	Food Technology 2: Milk & Meat Technology (M)	10	Food Technology 3: Cereals, Fruit & Vegetables (M)	10
	Food Microbiology (M)	10	Advanced Food Chemistry (M)	10
	Research Skills (M)	5	Quality Management (M)	5
	Dietary Evaluation (M)	5	Sports Nutrition (M)	5
Year 4	Food Fermentation (M)	10	Research Project (M)	10
	Food Product Development & Sensory Evaluation (M)	10	Clinical Nutrition & Health Promotion (M)	10
	Food Safety (M)	5	Food Processing (M)	5
	Research Project Design (M)	5	Operation Management & Lean Technologies (M)	5

(M) = Mandatory

Career opportunities

Successful graduates find themselves working in the following sectors:

- Food Industry
- Government Agencies
- Product Development

Graduate careers typically include:

- Food Product Developer
- Quality Manager
- Food Technologist

Follow-on courses

- Masters and Doctoral degrees (by research) in institutes and universities at home and abroad



Degree Award Option: Pharmaceutical & Medicinal Science

	Semester 1	Credits	Semester 2	Credits
Year 2	Biochemistry (M)	10	Pharmaceutical Chemistry (M)	5
	Organic Chemistry (M)	5	Physical/Inorganic Chemistry (M)	10
	Instrumentation 1 (M)	10	Instrumentation 2 (M)	10
	Data Methods for Science (M)	5	Medicinal Drug Discovery (M)	5
Year 3	Pharmaceutical Analysis (M)	10	Medicinal Drug Analysis (M)	10
	Pharmaceutical Microbiology & Cleanroom Technology (M)	10	Medicinal Science of Natural Products (M)	5
	Research Skills (M)	5	Industrial Processes & Medical Devices (M)	10
	Pharmacology (M)	5	Quality & Regulations (M)	5
Year 4	Analytical Science (M)	10	Research Project (M)	10
	Research Project Design (M)	5	Medicinal Protein Chemistry (M)	5
	Toxicology (M)	10	Pharmaceutical Processes (M)	10
	Medicinal Chemistry (M)	5	Operation Management & Lean Techniques (M)	5

(M) = Mandatory

Career opportunities

Successful graduates find themselves working in the following sectors:

- Pharmaceutical
- Medical Devices
- Government Agencies

Graduate careers typically include:

- Pharmaceutical Scientist
- Analytical Chemist
- Quality Manager

Follow-on courses

- Masters and Doctoral degrees (by research) in institutes and universities at home and abroad



Agriculture (Common Entry)

**Bachelor of Science (Hons)
in Agriculture with Degree
Award Options: Animal & Crop
Science or Environmental
Management**

National Framework: Level 8

CAO Code: LY828

Duration: 4 years

Number of Places: 32

Reserved Quota:

2 - Mature Applicants

2 - QQI FET Applicants

**2 - Internal Progression
from Access Studies**

1 - HEAR

1 - DARE

Points in Recent Years:



Year	Final	Median
2018	301	329
2019	300	342

Is this course for you?

The BSc Honours in Agriculture prepares students for a career in the Agriculture and Agri-Business sectors. The programme will provide graduates with key skills in Animal Husbandry, Animal Science, Soil and Plant Science, Environmental Science and Agriculture Business Management and Marketing. The course incorporates a substantial work placement in semester 2 of year 2 where the students will gain valuable work place experience. Year 3 expands and builds upon the knowledge obtained in years one and two. Year 4 allows students to focus on one of two disciplines; Animal and Crop Science or Environmental Management. On completion of the programme graduates will have attained key skills and competencies to allow them meet the needs of a dynamic Agricultural sector.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Agri-Food Industry
- Government Agencies
- Agricultural Advisor

Graduate careers typically include:

- Farm Manager
- R&D Scientist
- Environmental Manager

Special requirements

Work placement: Students will undertake a mandatory work placement of 12 weeks duration (which will be divided into two six week placements) in the second semester of year 2 of the programme. This will give students operational experience of a working farm and related agricultural businesses which will in turn enhance their employability and future career prospects. While the Institute will make every effort to assist the learner in finding a placement, final responsibility for securing the placement, resides with the learner. Travel and accommodation are the responsibility of the learner. Students can be placed anywhere in Ireland.

Minimum Entry Requirements:

Minimum Six O6/H7

Maths O6/H7

English or Irish O6/H7

At least two H5



What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Introduction to Agriculture (M)	5	Ruminant Husbandry (M)	10
	Animal Husbandry, Nutrition & Welfare (M)	10	Agricultural Business Management (M)	10
	Communications & IT Skills (M)	5	Soil & Plant Science (M)	5
	Fundamentals of Biology & Chemistry (M)	5	Alternative Farm Enterprises (M)	5
	Mathematical Skills for Science 1 (M)	5		
Year 2	Agriculture and Environmental Impact (M)	10	Work Placement (M)	30
	Grassland & Crop Production (M)	10		
	Work placement & Farm Health & Safety (M)	5		
	Beef and Dairy Production Systems (M)	5		
Year 3	Animal Science (E)	10	Agricultural & Food Technology (M)	5
	Ecology & Ecosystems (E)	10		
	Agricultural Marketing & Accounts (M)	5	Farm Waste & Environmental Science (M)	10
	Advanced Soil Science (M)	5	Advanced Crop Production (M)	5
	Sheep, Pigs & Poultry Production (M)	5	Literature Project (M)	10
	Research Skills (M)	5		

Degree Award Option: Animal & Crop Science

	Semester 1	Credits	Semester 2	Credits
Year 4	Agricultural Business & Economics (M)	10	Sustainable Agriculture (M)	10
	Animal Welfare (M)	10	Animal Health, Reproduction & Genetics (M)	10
	Crop Science & Mechanisation (M)	5	Research Project (M)	10
	Research Project Design (M)	5		

Degree Award Option: Environmental Management

	Semester 1	Credits	Semester 2	Credits
Year 4	Agricultural Business & Economics (M)	10	Sustainable Agriculture (M)	10
	Environmental Science (M)	10	Climate Change & Agriculture (M)	10
	Organic Farming (M)	5	Research Project (M)	10
	Research Project Design (M)	5		

(M) = Mandatory, (E) = Elective

Follow-on courses

- Masters (by research)
- Masters and Doctoral degrees in institutes and universities at home and abroad

Bioscience

Bachelor of Science in Bioscience

National Framework: Level 7
CAO Code: LY817
Duration: 3 years
Number of Places: 32
Reserved Quota: 10 - QQI FET Applicants

Points in Recent Years:

Year	Final	Median
2018	258	372
2019	237	377

Is this course for you?

Bioscience involves the study of living organisms - how humans, plants, animals, and microbes function and interact with their environment. Bioscientists use their knowledge of biology and biological techniques to develop products and improve human health, animal health, agriculture and the environment. New technologies in bioscience, which include biotechnology, are applied in the fields of medicine, pharmacy, agriculture, environmental analysis and in the food industry. The BSc in Bioscience is a three-year programme, during which extensive time is spent in a range of well-equipped laboratories.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Biopharmaceutical
- Environmental
- Education

Graduate careers typically include:

- Bioscientist
- Laboratory Technician
- Quality Analyst



Minimum Entry Requirements:

Minimum Points Score 160
Minimum Five O6/H7
Maths F2/O6/H7
English or Irish O6/H7

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Introductory Biology (M)	5	Animal & Plant Biology (M)	5
	Chemistry 1 (M)	5	Chemistry 2 (M)	5
	Physics 1 (M)	5	Physics 2 (M)	5
	Mathematical Skills for Science 1 (M)	5	Mathematical Skills for Science 2 (M)	5
	Transferable Skills 1 (M)	5	Communications & IT Skills (M)	5
	Laboratory Skills & Safety (M)	5	Science & Society (M)	5
Year 2	Data Methods for Science (M)	5	Instrumentation 2 (M)	10
	Instrumentation 1 (M)	10	Biomolecules & Disease (M)	5
	Biochemistry (M)	10	Fundamentals of Microbiology (M)	10
	Ecosystems (M)	5	Anatomy & Physiology (M)	5
Year 3	Genetics & Recombinant DNA (M)	10	Applied Immunology (M)	10
	Applied Microbiology & Clean Room Technology (M)	10	Environmental Analysis (M)	10
	Research Skills (M)	5	Quality & Regulations (M)	5
	Pharmacology (M)	5	Cell Culture (M)	5

(M) = Mandatory

Bachelor of Science (Hons)
in Bioanalytical Science

Add-on Level 8 Course

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Analytical Science (M)	10	Research Project (M)	10
	Molecular Biology (M)	10	Biopharmaceutical Processes (M)	10
	Research Project Design (M)	5	Medicinal Protein Chemistry (M)	5
	Biotechnology (E)	5	Operational Management & Lean Techniques (M)	5
	Medicinal Chemistry (E)	5		

(M) = Mandatory, (E) = Elective

Follow-on courses

- Masters (by research)
- Masters and Doctoral degrees in institutes and universities at home and abroad

Food Science & Nutrition

Bachelor of Science in Food Science & Nutrition

National Framework: Level 7
CAO Code: LY837
Duration: 3 years
Number of Places: 26
Reserved Quota: 10 - QQI FET Applicants

Points in Recent Years:

Year	Final	Median
2018	189	343
2019	165	347

Is this course for you?

Food science and nutrition is something we all take part in everyday – it is about what we eat, how it is made and developed, how our diets affect our bodies, the relationship between diet and disease, how changing consumer lifestyles impact on our health and how the food industry operates. This course is for you if you want to gain a knowledge of science generally and food and nutrition in particular.

Students on this course learn about food production and processing, and study the nutritional properties, quality and safety of food and food products. They also acquire knowledge of human biochemistry, human nutrition and an understanding of dietary analysis.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Food Industry
- Government Agencies
- Food Nutrition

Graduate careers typically include:

- Food Product Developer
- Food Production Supervisor
- Food Quality & Safety Analyst

Minimum Entry Requirements:

Minimum Points Score 160
Minimum Five O6/H7
Maths F2/O6/H7
English or Irish O6/H7



What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Introductory Biology (M)	5	Animal & Plant Biology (M)	5
	Chemistry 1 (M)	5	Chemistry 2 (M)	5
	Physics 1 (M)	5	Physics 2 (M)	5
	Mathematical Skills for Science 1 (M)	5	Mathematical Skills for Science 2 (M)	5
	Transferable Skills 1 (M)	5	Communications & IT Skills (M)	5
	Laboratory Skills & Safety (M)	5	Science & Society (M)	5
Year 2	Food Technology 1 (M)	10	Human Nutrition (M)	5
	Data Methods for Science (M)	5	Food Chemistry (M)	5
	Biochemistry (M)	10	Anatomy & Physiology (M)	5
			Fundamentals of Microbiology (M)	10
Year 3	Food Instrumentation 1 (M)	5	Food Instrumentation 2 (M)	5
	Food Technology 2 (M)	10	Food Technology 3 (M)	10
	Food Microbiology (M)	10	Advanced Food Chemistry (M)	10
	Research Skills (M)	5	Quality Management & Auditing (M)	5
	Dietary Evaluation (M)	5	Sports Nutrition (M)	5

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in Food Science & Nutrition

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Food Fermentation (M)	10	Research Project (M)	10
	Food Product Development & Sensory Evaluation (M)	10	Clinical Nutrition & Health Promotion (M)	10
	Food Safety (M)	5	Food Processing (M)	5
	Research Project Design (M)	5	Operation Management & Lean Technologies (M)	5

(M) = Mandatory

Follow-on courses

- Masters (by research)
- Masters and Doctoral degrees in institutes and universities at home and abroad

Pharmaceutical & Medicinal Science

Bachelor of Science in Pharmaceutical & Medicinal Science

National Framework: Level 7
CAO Code: LY867
Duration: 3 years
Number of Places: 20
Reserved Quota: 10 - QQI FET Applicants

Points in Recent Years:

Year	Final	Median
2018	163	297
2019	181	357

Is this course for you?

The BSc in Pharmaceutical and Medicinal Science is a three-year programme, during which extensive time is spent in a range of well-equipped laboratories. This course covers the full range of core subjects in science and in particular Pharmaceutical Science and Medical Devices. Pharmaceutical scientists have key analytical skills which can be applied in many industrial, research and government laboratories. This course is intrinsically multidisciplinary in nature.

The degree emphasises the importance of analytical and medicinal sciences to the modern pharmaceutical, and medicinal product sectors as well as related chemical industries.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Pharmaceutical
- Medical Device
- Government Agencies

Graduate careers typically include:

- Analytical Scientist
- Research & Development Scientist
- Quality Specialist

Minimum Entry Requirements:

Minimum Points Score 160
Minimum Five O6/H7
English or Irish O6/H7
Maths F2/O6/H7



What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Introductory Biology (M)	5	Animal & Plant Biology (M)	5
	Chemistry 1 (M)	5	Chemistry 2 (M)	5
	Physics 1 (M)	5	Physics 2 (M)	5
	Mathematical Skills for Science 1 (M)	5	Mathematical Skills for Science 2 (M)	5
	Transferable Skills 1 (M)	5	Communications & IT Skills (M)	5
	Laboratory Skills & Safety (M)	5	Science & Society (M)	5
Year 2	Biochemistry (M)	10	Pharmaceutical Chemistry (M)	5
	Organic Chemistry (M)	5	Physical/Inorganic Chemistry (M)	10
	Instrumentation 1 (M)	10	Instrumentation 2 (M)	10
	Data Methods for Science (M)	5	Medicinal Drug Discovery (M)	5
Year 3	Pharmaceutical Analysis (M)	10	Medicinal Drug Analysis (M)	10
	Pharmaceutical Microbiology & Cleanroom Technology (M)	10	Medicinal Science of Natural Products (M)	5
	Research Skills (M)	5	Industrial Processes & Medical Devices (M)	10
	Pharmacology (M)	5	Quality & Regulations (M)	5

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in
Pharmaceutical & Medicinal Science

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Analytical Science (M)	10	Research Project (M)	10
	Research Project Design (M)	5	Medicinal Protein Chemistry (M)	5
	Toxicology (M)	10	Pharmaceutical Processes (M)	10
	Medicinal Chemistry (M)	5	Operation Management & Lean Techniques (M)	5

(M) = Mandatory

Follow-on courses

- Masters (by research)
- Masters and Doctoral degrees in institutes and universities at home and abroad



Bachelor of Science (Hons) in
Agriculture, LYIT (2019)

"LYIT far exceeded my
expectations."

Ryan Prendergast

A broader knowledge of the agricultural industry

Agriculture is Ireland's largest indigenous sector with more than 300,000 people employed directly or indirectly in the agri-food industry, offering excellent opportunities for graduates in this field. Ryan Prendergast, from Swinford, Co. Mayo comes from a farming background and always knew that his future career would be in this industry.

The Agriculture course at LYIT was a natural progression for Ryan. "I applied for agriculture courses and got accepted to LYIT, and as it turns out they had exact course that I was looking for. To begin, I was apprehensive as I didn't know Letterkenny or LYIT very well. It far exceeded my expectations. The course was excellent, and I am delighted that I chose to study at LYIT"

"The class sizes were ideal as it allowed for an effective dialogue between students and lecturers. This really helped myself and my classmates get very engaged in the course work and group discussions. The lecturers were approachable and friendly and always open to questions".

Making the move from Mayo to Donegal went smoothly for Ryan. "There was plenty of accommodation available and at a very reasonable price. I had a lot of fun in Letterkenny and there was a vibrant nightlife within walking distance to the accommodation.

"Day trips were a large part of course. We were able to visit a large variety farms of different enterprises, from large scale tillage and intensive dairy farms to farms that focus on sustainability and organic production with an environmental focus. We were also brought on tours to feed mills and Agri-engineering companies, which really helped students who had an interest outside of farming and more towards agri-business/engineering. This was a great opportunity for myself and other students to explore different

sectors and learn more about the broad industry of agriculture".

"LYIT has so many different enterprises and farms within a 30-minute drive that I could visit. That is one of the great things about Donegal".

The work placement was another enjoyable part of the course. I had the opportunity to do two 6-week work placements in the second year of the course. This allowed me the opportunity of hands on experience in other sectors, as well as developing valuable work skills for the future, which I really enjoyed.

Since graduation Ryan has continued to further his studies and is now undertaking a PhD. "I work at the Teagasc Moorepark facility, located just outside of Fermoy, Co. Cork". The title of the PhD is 'Increasing Milking Efficiency through the application of optimization and automation techniques'. "My research will involve going to different dairy farms that have a variety of milking systems in place, from Herringbone to Rotary to AMS, and documenting the infrastructure on each farm as well as observing the performance of the farms milking process.

"It is an excellent opportunity to work for a research body as indigenous and as well reputed as Teagasc, I owe this in no small part to the great teaching I received at LYIT"

Veterinary Nursing

Bachelor of Science in Veterinary Nursing

National Framework: Level 7

CAO Code: LY847

Duration: 3 years

Number of Places: 32

Reserved Quota:

1 - Mature Applicant

2 - QQI FET Applicants

1 - Internal Progression from Access Studies

1 - HEAR

1 - DARE

Points in Recent Years:



Year	Final	Median
2018	356*	388
2019	347*	378

* Not all applicants on this point score received an offer.

Is this course for you?

This course is designed for people who are eager to care for animals. You will work closely with the veterinary surgeon in helping to diagnose and treat medical and surgical cases. In addition to learning different aspects of science, clinical and surgical nursing, animal husbandry, ethics and laboratory management, you will also learn about veterinary practice management and communication skills. The strong skills and knowledge you will receive from this practical course will leave you well placed for an enjoyable and challenging career. The course involves a placement element consisting of a six week placement in each semester in a veterinary setting.

Accreditation

This course is fully accredited by the Veterinary Council of Ireland.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Private Veterinary Practices

- Animal Welfare Organisations
- Veterinary Hospitals

Graduate careers typically include:

- Registered Veterinary Nurse
- Animal Behaviourist
- Veterinary Pharmaceutical Sales Specialist

Special requirements

Work placement: Please note that with respect to the placement, while the Institute will make every effort to assist the learner in finding a placement final responsibility for securing the placement resides with the learner. Students can be placed anywhere in Ireland.

Travel and accommodation are the responsibility of the learner.

Minimum Entry Requirements:

Minimum Points Score 160
Minimum Five O6/H7
English or Irish O6/H7
One of Phy/Chm/Pch/Bgy/
Ags at O6/H7
Maths F2/O6/H7



What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Introduction to Nursing (M)	5	Biological & Bioveterinary Sciences (M)	5
	Communications & Research Skills (M)	5	Surgical Nursing & Theatre Practice (M)	5
	Animal Husbandry, Nutrition & Welfare (M)	10	Veterinary Nursing 1 (M)	10
	Work Placement 1 (M)	10	Work Placement 2 (M)	10
Year 2	Exotic & Wildlife Nursing (M)	5	Veterinary Practice Management (M)	10
	Professional, Regulatory & Ethical Studies (M)	5	Veterinary Nursing 3 (M)	10
	Veterinary Nursing 2 (M)	10	Work Placement 4 (M)	10
	Work Placement 3 (M)	10		
Year 3	Animal Behaviour & Behavioural Therapy (M)	5	Pharmacy & Stock Management (M)	5
	Emergency & Critical Care Nursing (M)	5	Veterinary Nursing 5 (M)	5
	Veterinary Nursing 4 (M)	10	Professional Practice Skills (M)	10
	Work Placement 5 (M)	10	Work Placement 6 (M)	10

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in Veterinary Nursing

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Research Project Design (M)	5	Research Project (M)	10
	Critical Care Nursing I (M)	10	Critical Care Nursing II (M)	10
	Practice Management & Veterinary Nursing Clinics (M)	10	Palliation & Rehabilitation	5
	Pharmacology	5	Nutrition (M)	5

(M) = Mandatory, (E) = Elective

Follow-on courses

- Masters degrees at other institutes and universities at home and abroad

Add-on Level 8 Course

Bachelor of Science (Hons) in Animal Behaviour & Welfare

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Animal Cognition & Behaviour (M)	10	Anthrozoology (M)	10
	Animal Welfare (M)	10	Research Project (M)	10
	Welfare & Behavioural Aspects of Rehabilitation (M)	5	Choose one of the following Electives (E):	
	Research Project Design (M)	5	Advanced Veterinary Fluid Therapy Wildlife Conservation & Welfare	10 10

(M) = Mandatory, (E) = Elective

Follow-on courses

- Masters degrees at other institutes and universities at home and abroad

Agriculture

Bachelor of Science in Agriculture

National Framework: Level 7
CAO Code: LY877
Duration: 3 years
Number of Places: 32
Reserved Quota:
2 - Mature Applicants
2 - QQI FET Applicants
2 - Internal Progression from Access Studies
1 - HEAR
1 - DARE
Points in Recent Years:



Year	Final	Median
2018	204	302
2019	188	307

Is this course for you?

Agriculture is a key contributor to the Irish economy and is currently experiencing a period of growth and expansion. The BSc in Agriculture offers graduates a combination of skills and knowledge of key areas in agriculture such as Soil and Plant Science, Ruminant Husbandry and Agriculture Business Management. This is combined with a substantial work placement in semester 2 of year 2 where the students will gain valuable work place experience. Year 3 expands and builds upon the knowledge obtained in years one and two of the programme with the study of modules such as Farm Waste and Environmental Science Livestock Production and Animal Science. Students who do not wish to progress to year three of the programme can exit following successful completion of two years and achieve a Higher Certificate in Science in Agriculture. This course fulfills the requirements for stamp duty exemption or land transfer for young farmers (Green Cert).

Career opportunities

Successful graduates find themselves working in the following sectors:

- Agriculture
- Agri-food
- Government Agencies

Graduate careers typically include:

- Farm Manager
- Agricultural Research Assistant
- Agricultural Sales Manager

Minimum Entry Requirements:

Minimum Points Score 160
Minimum Five O6/H7 Maths F2/O6/H7
English or Irish O6/H7

Special requirements

Work placement: Students will undertake a mandatory work placement of 12 weeks duration (which will be divided into two six week placements) in the second semester of year 2 of the programme. This will give students operational experience of a working farm and related agricultural businesses which will in turn enhance their employability and future career prospects. It will also provide employers with capable staff who can demonstrate and apply their technical skills to real-world situations. While the Institute will make every effort to assist the learner in finding a placement, final responsibility for securing the placement, resides with the learner. Travel and accommodation are the responsibility of the learner. Students can be placed anywhere in Ireland.

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Introduction to Agriculture (M)	5	Ruminant Husbandry (M)	10
	Animal Husbandry, Nutrition & Welfare (M)	10	Agricultural Business Management (M)	10
	Communications & IT Skills (M)	5	Soil & Plant Science (M)	5
	Fundamentals of Biology & Chemistry (M)	5	Alternative Farm Enterprises (M)	5
	Mathematical Skills for Science 1 (M)	5		
Year 2	Agriculture & Environmental Impact (M)	10	Work Placement (M)	30
	Grassland & Crop Production (M)	10		
	Work Placement & Farm Health & Safety (M)	5		
	Beef & Dairy Production Systems (M)	5		
Year 3	Animal Science (M)	10	Agricultural Food Technology (M)	10
	Agricultural Marketing & Accounts (M)	5	Farm Waste & Environmental Science (M)	5
	Advanced Soil Science (M)	5	Advanced Crop Production (M)	10
	Sheep Pigs & Poultry Production (M)	5	Literature Project (M)	5
	Research Skills (M)	5		

(M) = Mandatory

Bachelor of Science (Hons) in Agriculture

Add-on Level 8 Course

What will I study?

Degree Award Option: Animal & Crop Science

Year 4 - Animal and Crop Science			
Semester 7	Credits	Semester 8	Credits
Agricultural Business & Economics (M)	10	Sustainable Agriculture (M)	10
Animal Welfare (M)	10	Animal Health, Reproduction & Genetics (M)	10
Crop Science & Mechanisation (M)	5	Research Project (M)	10
Research Project Design (M)	5		

Degree Award Option: Environmental Management

Year 4 - Environmental Management			
Semester 7	Credits	Semester 8	Credits
Agricultural Business & Economics (M)	10	Sustainable Agriculture (M)	10
Environmental Science (M)	10	Climate Change & Agriculture (M)	10
Organic Farming (M)	5	Research Project (M)	10
Research Project Design (M)	5		

(M) = Mandatory

Pharmacy Technician

Higher Certificate in Science in Pharmacy Technician

National Framework: Level 6
CAO Code: LY806
Duration: 2 years
Number of Places: 20

Reserved Quota:
1 - QQI FET Applicant
2 - Mature Applicants
1 - Internal Progression from Access Studies
1 - HEAR
1 - DARE



Points in Recent Years:

Year	Final	Median
2018	140	317
2019	216	377

Is this course for you?

This is a two-year Higher Certificate in Science (Pharmacy Technician) course which allows you to gain professional, managerial and technical knowledge that opens up opportunities to work in either hospital or community-based pharmacies. This programme will be delivered over four semesters allowing learners to gain their qualification in two years. The main aim of the programme is to produce graduates with the required theoretical and hands-on skills to allow them to work in a pharmacy setting and to contribute effectively to the pharmacy. The programme involves a placement element consisting of a six week placement in each semester in a pharmacy setting. It is intended that students will be placed in both community and hospital pharmacies. For those wishing to pursue a career in pharmacy, a formal agreement between Ulster University (UU) and LYIT provides a progression pathway to the MPharm Degree Programme in UU.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Community Pharmacies
- Hospital Pharmacies

Graduate careers typically include:

- Pharmacy Technician

Minimum Entry Requirements:

Minimum Five O6/H7

English or Irish O6/H7

One of Phy/Chm/Pch/Bgy/

Ags at O6/H7

Maths F2/O6/H7

Special requirements

Garda Vetting: Everyone who joins this course will have to be vetted by the Gardai (police). If you do not pass, you will not be able to go on placement or fulfil your course requirements, in which case you will be asked to leave the course. Please note that any course requiring Garda vetting will only have places for non-EU candidates if there are not enough qualified EU candidates available to fill the course.

Work Placement: Please note that with respect to the placement, while the Institute will make every effort to assist the learner in finding a placement final responsibility for securing the placement, resides with the learner. Students can be placed in either a community or hospital pharmacy anywhere in the country.

Travel and accommodation are the responsibility of the learner.



What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Chemistry 1 (M)	5	Organic & Applied Chemistry (M)	5
	Biological Science (M)	5	Pharmacology (M)	5
	Pharmacy Practice 1 & Dispensary Computers (M)	10	Pharmacy Practice 2 (M)	10
	Pharmacy Work Placement 1 - Practical (M)	10	Pharmacy Work Placement 2 - Practical (M)	10
Year 2	Pharmaceutical Chemistry & Formulation (M)	5	Drug Action & Usage (M)	10
	Applied Physiology (M)	10	Pharmacy Business & IT (M)	10
	Calculations & Extemporaneous Preparations (M)	5	Pharmacy Work Placement 4 - Practical (M)	10
	Pharmacy Work Placement 3 - Practical (M)	10		

(M) = Mandatory

Follow-on courses

- Bachelor of Science in Pharmaceutical and Medicinal Science, Bachelor of Science in Food Science and Nutrition and Bachelor of Science in Bioscience. (Year 2)
- Master of Pharmacy, Ulster University (once minimum entry requirements have been met). (Year 1)
- Interview for admission through UCAS to Master of Pharmacy at University of Bradford and University of Brighton. (Year 1)

Dental Nursing

Higher Certificate in Science in Dental Nursing

National Framework: Level 6

CAO Code: LY816

Duration: 2 years

Number of Places: 18

Reserved Quota:

1 - QQI FET Applicant

1 - Mature Applicant

1 - Internal Progression from Access Studies

1 - HEAR

1 - DARE

Points in Recent Years:



Year	Final	Median
2018	173	289
2019	180	307

Is this course for you?

A dental nurse works as part of a dental team in a variety of clinical and non-clinical settings. In Ireland they are mainly employed in General Dental Surgeries, Dental Hospitals, Health Service Executive Dental Clinics or Specialist Surgeries. They are responsible for ensuring the Dentist or Oral Surgeon's operating list runs smoothly during the course of a clinical session. This includes ensuring that all instrumentation is correct and has been thoroughly sterilised, all radiographs and case notes are prepared for the clinical session, necessary lab work/ results and supplies are available, the dental surgery/operating room is clean and equipment is in good working order and all general administrative and office work is up-to-date. Dental nurses are also involved in assisting with suction during dental procedures, for example, cleaning, scaling and polishing of teeth and offering emotional support to patients with an anxiety towards dental treatment. They need to have good organisational skills and have the ability to communicate effectively, both verbally and in writing. The main aim of the course is

to produce graduates who are licensed to practice as dental nurses. The course will provide dental nurses with the appropriate multi-disciplinary skills to enable them to play a key role in dental practices.

Accreditation

This programme is fully accredited by the Dental Council of Ireland.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Dental Surgeries
- Dental Hospital
- Health Service Executive

Graduate careers typically include:

- Dental Nurse

Minimum Entry Requirements:

Minimum Five O6/H7

English or Irish O6/H7

One of Phy/Chm/Pch/Bgy/ Ags at O6/H7

Maths F2/O6/H7



Special requirements

Garda Vetting: Everyone who joins this course will have to be vetted by the Gardaí (police). If you do not pass, you will not be able to go on placement or fulfil your course requirements, in which case you will be asked to leave the course. Please note that any courses requiring Garda vetting will only have places for non-EU candidates if there are not enough qualified EU candidates available to fill the course.

Vaccination: Students are required to be vaccinated and demonstrate immunity to Hepatitis B prior to going on placement.

Work Placement: The course involves a placement element consisting of six weeks in semester two in both year one and year two and twelve weeks in semester one year two. Please note that while the Institute will make every effort to assist the learner in finding a placement, final responsibility for securing the placement resides with the learner.

Travel and accommodation are the responsibility of the learner. Students can be placed anywhere in Ireland.

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Clinical Dentistry 1: Patient care, Materials & Instrumentation (M)	10	Clinical Work Placement 1 (M)	10
	Patient-centred Communication Skills (M)	5	Disease and Infection Control for Dental Nurses (M)	10
	Clinical & Related Skills for Dental Nursing (M)	5	Ethical, legal & current issues for Dental Nurses (M)	5
	Nutrition and Oral Health Promotion (M)	5	Clinical Dentistry 2: Anatomy and Pathology (M)	5
	Biological Science (M)	5		
Year 2	Clinical Work Placement 2 (M)	30	Dental Practice Management (M)	5
			Medical Emergencies & Clinical Pharmacology in Dental Nursing (M)	10
			Clinical Dentistry 3: Special Practice (M)	5
			Work Placement 3 (M)	10

(M) = Mandatory

Follow-on courses

- A range of programmes such as dental hygiene and dental practice management in institutes and universities at home and abroad



Physiotherapy

Higher Certificate in Science in Health Science with Physiotherapy Studies

National Framework: Level 6

CAO Code: LY826

Duration: 2 years

Number of Places: 16

Reserved Quota:

1 - QQI FET Applicant

1 - Mature Applicant

1 - HEAR

1 - DARE

NEW

Year	Final	Median
2019	309	440

Is this course for you?

This is a two year Higher Certificate in Science (Health Science with Physiotherapy Studies) course. Health Science with Physiotherapy Studies is the study of the human body with particular focus on Anatomy and Physiology and provides a foundation to Physiotherapy studies. Through a unique progression opportunity, this programme allows students to progress to complete a BSc Honours in Physiotherapy at Coventry University.

This two year Health Science with Physiotherapy Studies incorporates year one of the three year BSc Honours in Physiotherapy at Coventry University (CU). Following successful completion of the two year programme in LYIT, students can progress directly to year two of the three year BSc Honours in Physiotherapy in CU.

Upon successful completion of years two and three in Coventry University, and graduation subject to academic regulations, students will be awarded a BSc (Hons) in Physiotherapy and be eligible to register with the Health and Care Professionals Council (HCPC) in the UK.

This two year (LYIT) and two year (CU) progression agreement provides a unique opportunity for students to progress to Coventry University to complete a BSc

Honours in Physiotherapy which allows graduates to register with the HCPC.

Accreditation

Graduates of the HC in Health Science with Physiotherapy Studies in LYIT are not qualified as Physiotherapists and are not eligible to register with CORU.

Special Requirements

Garda Vetting: Everyone who joins this course will have to be vetted by the Gardai (police). If you do not pass, you will not be able to go on placement or fulfil your course requirements, in which case you will be asked to leave the course. Please note that any courses requiring Garda vetting will only have places for non-EU candidates if there are not enough qualified EU candidates available to fill the course.

Additional Information

Subject to Coventry University's rules and regulations, Coventry University may, in its absolute discretion, register a student as a student of Coventry University for the duration of Stage II (Year 2 and Year 3 in CU) on receipt of: any documents which Coventry University requires the student to complete to effect the registration, as notified to and/or requested from the prospective student by Coventry University. Coventry University fees shall be subject to annual review and may be changed at the sole discretion of Coventry University without notice.

Minimum Entry Requirements:

5 subjects at O6/H7 to include

- BGY at H5 or better
- English or Irish at O6/H7
- Maths at O6/H7 or MAF at F2

Health Declaration

Applicants will be required to complete a Health declaration.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Health Service Executive
- Physiotherapy Practices

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Human Biology (M)	10	Introduction to Anatomy and Physiology (M)	10
	People Centred Communication Skills (M)	10	Introduction to Human Health and Disease (M)	5
	Introduction to Physiotherapy (M)	10	Psychological Well-Being & Health Promotion (M)	10
Year 2			Civic and Social Engagement (M)	5
	Pathophysiology (M)	10	Introduction to Physiotherapy Assessment (M)	5
	Research and Study Skills (M)	10	Health and Wellbeing in the Community (M)	10
	Anatomy of the Upper Quadrant (M)	5	Physiotherapy Intervention and Management (M)	10
			Movement Analysis, Physical Activity and Exercise (M)	5
			Anatomy of the Lower Quadrant (M)	5

(M) = Mandatory

Follow-on courses

- Progression to Bachelor of Science (Hons) in Physiotherapy in Coventry University (Year 2)



Occupational Therapy

Higher Certificate in Science in Health Science with Occupational Therapy Studies

National Framework: Level 6

CAO Code: LY836

Duration: 2 year

Number of Places: 16

Reserved Quota:

1 - QQI FET Applicant

1 - Mature Applicant

1 - HEAR

1 - DARE



Year	Final	Median
2019	245	382

Is this course for you?

Health Science with Occupational Therapy Studies is the study of the human body with particular focus on Anatomy and Physiology and provides a foundation to Occupational Therapy studies. Through a unique progression opportunity, this programme allows students to progress to complete a BSc Honours in Occupational Therapy at Coventry University.

This two year Health Science with Occupational Therapy Studies incorporates year one of the three year BSc Honours in Occupational Therapy at Coventry University (CU). Following successful completion of the two year programme in LYIT students can progress directly to year two of the three year BSc Honours in Occupational Therapy in CU.

Upon successful completion of years two and three in Coventry University, and graduation students will be awarded a BSc (Hons) in Occupational Therapy and be eligible to register with the Health and Care Professionals Council (HCPC) in the UK.

This two year (LYIT) and two year (CU) progression agreement provides a unique opportunity for students to progress to Coventry University to complete a BSc Honours in Occupational Therapy which allows graduates to register with the HCPC.

Accreditation

Graduates of the HC in Health Science with Occupational Therapy Studies in LYIT are not qualified as Occupational Therapists and are not eligible to register with CORU.

Special Requirements

Garda Vetting: Everyone who joins this course will have to be vetted by the Gardai (police). If you do not pass, you will not be able to go on placement or fulfil your course requirements, in which case you will be asked to leave the course. Please note that any courses requiring Garda vetting will only have places for non-EU candidates if there are not enough qualified EU candidates available to fill the course.

Additional Information

Subject to Coventry University’s rules and regulations, Coventry University may, in its absolute discretion, register a student as a student of Coventry University for the duration of Stage II (Year 2 and Year 3 in CU) on receipt of: any documents which Coventry University requires the student to complete to effect the registration, as notified to and/or requested from the prospective student by Coventry University. Coventry University fees shall be subject to annual review and may be changed at the sole discretion of Coventry University without notice.

Minimum Entry Requirements:

5 subjects at O6/H7 to include

- BGY at H5 or better
- English or Irish at O6/H7
- Maths at O6/H7 or MAF at F2

Health Declaration

Applicants will be required to complete a Health declaration.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Health Service Assistant
- Occupational Therapy Assistant

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Human Biology (M)	10	Introduction to Anatomy & Physiology (M)	10
	People Centred Communication Skills (M)	10	Introduction to Human Health & Disease (M)	5
	Introduction to Occupational Therapy (M)	10	Psychological Well-Being & Health Promotion (M)	10
Year 2			Civic and Social Engagement (M)	5
	The Human, Mind and Occupation. Part 1 (M)	5	The Human, Mind and Occupation. Part 2 (M)	5
	Occupational Therapists: Doing, Being, Becoming & Belonging (M)	10	Health and Well-being in the Community (M)	10
	Foundations of Evidence Informed Practice (M)	10	Delivering Theory Based Occupational Therapy – Placement Preparation (M)	10
			Practice placement (M)	10

(M) = Mandatory

Follow-on courses

- Progression to Bachelor of Science (Hons) in Occupational Therapy in Coventry University (Year 2)



Dietetics

Higher Certificate in Science in Health Science with Dietetics Studies

National Framework: Level 6

CAO Code: LY846

Duration: 2 year

Number of Places: 16

Reserved Quota:

1 - QQI Applicant

1 - Mature Applicant

1 - HEAR

1 - DARE



Year	Final	Median
2019	316	440

Is this course for you?

Health Science with Dietetics Studies is the study of the human body with particular focus on Anatomy and Physiology and provides a foundation to Human Nutrition and Dietetics studies. Through a unique progression opportunity, this programme allows students to progress to complete a BSc Honours in Dietetics and Nutrition at Coventry University.

This two year Health Science with Dietetics Studies incorporates year one of the three year BSc Honours in Dietetics and Nutrition at Coventry University (CU). Following successful completion of the two year programme in LYIT students can progress directly to year two of the three year BSc Honours in Dietetics and Nutrition in CU.

Upon successful completion of years two and three in Coventry University, and graduation students will be awarded a BSc (Hons) in Dietetics and Nutrition and be eligible to register with the Health and Care Professionals Council (HCPC) in the UK. This two years (LYIT), and two years (CU) progression agreement provides a unique opportunity for students to progress to Coventry University to complete a BSc Honours in Dietetics and Nutrition which allows graduates to register with the HCPC.

Accreditation

Graduates of the HC in Health Science with Dietetics Studies in LYIT are not qualified as Dieticians and are not eligible to register with CORU.

Special Requirements

Garda Vetting: Everyone who joins this course will have to be vetted by the Gardai (police). If you do not pass, you will not be able to go on placement or fulfil your course requirements, in which case you will be asked to leave the course. Please note that any courses requiring Garda vetting will only have places for non-EU candidates if there are not enough qualified EU candidates available to fill the course.

Additional Information

Subject to Coventry University's rules and regulations, Coventry University may, in its absolute discretion, register a student as a student of Coventry University for the duration of Stage II (Year 2 and Year 3 in CU) on receipt of: any documents which Coventry University requires the student to complete to effect the registration, as notified to and/or requested from the prospective student by Coventry University. Coventry University fees shall be subject to annual review and may be changed at the sole discretion of Coventry University without notice.

Health Declaration

Applicants will be required to complete a Health declaration.

Minimum Entry Requirements:

5 subjects at O6/H7 to include

- BGY at H5 or better
- English or Irish at O6/H7
- Maths at O6/H7 or MAF at F2

Career opportunities

Successful graduates find themselves working in the following sectors:

- Health Care Assistant
- Nutrition Industry
- Retail Sector

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Human Biology (M)	10	Introduction to Anatomy & Physiology (M)	10
	People Centred Communication Skills (M)	10	Introduction to Human Health & Disease (M)	5
	Introduction to Dietetics (M)	10	Psychological Well-Being & Health Promotion (M)	10
			Civic and Social Engagement (M)	5
	Semester 3	Credits	Semester 4	Credits
Year 2	Human Nutrition and Metabolism (M)	10	Nutrition Physiology & Eating (M)	15
	Foundations of Evidence Informed Practice (M)	10	Health & Well-being in the Community (M)	10
	Food & Food Production (M)	5	Foundations in Dietetics Practice (Including Placement A) (M)	10

(M) = Mandatory, (E) = Elective

Follow-on courses

- Progression to Bachelor of Science (Hons) in Dietetics and Nutrition in Coventry University (Year 2)

