

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 and Nutrition or Pharmaceutical and Medicinal Science
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

Science

(Common Entry)

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

National Framework: Level 8

CAO Code: LY818

Duration: 4 years

Number of Places: 32

Points in Recent Years:

Year	Final	Median
2014	N/A	N/A
2015	305	380

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 and 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)	10	Transferable Skills 2 (M)	10

(M) = Mandatory

Degree Award Option: Bioanalytical Science

	Semester 1	Credits	Semester 2	Credits
Year 2	Fundamentals of Microbiology (M)	10	Instrumentation 2 (M)	10
	Instrumentation 1 (M)	10	Biochemistry (M)	10
	Mathematical Methods for Science (M)	5	Data Methods for Science (M)	5
	Ecosystems (M)	5	Anatomy & Physiology (M)	5
Year 3	Genetics and Recombinant DNA (M)	10	Applied Immunology (M)	10
	Cell Culture and Clean Room Technology (M)	10	Environmental Analysis (M)	10
	Research Skills (M)	5	Quality and Regulations (M)	5
	Pharmacology (M)	5	Applied Microbiology (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	Protein Chemistry (M)	5
	Industrial Microbiology (E)	5	Management Theory and Practice (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: Unit Operations (M)	10	Human Nutrition (M)	10
	Fundamentals of Microbiology (M)	10	Biochemistry (M)	10
	Food Chemistry (M)	5	Data Methods for Science (M)	5
	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
	Sports Nutrition (M)	5	Dietary Evaluation (M)	5
Year 4	Food Fermentation (M)	10	Research Project (M)	10
	Food Product Development & Sensory Evaluation (M)	10	Nutrition, Disease & Health Promotion (M)	10
	Food Safety (M)	5	Food Processing (M)	5
	Research Project Design (M)	5	LEAN Technologies: Tools & Techniques (M)	5

(M) = Mandatory

Career opportunities

Successful graduates find themselves working in the following sectors:

- Food Industry
- Government Agencies
- Product Development

Follow-on courses

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

Graduate careers typically include:

- Food Product Developer
- Quality Manager
- Food Technologist



Degree Award Option: Pharmaceutical & Medicinal Science

	Semester 1	Credits	Semester 2	Credits
Year 2	Physical and Inorganic Chemistry (M)	10	Pharmaceutical Chemistry (M)	5
	Organic Chemistry (M)	5	Biochemistry (M)	10
	Instrumentation 1 (M)	10	Instrumentation 2 (M)	10
	Medicinal Drug Discovery (M)	5	Data Methods for Science (M)	5
Year 3	Pharmaceutical Analysis (M)	10	Pharmaceutical Microbiology (M)	10
	Medicinal Drug Analysis (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	Management Theory & Practice (M)	5

(M) = Mandatory

Career opportunities

Successful graduates find themselves working in the following sectors:

- Pharmaceutical
- Medical Devices
- Government Agencies

Follow-on courses

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

Graduate careers typically include:

- Pharmaceutical Scientist
- Analytical Chemist
- Quality Manager



Bioscience

Bachelor of Science in Bioscience

National Framework: Level 7

CAO Code: LY817

Duration: 3 years

Number of Places: 32

Points in Recent Years:

Year	Final	Median
2014	225	400
2015	195	350

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	Transferable Skills 1 (M)	10	Transferable Skills 2 (M)	10
	Introductory Biology (M)	5	Animal & Plant Biology (M)	5
	Chemistry 1 (M)	5	Chemistry 2: Fuels, Organic Chemistry & Biochemistry (M)	5
	Physics 1 (M)	5	Physics 2 (M)	5
	Mathematical Skills for Science 1 (M)	5	Mathematical Skills for Science 2 (M)	5
Year 2	Fundamentals of Microbiology (M)	10	Instrumentation 2 (M)	10
	Instrumentation 1 (M)	10	Biochemistry (M)	10
	Mathematical Methods for Science (M)	5	Data Methods for Science (M)	5
	Ecosystems (M)	5	Anatomy & Physiology (M)	5
Year 3	Genetics and Recombinant DNA (M)	10	Applied Immunology (M)	10
	Cell Culture and Clean Room Technology (M)	10	Environmental Analysis (M)	10
	Research Skills (M)	5	Quality and Regulations (M)	5
	Pharmacology (M)	5	Applied Microbiology (M)	5

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in Bioanalytical Science

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	Protein Chemistry (M)	5
	Choose one of the following Electives (E):		Management Theory and Practice (M)	5
	Industrial Microbiology	5		
	Medicinal Chemistry	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 and Nutrition

Bachelor of Science in Food Science and Nutrition

National Framework: Level 7

CAO Code: LY837

Duration: 3 years

Number of Places: 26

Points in Recent Years:

Year	Final	Median
2014	150	330
2015	140	335

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	Transferable Skills 1 (M)	10	Animal & Plant Biology (M)	5
	Introductory Biology (M)	5	Chemistry 2: Fuels, Organic Chemistry & Biochemistry (M)	5
	Chemistry 1 (M)	5	Physics 2 (M)	5
	Physics 1 (M)	5	Mathematical Skills for Science 2 (M)	5
	Mathematical Skills for Science 1 (M)	5	Transferrable Skills 2 (M)	10
Year 2	Food Technology 1: Unit Operations (M)	10	Human Nutrition (M)	10
	Fundamentals of Microbiology (M)	10	Biochemistry (M)	10
	Food Chemistry (M)	5	Data Methods for Science (M)	5
	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
	Sports Nutrition (M)	5	Dietary Evaluation (M)	5

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in Food Science and Nutrition

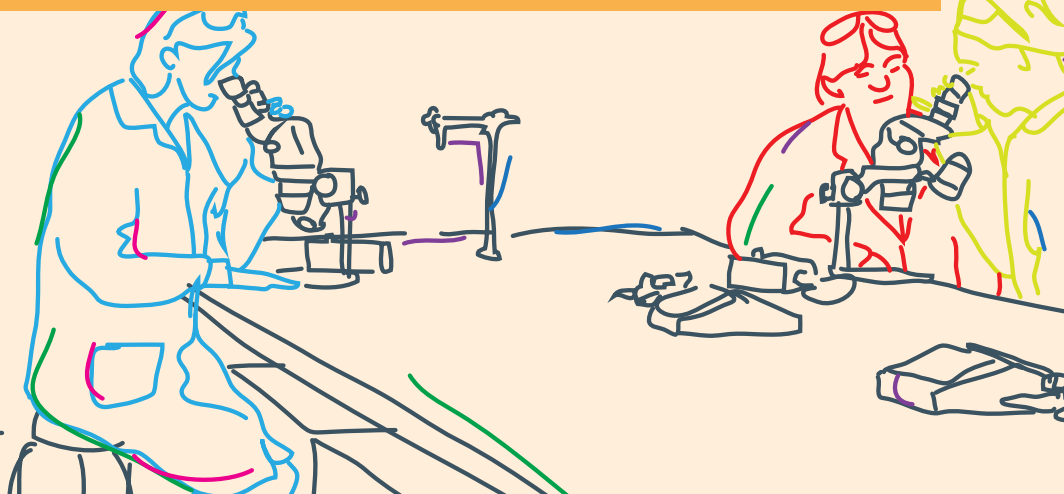
What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Food Safety (M)	5	Food Processing (M)	5
	Food Fermentation (M)	10	LEAN Technologies: Tools & Techniques (M)	5
	Research Project Design (M)	5	Research Project (M)	10
	Food Product Development & Sensory Evaluation (M)	10	Nutrition, Disease & Health Promotion (M)	10

(M) = Mandatory

Follow-on courses

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



Pharmaceutical and Medicinal Science

Bachelor of Science in Pharmaceutical and Medicinal Science

National Framework: Level 7

CAO Code: LY867

Duration: 3 years

Number of Places: 20

Points in Recent Years:

Year	Final	Median
2014	N/A	N/A
2015	170	300

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	Transferable Skills 1 (M)	10	Transferable Skills 2 (M)	10
	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	5
Year 2	Physical and Inorganic Chemistry (M)	10	Biochemistry (M)	10
	Instrumentation 1 (M)	10	Instrumentation 2 (M)	10
	Organic Chemistry (M)	5	Pharmaceutical Chemistry (M)	5
	Medicinal Drug Discovery (M)	5	Data Methods for Science (M)	5
Year 3	Pharmaceutical Analysis (M)	10	Pharmaceutical Microbiology (M)	10
	Medicinal Drug Analysis (M)	10	Industrial Processes and Medical Devices (M)	10
	Research Skills (M)	5	Medicinal Science of Natural Products (M)	5
	Pharmacology (M)	5	Quality & Regulations (M)	5

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in Pharmaceutical and 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	Management Theory and Practice (M)	5

(M) = Mandatory

Follow-on courses

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

Gavin McLaughlin



Bachelor of Science in Bioanalytical Science, LYIT (2012)

Completing a PhD in Organic Chemistry at Athlone Institute of Technology

"LYIT ignited my interest in research and gave me such a comprehensive base for my studies ever since. Now, for my PhD, I am collaborating with expert scientists from academic institutions and agencies right around the world."

A passion for science

"If you had said to me when I took my Leaving Certificate at school that I would end up studying for a PhD, I would have laughed at you." Gavin McLaughlin always had a strong interest in science but little did he realise when he began his BSc in Analytical and Forensic Science at LYIT he would eventually be writing the kind of research papers he was studying then.

Currently, Gavin is completing a PhD in Organic Chemistry, focusing on the synthesis and characterisation of novel recreational drugs, while also working as a research assistant at Trinity College, Dublin. But it was during his fourth year at LYIT, when he took his BSc (Honours) in Bioanalytical Science, that his interest in research into chemical sciences was sparked.

"The fourth year contained a research project which gave me a real taste for research," he says. "You design your own project, carry out a literature review and conduct the experiments before writing a thesis. The facilities were state-of-the-art too. They had just built a number of new laboratories for teaching and research, including a modern instrumentation suite with some of the best and latest technologies around. In fact, each discipline now has its own dedicated lab."

Gavin had already taken his BSc in Analytical and Forensic Science at LYIT*. "This was the perfect course for me", he says, "as it gives you such a solid overview of the chemical and biological sciences and their application to the area of pharmaceutical and forensic science, something I am passionately interested in."

Another huge advantage he discovered at LYIT was the class sizes, which were much smaller than at university.

"It means you get a hands-on experience in the lab you can't get in the university setting,"

Gavin says, "Each student has time to develop their laboratory skills and become competent with scientific instruments."

Having graduated in 2012, Gavin moved to Ulster University at Coleraine to study for a Master of Science in Pharmaceutical Sciences. Thanks to a collaboration between the two institutions he was able to conduct his research in the science laboratories at LYIT. "They had the core facilities required to conduct the research, which was into the chemical analysis of drugs, and the lecturers and technical staff were happy to give me any assistance I needed," he says.

After completing his Masters, Gavin was the beneficiary of another such collaboration. After being awarded the President Seed Fund Scholarship, he is studying for a PhD at Athlone Institute of Technology, while also engaged as a research assistant at Trinity College Dublin.

It's been a long and exciting journey since his passion for science led Gavin to LYIT and the course which provided the backbone of his success. "The science courses offered at LYIT," he says, "provide the student with the fundamental skills required for a science career in industry and academia."

*This course is now replaced by LY867 Bachelor of Science in Pharmaceutical and Medicinal Science.

Veterinary Nursing

Bachelor of Science in Veterinary Nursing

National Framework: Level 7
CAO Code: LY847
Duration: 3 years
Number of Places: 32

Reserved Quota:
 2 - Mature Applicants
 2 - QQI FET Applicants
 2 - Internal Progression from Access Studies

Points in Recent Years:



Year	Final	Median
2014	385*	410
2015	370	395

* 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 accreditation by the Veterinary Council of Ireland.

Career opportunities

Successful graduates find themselves working in the following sectors:

- Private Veterinary Practices
- Animal Welfare Organisations
- Veterinary Hospital

Graduate careers typically include:

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

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

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.

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 – Theory (M)	-	Work Placement 2 – Theory (M)	-
	Work Placement 1 – Practical (M)	10	Work Placement 2 – Practical	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 – Theory (M)	-
	Work Placement 3 – Theory (M)	-	Work Placement 4 – Practical (M)	10
	Work Placement 3 – Practical (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 – Theory (M)	-	Work Placement 6 – Theory (M)	-
	Work Placement 5 – Practical (M)	10	Work Placement 6 – Practical (M)	10

(M) = Mandatory

Add-on Level 8 Course

Bachelor of Science (Hons) in Animal Behaviour and Welfare

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 4	Animal Cognition and 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	10
			Wildlife Conservation & Welfare	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

Points in Recent Years:



Year	Final	Median
2014	N/A	N/A
2015	170	285

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 students can exit following successful completion of two years and achieve a Higher Certificate in Science in Agriculture.

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

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	Agriculture & Environmental Impact (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	Ruminant Husbandry (M)	10	Work Placement (M)	30
	Grassland & Crop Production (M)	10		
	Work Placement & Farm Health & Safety (M)	5		
	Advanced Soil Science (M)	5		
Year 3	Animal Science (M)	10	Agricultural Food Technology (M)	10
	Agricultural Marketing & Accounts (M)	5	Farm Waste & Environmental Science (M)	5
	Beef & Dairy Production Systems (M)	5	Advanced Crop Production (M)	10
	Sheep Pigs & Poultry Production (M)	5	Literature Project (M)	5
	Research Skills (M)	5		

(M) = Mandatory

Follow-on courses

- Level 8 degrees in institutes and universities at home and abroad



Pharmacy Technician

Higher Certificate in Science (Pharmacy Technician)

National Framework: Level 6

CAO Code: LY806

Duration: 2 years

Number of Places: 20

Reserved Quota:

1 - QQI FET Applicants

2 - Mature Applicants

1 - Internal Progression from
Access Studies

Points in Recent Years:



Year	Final	Median
2014	150	285
2015	155	285

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 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 may 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.



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
	Work Placement 1 - Theory (M)	-	Work Placement 2 -Theory (M)	-
	Pharmacy Work Placement 1 – Practical (M)	10	Pharmacy Work Placement2 -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
	Work Placement 3 - Theory	-		
	Pharmacy Work Placement 3 - Practical	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 Applicants

2 - Mature Applicants

1 - Internal Progression from Access
Studies

Points in Recent Years:



Year	Final	Median
2014	125	250
2015	195	265

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.

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 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 may 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.

Work Placement: The course involves a placement element consisting of a six week placement in each semester in a dental setting. 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.

What will I study?

	Semester 1	Credits	Semester 2	Credits
Year 1	Clinical Dentistry 1: Communications & Patient Care (M)	5	Clinical Dentistry 2: Materials & Instrumentation (M)	5
	Biological Science (M)	5	Disease & Infection Control (M)	10
	Transferable Skills (M)	10	Pharmacology (M)	5
	Work Placement 1 (M)	10	Work Placement 2 (M)	10
Year 2	Clinical Dentistry 3: Anatomy & Pathology (M)	5	Clinical Dentistry 4: Special Practice (M)	5
	Applied Physiology (M)	10	Dental Practice Management (M)	5
	Nutrition & Health Promotion (M)	5	Drugs Action & Usage (M)	10
	Work Placement 3 (M)	10	Work Placement 4 (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

