



CAREERS BY DEGREES°

Science &
Engineering

UL graduates
nine months
after
graduation

Further studies
chosen by
UL graduates

Organisations
that employ
UL graduates

Employability
Skills gained
from your
degree

Further
career
information

the frequency range 100–200 Hz. The frequency range 100–200 Hz is the range of the most annoying noise component for the majority of the subjects. The annoyance is due to the fact that the noise is in the frequency range of the most sensitive hearing range of the human ear. The annoyance is also due to the fact that the noise is in the frequency range of the most sensitive hearing range of the human ear.

The results of the present study show that the annoyance of the noise is not related to the sound pressure level. The annoyance is related to the frequency content of the noise. The annoyance is related to the frequency content of the noise. The annoyance is related to the frequency content of the noise. The annoyance is related to the frequency content of the noise.

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(This is an ongoing project - more programmes will be made available in time.)

Available online www.ul.ie/careers

Careers by Degrees

The following information will provide you with an outline of the skills you have gained from your degree subject at the University of Limerick. The publication also outlines the following:

Employability skills gained from your degree

- What UL graduates do the year after graduation
- Further study options for our graduates
- Organisations that employ UL graduates from these degrees
- Job titles of graduates who progressed directly to employment
- Further career Information



Bachelor of Architecture

Introduction

The School of Architecture at the University of Limerick offers a five-year undergraduate degree in architecture. The objective of the School is to educate architects with a set of integrated skills, balanced with a clear understanding of the environment – built, existing and imagined. The Royal Institute of Architects of Ireland (RIAI) has awarded full accreditation to the architecture programme at UL. Studying architecture in an accredited programme is the first step towards becoming a registered professional architect.

The School of Architecture embraces all parts of an architect’s education. It is a place where the study of architecture is undertaken with passion and inventiveness—an open and transparent society of mobile thinkers. The School of Architecture teaches an architecture that is integrated with Environmental and Structural engineering. As a graduate of this course, you will be in a position to start working in an architect’s office. This is the path followed by most graduates. Architecture studies include broad, encompassing technical skills, design, art, history and presentation skills. Some graduates move into other areas, including policy-making or public administration, business or urban design, photography or other arts, furniture or model-making, research and writing; other graduates pursue further studies.

Recognised degree courses in architecture take five years of full-time study. Many students take a year out for practical experience between the third and fourth years. So the whole process, from start to full professional qualification generally takes seven to nine years.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Problem-solving in an analytical, logical way
- Decision-making
- Working effectively in multinational teams
- Using creativity to establish innovative solutions
- Managing the design process and evaluating outcomes
- Meeting the changing needs of customers
- Numeracy, design and drawing
- IT skills (e.g. CAD)
- Project management
- Teamwork
- Written and verbal communication
- Research
- Flexibility in dealing with unexpected situations
- Self-reflection and continued professional development



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MSc in Computational Finance MSc in Creative Modelling

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme:

A2 Architects	Hassett Ducatez Architects	Millar+Howard Workshop Architects
Bucholz McEvoy Architects	Healy Partners	Open Architects
Casper Mueller Kneer	HMSHost	Punch Consulting Engineers
Chipperfield	Hugh Kelly Architects	Reiach and Hall Architects
Coady Partnership Architects	James Corbett Architects	Royal Bank of Scotland
Concord Architects	Jmarchitects	Simon J. Kelly Architects
Cork County Council	John Fleming Architects	SPAN Architecture
David Howell Design	Joseph Donk Architects	Tony Mullen Architects
David Quigley Architects	Leyden Hassett & Associates	Vistakon
David Walker Architects	Limerick City of Culture	Voxpro

Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed on Graduate Outcomes Surveys by graduates approximately one year after graduation:

Architect	Consultant
Architect Part II	Junior Architect
Architect Technician	Project Architect
Architectural Assistant	Teaching Assistant
Architectural Graduate	Technical Support Agent
Architectural Research Assistant	Architecture Tutor



Bachelor of Engineering in Aeronautical Engineering

Introduction

The Aeronautical Engineering course at UL is your gateway into the hugely exciting aerospace industry. This elite course is one of the most respected in Europe and is supported by outstanding facilities, including wind tunnels and composites manufacturing equipment. Job prospects have never been brighter for Aerospace Engineers: currently, there is a major shortage of such graduates in Europe. More than 70 per cent of our graduates work in the Aerospace industry and 63 per cent live in the Republic of Ireland.

The course is accredited by Engineers Ireland and is the only NFQ Level 8 degree course in Aeronautical Engineering in the Republic of Ireland. In Year 3, top-performing students can spend a semester at the world-renowned Embry-Riddle Aeronautical University in Florida, USA, or at Georgia Institute of Technology in Atlanta, USA, which is currently ranked in the top five US engineering schools.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Developing specialist knowledge in areas including aerodynamics, stress engineering, materials and structures, and sustainable aircraft design
- Working effectively in multinational teams
- Using creativity to establish innovative solutions
- Managing the design process and evaluating outcomes
- Meeting the changing needs of customers
- Numeracy, IT skills and attention to detail
- Teamwork
- Leadership
- Project management
- Communication (written and verbal)
- Development of economically viable, ethically sound and sustainable solutions



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MEng Aeronautical Engineering	PhD in Nucleation Crystallisation Hydrodynamics
MSc in Aerospace Vehicle Design	Structured PhD in Aerodynamics

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme:

Aer Lingus	GE Aviation
Airbus Defence and Space	Messier-Bugatti-Dowty
Eirtech Aviation	Orix Aviation
Electroimpact	Parc/GECAS
Envirotech Engineering	Part M Aviation Ireland
Bombardier Aerospace	Lufthansa Technik Airmotive Ireland
Boston Scientific	McGrath Electronics
British Airways	Medtronic
Dublin Aerospace	Mercedes-Benz



Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation:

Aero Design Engineer	Material and Process Engineer
Aeronautical Engineer	Project Engineer
Aerospace Stress Engineer	Quality Engineer
Aircraft Design Engineer	Research Assistant
Associate Technical Professional	Service Engineer
Camo Engineer	Support Engineer
Design Engineer	Technical Consultant
Design Liaison Engineer	Technical Designer
Development Engineer	Technical Project Manager
Engineering Technician	Technical Representative
Graduate Engineer	Technical Services Engineer
Maintenance Coordinator	Trainee Pilot
Maintenance Programme Engineer	



Bachelor of Science in Applied Physics

Introduction

Fundamental principles of physics govern our existence in this world. At the same time, these principles have been exploited in making possible the many technological advances that surround us. The BSc in Applied Physics strikes the right balance between obtaining a fundamental understanding of these principles and learning how to apply them in a way that leads to discoveries and innovations.

This pragmatic approach, underpinned by a strong link with local industry, will ensure that you are highly desirable as an employee and very flexible in adapting to different employment conditions in industry, research organisations, academia, etc.

Graduates of this course have contributed to ground-breaking scientific discoveries, trend-setting innovations and high-yield production technologies. They are sought after for top-end fundamental research and cutting-edge technological innovation roles.

Employability skills from this degree

Graduates from this programme develop skills for employment including:

- Planning, executing, analysing and reporting on experiments and investigations
- Analysing data, evaluating the level of uncertainty in experimental investigations and drawing valid conclusions
- Understanding mathematical modelling and the role of approximation
- Producing clear and accurate scientific reports
- Using laboratory apparatus and techniques soundly
- Using technical language correctly
- Working independently, using initiative to meet deadlines, and interacting constructively with other people
- Constructon of logical arguments
- Problem solving by identifying the appropriate principles and using scientific techniques such as special and limiting cases and order-of-magnitude estimates
- Numerical skills
- Attention to detail
- IT skills, including using programming languages and applications
- Communication—listening carefully, reading demanding texts, and presenting complex information clearly



Further study options for graduates with this degree

The following provides a sample of further education qualifications graduates have pursued:

Graduate Entry Medicine	MSc in Nano Bioscience
MA in Business Management	MSc in Physics
MEng in VLSI Systems	MSc in Physics /Engineering
MSc in Chemical Engineering	PhD research in a relevant field
MSc in Medical Physics	

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme:

Accenture	Global Foundries	Microsemi
Analog Devices	Intel	Molex
ASML	Irdeto	SAP
Firecomms	Johnson & Johnson	Stryker
GenCell Biosystems		

Job titles of graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation:

Quality Control Analyst	Medical Physicist
Consultant	Process Engineer
Laboratory Technician	Research and Development Engineer
Tech Support	Software Developer/Engineer



Bachelor of Engineering in Biomedical Engineering

Introduction

Modern medicine has given rise to the development of a wide range of novel engineering solutions to clinical problems. Examples of these developments vary from orthopaedic implants (e.g. total hip replacements) to cardiovascular implants (e.g. coronary stents, which are small wire scaffolds inserted into the blood vessels around the heart). As a result of the increased collaboration between engineers and doctors, the discipline of Biomedical Engineering has developed. Biomedical Engineering is the fastest-growing area of Engineering.

Students who follow this programme can look forward to exciting and rewarding careers in the biomedical engineering industry, an industry that is undergoing major expansion internationally and in Ireland. The biomedical engineering industry has established operations in Ireland from all the major multinational companies resulting in the need for highly skilled biomedical engineers.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Solving problems using logic, creative and innovative approaches
- Planning, prioritising, working to deadlines and under pressure
- Communicating effectively (verbally and written)
- Working in multidisciplinary teams
- Numeracy and IT skills, with excellent use of statistics
- Project management
- Awareness of cost/value
- Awareness of social, cultural, environmental, health and safety, and wider professional responsibilities
- Attention to detail
- Good judgement and acceptance of responsibility



Further study options for graduates with this degree

The following provides a sample of further education qualifications graduates have pursued:

GradDip in Chemical Engineering	MSc in Software Engineering
GradDip in Computer Aided Engineering Product Design	PhD in Biomedical Engineering
MEng in Biopharmaceutical Engineering	PhD in Disease Modelling using Microfluidics
MSc in Biomedical Engineering	PhD in Mechanical Engineering
MSc in Evolutionary Biology	PhD in Micro Fluids - Biomedical Engineering

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme:

Abbott Ireland	GenCell	Sabis International School
AirTanker Services	IComp	Sanmina
Alere	Kerry Group	Sedara
Amgen	Labquip	Stryker
Biological Services Unit	Lake Region Medical	Tetra Pak
Boston Scientific	Life Technologies	University of Limerick
Creganna Medical	Medtronic	Vistakon
DePuy	Meridian Medical	

Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation:

Associate Regulatory Affairs Specialist	Operations Graduate
Design Engineer	Procurement & Commercial Analyst
Graduate Manufacturing Engineer	Quality Engineer
Graduate Process Engineer	R&D Engineer
Graduate Programme	Research Assistant
Graduate Trainee	Risk Analyst
Lab. Assistant	Technical Biomedical Engineer
Manufacturing Engineer	Validation Engineer



Bachelor of Engineering in Chemical and Biochemical Engineering

This programme is the only course of its kind in the Mid-West and Western regions of the country. Process engineering is the central area of expertise underpinning many important, sustainable industries and businesses within both the Irish and global economies. Such enterprises include biopharmaceuticals, fuels, chemicals, drug manufacture, energy production, food and beverage processing, environmental waste remediation, and electronic component manufacture.

The Irish pharmaceutical, chemical and biochemical industries have been primarily responsible for the recent consistent increases in the national export performance, proving these sectors to be stable and resilient, even in harsh economic conditions.

In all these areas, the chemical/biochemical engineer is of key importance both in the design and operation of the processing systems and in the development and manufacture of novel products.

The course received full professional accreditation for BE (Hons) Chemical & Biochemical Engineering from professional bodies, including the Institution of Chemical Engineers (IChemE), which ensures international professional recognition for holders of this qualification.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Solving problems and using analytical skills
- Managing projects
- Working in teams
- Using leadership skills
- Attention to detail
- Communication and presentation skills
- Ability to develop manufacturing processes for a wide variety of products



Further study options for graduates with this degree

Graduates with this degree have pursued PhD research in a chosen field.

Organisations employing graduates with this degree

Athy International Concentrates (The Coca-Cola Company)	Lifescan	MSD
Glanbia	Regeneron	Hovione
	PFGI Consulting Engineers	Eli Lilly

Job titles for graduates with this degree

Graduate Engineer	Process Engineer
Process Development & Chemical Engineer	Process Projects Engineer
IPT Engineer	Biotech Production Specialist



Bachelor of Engineering in Civil Engineering

Introduction

The Civil Engineering programme at UL is fully accredited by Engineers Ireland and uses a student-centered approach to teaching, using techniques such as problem-based learning and active learning. You will develop your ability to work on a team, to plan and present, to undertake research and to apply your knowledge.

Most civil engineering today deals with structures, roads, bridges, railways, water supply, transportation and traffic, waste water, protection of the environment, flood control and power plants.

The details of a career path can vary, depending on market forces and your personal preferences. In some fields and in some firms, entry-level engineers work primarily monitoring construction in the field, serving as the 'eyes and ears' of more senior design engineers; while in other areas, entry-level engineers perform routine analysis or design tasks.

The flexibility offered by the breadth and structure of the course will provide you with the diverse skills necessary to adapt to the demands and challenges of civil engineering practice in the 21st century. Career opportunities exist in areas of infrastructure, building, water resources, environmental and government agencies.

Employability skills gained from your degree

Graduates from this programme develop employability skills including:

- Solving problems in an analytical, logical way
- Working in teams
- Conducting research
- Making decisions
- Being flexible in dealing with unexpected situations
- Numeracy, design and drawing
- IT skills (e.g. CAD)
- Project management
- Self-reflection and continued professional development
- Written and verbal communication



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MSc Structural Dynamics	MSc in Structural and Geotechnical Engineering
MSc in Financial Services	Research PhD-Information Technology in Architecture, Engineering and Construction
MSc in Project Management	

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme:

4site	EirGrid	Modebest
Arup	Fort McMurray	Munster Joinery
Atkins	GCL Engineering	Murphy Group
BHP Laboratories	JBA Consulting	Northvale Construction
Bord Gáis	JB Barry & Partners	PHM Consulting
Brian Conneely Civil Engineer	J Reddington	Punch Consulting Engineers
Byrne Looby Partners	K&J Townmore Construction	PVP Engineering
Clancy Construction	Kentz	Reddington
Contech Construction	KPMG	Richard Nolan Civil Engineering
Dennany Reidy Associates	Lagan Construction	Tobin Consulting
	McHugh Construction	



Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation:

Assistant Engineer	Graduate Engineer
Builder	Graduate Geotechnical Engineer
Civil Engineer	Junior Project Manager
Design Engineer	Project Coordinator
Engineer	Site Engineer
Estimator	Site Manager/Project Manager
Facade Designer	Technician



Bachelor of Science in Computer Games Development

Introduction

The computer games industry is an exciting field, currently outselling the film industry worldwide. Computer game development is innovative and exciting from a technological and creative perspective, providing career opportunities for imaginative, logical and energetic students. Graduates have the satisfaction of seeing their work being enjoyed by a global audience. With this programme, you will learn the art and science of computer games, with a focus on programming and design.

This programme will equip you with the skills and technological ability to develop both computer game and computer software related systems. You will study Computer Science, with special emphasis on topics relevant to Game Design, e.g. software development, mobile devices, computer graphics and artificial intelligence. You will also study topics relevant to the development of a game from concept to the final 'shooting script' (prior to programming).

The key aims of the BSc (Hons) in Computer Games Development programme are to provide you with:

- Knowledge of the various programming languages and software related platforms used
- Skills in System Analysis, and integration of software components
- Expertise in areas such as the human-computer interface and artificial intelligence

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Understanding the fundamentals of software for computer graphics
- Working in teams and liaising with other professionals to complete complex, software-based games projects
- Working creatively and problem-solving
- Communicating (written and verbal)
- Developing skills in cinematography and story writing
- Cultural awareness: developing games appropriate to international markets
- Technical ability and solid skills in software development:
 - Object Oriented Design
 - Mobile apps
 - Data structures and algorithms
 - Self-motivation and the ability to work independently
 - Flexibility in meeting deadlines and client requirements



Further study options for graduates with this degree

The following provides a sample of further education qualifications graduates have pursued:

HDip in Business Studies	PhD in Computer Science, Creative Informatics and Interactive Media
MEng in Information and Network Security	MSc in Software Engineering

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Action Point	Fidelity Investments	Rapid Ratings
BAE Systems Applied Intelligence	HP	Rockstar North
Bloomberg PolarLake	IBM	RR Donnelley
Deloitte	Intel	The Rosetta Foundation
Demonware	McAfee	Ubisoft Reflections
Doc's Homes	MDS	Virgin Media
eirpoint	Microsoft	Wind Energy Direct
	OKI	



Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed on the Graduate Outcomes Survey by graduates approximately one year after graduation:

Graduate Programme Intern	Social Localisation Programmer
IT Technician	Software Developer
Junior IT Consultant	Software Engineer
Junior Software Engineer	Software Programmer
Marketing Executive	Software QA Tester
Mission Scripter	System Document Author
Programming Engineer	Systems Software Engineer
QA Engineer	Systems Technician
Research Assistant	Technical Support
Service Engineer	Technology Analyst (Consulting Department)



Bachelor of Science in Computer Systems

Introduction

The Computer Systems programme at UL aims to equip you with the knowledge and skills to become a successful and effective computer professional. You are probably aware of the important role of computer software in everyday life: in your phone, your camera, your music player, and your social networking sites.

But are you also aware of the many advanced and highly sophisticated software-intensive systems that underpin the modern world? For example, software-based systems play an important role in all kinds of systems, including traffic management, energy generation, manufacturing, aeronautical systems, education, entertainment and business.

On completion of the programme, graduates go on to a variety of interesting and rewarding software careers based in large and small organisations, in industry, in research and in education and training. As ever, the primary focus of this course is on the underlying principles of software development and their application to modern software development practices.

We want you to secure a firm and lasting intellectual foundation that will allow you to acquire new and specific technical knowledge over a lifelong career. The course is designed to give you ample opportunities to learn and apply knowledge in small tutorials and practical groups.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Evaluating potential risks and designing creative solutions
- Teamwork
- Communicating *(written and verbal)
- Report writing
- Presenting reasoned arguments
- Retrieving information
- Coping with rapid technological changes
- Developing commercial awareness
- Ability to construct, design and specify computer-based systems
- Leadership
- Time management and organisation
- Architectural and programming design patterns
- Verification and validation
- Agile development



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MSc Computer Systems	MSc in Mathematical Modelling
MEng in Information and Network Security	MSc in Networks and Distributed Systems
MSc in Applied Software Technology	MSc in Software Engineering
MSc in Computing (Software Engineering)	

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Avaya	Glass Eye Productions	myCircle
Bayinteractive	HP	Paddy Power
Cybercom	IBM	Retail inMotion
Deloitte	IQ Solutions	Voicebank
Element Six	Lucidity Solutions	YellowSchedule



Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed on the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation:

Application Support	Program Manager
Associate Build Systems Engineer	QA Software Tester
Associate Software Developer/Engineer	Quality Assurance Engineer
Computer Programmer	Service Engineer
Data Centre Engineer	Sharepoint Consultant
Freelance Wordpress Designer	Software Developer/Engineer
Implementation Web Developer	Software Technician
IT Analyst	System Test Engineer
Java Engineer	Systems Administrator
Junior Software Engineer	Systems Engineer
Network Software Engineer	Technical Support
Production Technician	Unix Programmer



Bachelor of Science in Construction Management and Engineering

Introduction

The main aim of the course is to give you the skills to take projects from design to reality. Using a broad-based management and technological education, you will be capable of recognising, evaluating and solving construction and business problems associated with building and civil engineering projects.

You will learn how to adapt to technological change in a competitive industrial climate. Managing construction projects requires a high level of organisation, both commercially and technologically. Construction management prepares you to systematically plan, organise and manage resources such as people, finance, plant and materials. Construction engineering gives you the skills necessary to implement processes and methods of construction to produce a quality building in an efficient and safe manner.

The Construction Manager plays a pivotal role in overseeing a construction project from inception to completion. UL's programme equips graduates with broad skills in construction techniques, planning and control, and management. The diversity of the programme prepares construction managers to lead projects of immense complexity in an exciting and rewarding profession.

The University of Limerick's Construction Management and Engineering programme is accredited by the Chartered Institute of Building (CIOB) and the Chartered Association of Building Engineers (CABE).

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Dealing with complex technical detail and the wider demands of a project
- Working in teams
- Communicating (written and verbal)
- Planning and managing construction projects
- Assimilating new information quickly
- Analysing and critically examining a range of information sources for decision-making
- Researching in-depth problems to design real solutions
- Gathering, summarising and presenting information
- Leadership and management of employees
- Technical expertise
- Logical thinking, numeracy and computing
- An understanding of compliance (e.g. health and safety)



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued:

Diploma in Accounting and Corporate Finance	MSc in Construction
Professional Master's in Education (Technology)	MSc in Infrastructure Engineering
MA in Business Management	MSc in International Management and Global Business
MA in English Language Teaching	MSc in Project Management
MSc in Music Technology	MSc in Quantity Surveying
MEng Sustainable Energy	MSc in Sustainable Energy Engineering
MEng in Research	PhD in Engineering
MSc in Civil Engineering	

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme:

AP Megan	Gleeson Steel & Engineering	Morrison Utility Services
BAM Contractors	JBA Consulting	Munster Group
BAM Ferrovial Kier JV-Crossrail	J Coffey	North Tipperary County Council
Boston Scientific	J.H. Lynch & Sons	Oriental Consultants
Byrne Bros	JJ Rhatigan & Co	PM&C Saudi Arabia
Cargill	J Murphy & Sons	Reidy Contracting Group
Celtic Anglian Water	John Paul Construction	Sommerman Skinner Associates
Civmec	John Sisk and Son	Tipperary County Council
Clancy Construction	J.T. Magen & Co.	
Coffey Northumbrian	Kentz	



Job titles for graduates with this degree

Graduates progressing directly into employment take up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation:

Assistant Engineer	Graduate Trainee
Assistant Project Manager	Health & Safety Engineering Supervisor
Building Energy Rating Assessor	Junior Civil Engineer
Business Reporting Administrator	Junior Construction Engineer
Civil Engineer	Junior Project Manager
Construction Labourer	Medical Device Analyst
Construction Manager	Project Engineer
Draftsman	Project Manager
Engineer – Roads Section	Project Superintendent
Engineer/Estimator	Property Manager
Engineer Manager	Quality Assurance Representative
Engineer/Supervisor	Quantity Surveyor
Field Surveyor	Site Engineer
Foreman	Site Manager
Graduate Construction Commercial Manager	Surveyor
Graduate Project Engineer	TBM Shift Engineer
Graduate Site Engineer	Trainee Engineer



Bachelor of Science in Digital Media Design

Introduction

While engineers make technology faster, smaller and more reliable, interaction designers make it more meaningful, usable and delightful. Do you want to create the next-wave mobile experience? Do you want to reinvent social networks? Do you want to pioneer new ways to work and play? If so, this programme may be for you.

Interaction Designers define the structure and behaviour of interactive products and services and create compelling relationships between people and the interactive systems they use, from computers to mobile devices to appliances.

The design of interactive systems poses new types of challenges for designers and is a key skill for emerging trends in contemporary society such as the Internet of Things. The BSc in Digital Media Design develops the creative, technical and analytical skills needed to be successful media practitioners in both the Irish and global digital media industries. You will learn how to identify design problems in interactive devices, systems and services. You will learn how to respond to these design challenges by applying observation techniques to understand interactions in context. You will develop conceptual models and representations (stories, scenarios, mock-ups and prototypes) to assess the perspectives of prospective users (understand their understanding) in the course of a participatory design process to develop interactions that are understandable and useful.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Wireframing
- Designing websites
- Designing for usability
- Understanding the human and social issues surrounding the use of digital media
- Conducting User research
- Conducting User analysis
- Learning design methods relevant for designing interactions with technology
- Working in teams
- Graphic design
- Physical prototyping
- Concept and ideation skills
- Time management and organisation
- Expertise in the use of audio, video and interactive digital media



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MA in Business Management	MSc in Marketing, Consumption and Society
MA in Social Media	Structured PhD in Digital Media Design
MSc in Interactive Media	

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme.

Avaya	HP	Red PR
Bayinteractive Inc	IBM	Retail inMotion
John Sisk and Son	IQ Solutions	SDM
Cybercom	Isobar	Three
Deloitte	myCircle	Voicebank
Element Six	Nzone Skydiving	YellowSchedule
Glass Eye Productions	Paddy Power	

Job titles for graduates with this degree

Graduates progressing directly to employment take up a wide variety of roles. The following list provides a sample of initial roles listed on FDR surveys by graduates approximately one year after graduation:

Communication Designer	Motion Graphics Designer
Digital Content Producer	Product Designer
Digital Marketing Executive and Content Creator	Social Media Strategist
Freelance Designer	UI Designer
Freelance Digital Designer	User Researcher
Freelance Media Production	UX Designer
Front-end Designer	Video Editor
Interaction Designer	Visual Designer



Bachelor of Science in Economics and Mathematical Sciences

Introduction

Extensive use of quantitative techniques and an emphasis on the importance of analytical thinking will instil transferable skills that you can use and develop in a wide range of careers.

Studying Economics and Mathematical Sciences develops habits of rigorous thought, application of quantitative tools, and clear writing skills. This programme is an excellent way to acquire problem-solving skills and develop a logical, ordered way of looking at issues. By the end of this course, you will be able to apply various mathematical techniques to understand the physical and economic worlds we inhabit.

This degree aims to equip mathematically competent students with a more specialised focus at the level of mathematical theory and statistical analysis, while simultaneously providing them with an exposure to the principles of economics and its key applications.

In a dynamic learning environment, students develop high standards of numeracy and key skills in analytical thinking. Many diverse career opportunities are open to graduates with strong applied quantitative skills.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Analysing and interpreting data
- Finding patterns and drawing conclusions
- Applying economic principles and models
- Approaching problems in an analytical and rigorous way
- Formulating theories and applying them to solve problems
- Handling complex data and applying mathematical and statistical analysis methods
- Presenting mathematical arguments and conclusions with accuracy and clarity
- Logical thinking
- Communication and presentation skills
- Time management
- Organisational skills and working methodically and accurately
- Teamwork and the ability to work independently
- Statistical analysis

Further study options for graduates with this degree

The following provides a sample of further education qualifications these graduates have pursued.

HDip in Accounting and Corporate Finance

MSc in Actuarial Science

MSc in Business Analytics

MSc in Computational Finance

MSc in Economic Analysis

MSc in Financial Services

MSc in Statistics



Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme.

Accenture	Department of Finance	Invesco
Central Bank of Ireland	ESRI	KPMG
Competition and Consumer Protection Commission	FCOS	State Street
	GlobalReach	

Job titles for graduates with this degree

Graduates who progressed directly to employment have taken up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Actuary	Pensions Administrator
Equities Trader	Research Analyst
IT Consultant	Trainee Accountant



Bachelor of Science in Electronics

Introduction

Smart electronic systems are an ever-increasing part of daily life. They are encountered in the home and the workplace, controlling the environment within our buildings, safely regulating the cars that we drive and revolutionising how we spend our free time. The electronic systems of today are highly complex and miniaturised so that they can fit in our pockets, can be worn without discomfort (indeed they will be soon embedded in our clothing), and can occupy as little desk space as possible.

- There are lots of exciting and rewarding 'green' career opportunities in Electronics.
- All utility supplies to home or business (e.g. electricity, water or oil) now need to be monitored electronically.
- New electronic technology is deployed everywhere. Maintenance and Performance challenges for this technology are increasing every day.
- Electronics specialists are required to upgrade and maintain energy standards in homes, businesses and the healthcare services sector.
- It is clear that the extraordinary growth in the Electronics sector is set to continue far into the future and that the need for talented people and new companies to design, test, install and maintain these electronic systems has never been greater.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Problem-solving in an analytical, logical way
- Working in teams
- Communicating (written and verbal)
- Conducting research
- Decision-making
- Managing projects
- Self-reflection and continued professional development
- Numeracy, design and drawing
- IT skills (e.g. CAD)
- Critical thinking and the ability to interpret data
- Awareness of ethical issues
- Flexibility in dealing with unexpected situations



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MSc in Project Management

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme.

Analog

Finesse Medical

Nikon

Dell

LIT

Vitalograph

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Design Evaluation Engineer

Project Management

Evaluation Engineer

Research Assistant

Graduate Programme

Technician

Process Engineer



Bachelor of Science in Energy

The BSc degree programme in Energy aims to provide you with the scientific and technical expertise to address the largest issues of the 21st century: energy sustainability, energy control and climate change.

Energy requirements will double, perhaps even quadruple, by the end of the 21st century. Ireland is one of the most dependent countries in the world on imported energy, importing more than 85 per cent of its fuel needs. However, we also occupy the windiest location in Europe and we are surrounded by water, with waves and tides. In other words, there is an abundance of renewable energy that we can harness on our way to becoming world leaders in the development of relevant science and technology.

Making this a reality will take time, so we also need to use our existing energy supplies efficiently, by looking for ways to reduce consumption and manage energy use effectively. To tackle all these issues and more, we need trained energy graduates in our society. The aim of the BSc in Energy is to meet current and anticipated demand for such graduates by providing a programme for careers in areas such as energy provision, energy control, energy research, energy management, energy planning, energy consultancy, energy assessment, and energy and carbon trading services.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Understanding the techniques, principles and practices for analysing the environmental and economic impacts of projects in energy usage and energy development
- Monitoring energy usage within the industrial sector and introducing modifications for more efficient energy consumption.
- Knowledge of the energy costs associated with the manufacture, transport, use and disposal of products



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

GradDip in Chemical Engineering	MSc in Computational Finance
MSc Advanced Engineering Materials	MSc in Financial Economics
MSc in Bio Fuel Process Engineering	MSc in Risk Management and Insurance
MSc in Energy Management	MSc in Technology and Innovation Management
MEng in Science, Sustainable Energy	
MSc in Carbon Finance	

Organisations employing graduates with this degree

The following provides a sample of organisations employing graduates of this programme

Antaris Consulting	Intel	ResourceKraft
Ashgrove Renewables	MCS	Schneider Electric
Astellas	Medite Europe	Serosep
Danske Bank	Northern Trust	Shell
EirGrid	Optinergy	SSE
Electric Ireland	ORS	Sustainable Energy Authority of Ireland
ESB	Procter & Gamble	
GECAS	Regeneron	Thermo King



Job titles for graduates with this degree

Graduates who progressed directly to employment have taken up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Applications Engineer	Test Engineer Graduate Subsea Hardware Engineer
Data Processor	Manufacturing Scientist
Design Engineer	Manufacturing Technician
Energy Procurement Consultant	Process Engineer
Energy Project Engineer	Project Engineer
Fund Accountant	Technical Communications Engineer
Futures Trader	



Bachelor of Science in Environmental Science

Introduction

Are you interested in Science? Are you concerned about the quality of our environment? Would you like a career helping to make improvements to our environment for the benefit of current and future generations? Do you want a challenging career and one tailored to meet the needs of a wide spectrum of employers? If so, this programme may be for you.

Stringent environmental requirements are being placed on industry and community in areas such as energy usage, waste minimisation, waste management, recycling, and water and air quality. Consequently, there is a strong demand for graduates with a scientific understanding of environmental health and safety issues, together with a full knowledge of technological and management methods available to help improve the quality of our environment. Environmental Science at the University of Limerick is a distinctive programme because of its relevance to industry and business, through a focus on environmental technology, environmental management, and health and safety in the workplace.

You will be provided with a strong foundation in biology, chemistry and ecology, and with in-depth knowledge in environmental technology, environmental monitoring and management, conservation and waste management.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Researching and problem-solving
- Developing arguments from scientific, ethical and philosophical perspectives
- Planning and managing projects
- Gathering, analysing and communicating complex technical data
- Flexibility in working in all kinds of environments, developed through field-work experience
- Numerical and IT skills, developed through the application of statistics and measurement techniques
- Broad understanding of local, national and global environmental issues



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

GradDip in Chemical Engineering	MSc in Project Management
GradDip in Computing	MSc in Soil Science
MSc in Environmental Engineering	MSc in Sustainable Resource Management: Policy and Practice
MSc in Environmental Hydrogeology	MSc in Water Resource Management
MSc in Geographical Information Systems	PhD in Environmental Science
MSc in Occupational Health, Safety and Ergonomics	PhD in Forest Soil Carbon Study

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Alexion	Dairygold	Shell
Analog Devices	DCM Compliance	SouthWestern Services
Arrabawn Dairies	Hegarty Metals Processors (International) Ltd	University of Limerick
Astellas		Vistakon
Britvic	Indaver Ireland	Veolia
Cork County Council	Intel	
Limerick County Council		



Job titles for graduates with this degree

Graduates who progressed directly to employment have taken up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Consultant Waste Technician	Monitoring & Analysis Specialist
Environmental Awareness Officer	Project Manager
Environmental Consultancy	Technical Adviser
Environmental Health & Safety (EHS) Officer	Waste Management Technical Officer
Environmental Research	



Bachelor of Science in Equine Science

Introduction

Would you like to follow a professional career in the horse industry? The four-year BSc degree in Equine Science provides you with the opportunity to underpin your career aspirations with specialist knowledge and skills. This programme, unique in Europe, has been developed because of the economic importance of the horse and related industries and the consequential need to produce highly qualified personnel with the specialised knowledge to exploit the potential of these industries.

The overall aim of the programme is to equip you with degree-level competence in the disciplines of Equine Science and a choice of professional studies in either Equitation* or Equine Business Management. Graduates of the programme contribute to the continued development of the horse industry through the application of their knowledge, skills and research in Science, Equitation and Business Management.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Working independently and in teams
- Knowledge of equitation and business
- Working at all levels of the horse industry
- Familiarity with the national and international horse industry
- Thinking critically

Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

Master's Degree Research	MSc in Project Management
MSc in Animal Behaviour	MSc in Reproduction Science
MSc in Equine Science	Veterinary Medicine



Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Advanced Diagnostics	Coolmore Stud	Hill Stables
Black River Farm	Grange Stud	Irish Equine Centre
Coolmore America		

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Apprentice Scheme with YITBA	Senior Clinical Pathology Technologist
Equine Nutrition Specialist	Showjumper
Laboratory Assistant	Stable Hand
Stable Manager	
Stud Employee	



Bachelor of Science in Financial Mathematics

Introduction

This programme produces graduates with developed mathematical, statistical and computing skills, and the ability to apply these skills to the quantitative analysis of industrial, commercial or financial business decisions. Employers are very keen to hire graduates with good quantitative skills as well as a financial background.

The programme also aims to produce graduates with sufficient mathematical, statistical and computing skills for them to undertake postgraduate work in these or related areas. As part of the Cooperative education aspect of this programme, you will have the opportunity to gain experience of working in a company or department where these skills are used.

This programme provides you with an education in the appropriate branches of mathematics. You will explore and develop standard methods and techniques using mathematical, symbolic and statistical computing packages. You will be introduced to state-of-the art theory and methodologies used in the pricing of financial products, the modelling of markets and the practical implementations of these models. As a student of financial mathematics you will observe the application of mathematics to problems drawn from industry, commerce and financial services.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Finding patterns and drawing conclusions
- Approaching problems in an analytical and rigorous way
- Formulating theories and applying them to solve problems
- Dealing with abstract concepts
- Presenting mathematical arguments and conclusions with accuracy and clarity
- Numeracy and the ability to research, interpret and use business and financial data
- Advanced numeracy and analysing large quantities of data
- Logical thinking
- Teamwork and the ability to work independently



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

HDip in Actuarial Science	MSc in Financial Services
MSc in Finance	MSc in Mathematical Modelling
MSc in Computational Finance	

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

AIB	First Derivatives	SSGA
Bank of Ireland	J.P. Morgan	University of Limerick
BNY Mellon	Northern Trust	Wipro Outsourcing Services
Fidelity Investments	Omnicom Financial Services	

Job titles for graduates with this degree

Graduates who progressed directly to employment have taken up a wide variety of roles. The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Claims Manager	Planning Resource Analyst
Credit Risk Technology	Redress Assessor
Data Analyst	Researcher
Investment Data Analyst	Technical Services Engineer
Operations Analyst	Treasury Assistant



Bachelor of Science Food Science and Health

Introduction

This BSc programme in Food Science and Health will prepare you for careers in Ireland's largest industry. The programme has been developed to meet needs among consumers, the food industry, academic and research organisations, and government agencies.

The study of Food Science and Health is challenging and rewarding. This degree programme will combine the study of nutrition, human physiology and diet–health relationships with classical food science and technology.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Analysing, problem-solving and interpreting data
- Conducting research
- Conducting laboratory work and reporting
- Attention to detail
- Oral and written communication skills
- IT skills
- Numerical and statistical awareness
- Time management

Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MA in Business Management

MSc in Biotechnology

MSc in Dietetics

MSc in Environmental Health
and Safety

MSc in Food Risk and Analysis

MSc in International Management
and Global Business

MSc in Public Health Nutrition

PhD in Food Science



Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

CP Ingredients	Dew Valley Foods	PLC Ingredients
Cadbury	Kerry Group	Queally's Arrow Food Group
Dairygold	Rudds Fine Foods	Carberry Group
Dawn Foods	Glanbia	Irish Distillers
Diageo	Abbot	Green Farm Foods
Danone	Eurofins Food Testing Ireland	

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Culinary Technologist	Quality Technician
Food Technologist	Sensory Analyst
Laboratory Analyst	Supervisor
QA & Regulatory Technologist	Technical Sales Coordinator
Quality Analyst	



Bachelor of Science in Industrial Biochemistry

Introduction

The BSc in Industrial Biochemistry is a degree programme in biotechnology. It focuses on the study of living cells (or components of living cells) and the medical/industrial applications of such substances. It is designed to prepare you for a career in biotechnology and allied industries, and has a very strong employment record.

Examples of traditional biotechnological processes include the use of microorganisms to produce alcohol or antibiotics. Examples of more modern biotechnological processes include the use of genetic engineering to produce protein-based drugs (e.g. Interferons), engineered plants (e.g. drought- or pesticide-resistant) or transgenic animals displaying novel characteristic (e.g. faster growth).

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Understanding complex biological processes
- Assembling arguments and engaging in debate
- Thinking independently and problem-solving
- Full and critical understanding of relevant texts
- Critical, analytical and practical skills
- Numeracy
- Communication, presentation and IT skills
- Teamwork
- Self-management and professional development

Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

PhD in a relevant research field	MSc in Biochemistry
GradDip in Chemical Engineering	MSc in Biomedical Science
Graduate Entry Medicine	MSc in Biotechnology
MA in Business Management	MSc in Computational Biology



Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Arise Europe	GSK	Novartis
Beckman Coulter	Janssen	Regeneron
BioMarin	Monaghan Biosciences	Vistakon
Dairygold		Waters Technologies
EirGen	Monaghan Mushrooms	

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Biotech Production	Process Technician
Manufacturing Technician	QC Analyst
Irish Research Council	Quality Officer
Laboratory Assistant	Research and Development Analyst
Laboratory Technician	Technical Support
Manufacturing Biochemist	



Bachelor of Science in Mathematical Sciences

Introduction

Do you like maths? Would you like a degree programme that will give you a wide range of options about the potential careers you might eventually pursue? If so, this programme may be for you.

Mathematical skills are highly valued by employers and are easily transferable. Mathematical Sciences includes three options (Mathematical Modelling, Statistics and Computing) and gives you the opportunity to study something you like, while having the chance to think about your eventual career choice.

The programme is suited to students with an aptitude for mathematics who are interested in applying mathematics to problem-solving in the real world. It is designed to provide a broad mathematical training that will allow you to work in any environment that requires strong analytical and problem-solving skills. The programme involves an introductory two years, common to all students, when the fundamental mathematical tools are introduced. After two years, you will have the option of specialising in mathematics, statistics or computing. The programme also provides a theoretical grounding for students who wish to pursue postgraduate studies.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Designing and conducting observational and experimental studies
- Analysing and interpreting data, finding patterns and drawing conclusions
- Approaching problems in an analytical and rigorous way, formulating theories and applying them to solve problems
- Dealing with abstract concepts
- IT skills
- Advanced numeracy and analysing large quantities of data
- Logical thinking



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MSc in Actuarial Science	PhD in Mathematics and Statistics
MSc in Computational Finance	PhD in Statistics
MSc in Mathematical Modelling	Professional Accounting Exams

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Accenture	Citco	Regeneron
ACI	First Derivatives	SABIS International Schools
AIB	Intel	Three
Bank of New York	Permanent TSB	Wipro
Caceis	Presidion	

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Actuary	Marketing Analyst
Analytics Consultant	Master Data/SRM Analyst
Business Analyst	Risk Analyst
Commodity Analyst	Software Engineer
Actuary	Marketing Analyst
Analytics Consultant	Master Data/SRM Analyst
Business Analyst	Risk Analyst
Commodity Analyst	Software Engineer



Bachelor of Science in Mathematics and Physics

Introduction

Have you ever thought about the following questions?

- Why is the weather so difficult to predict?
- What do stock markets and earthquakes have in common?
- How can matter be a wave on atomic scales?
- How can wave mechanics produce the next generation of computers?
- How do you model the universe in a computer?
- How does the spreading of a disease explain star formation?

All these questions share something in common: they can be answered at the interface of mathematics and physics. Understanding both subjects equally allows a unique view of the world that lets you capture and analyse its true complexity in an elegant way: it allows you to explain the world, see effects not yet detected or realised, and even predict how it will behave. You will need to be comfortable with mathematics, and have an innate curiosity about how the world works. You should also be interested in applying your skills in mathematics and physics to understanding and solving real-world problems. This course seeks to provide a genuine mixture of the two subjects. In addition to developing core and advanced mathematical skills, training will be provided in fundamental physics – spanning mechanics to quantum mechanics – and in state-of-the-art applications of physics, such as nanotechnology.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- | | |
|---|--|
| <ul style="list-style-type: none"> • Designing and conducting observational and experimental studies • Analysing and interpreting data, finding patterns and drawing conclusions • Dealing with abstract concepts • Presenting mathematical arguments and conclusions with accuracy and clarity • Advanced numeracy and analysing large quantities of data | <ul style="list-style-type: none"> • Logical thinking • Numeracy—mathematical modelling, interpreting and presenting information graphically, and using mathematics to find solutions to scientific problems • IT skills, including specialist software packages and some programming • Attention to detail • Communication— conveying complex ideas and using technical language correctly |
|---|--|



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

PhD in a relevant research field	MSc in Biochemistry
GradDip in Chemical Engineering	MSc in Biomedical Science
Graduate Entry Medicine	MSc in Biotechnology
MA in Business Management	MSc in Computational Biology

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Barclays Investment Bank	Magellan Aviation Group
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Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey

Data Analyst	Financial Analyst
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Bachelor of Engineering in Mechanical Engineering

Introduction

Mechanical Engineering is a broad-based discipline. Students following the degree programme are prepared for careers in many industrial sectors, including such diverse areas as power generation, mechanical design, automotive, chemical processing, pharmaceutical, food processing, manufacturing, design consultancy, materials processing and aviation.

The Mechanical Engineering degree programme aims not only to give you a thorough background in fundamental Mechanical Engineering subjects but also allows specialisation in one of a number of areas of particular relevance to Irish industry.

Mechanical Engineering at the University of Limerick adheres to traditional guidelines set out by the professional engineering institutions (such as Engineers Ireland and IMechE) and requires you to have an aptitude for mathematics and problem solving.

Mechanical Engineering at the University of Limerick is an honours degree programme accredited by Engineers Ireland (www.engineersireland.ie). The qualifications of graduates are recognised worldwide through international accords.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Analysing energy and thermo-fluid components and systems
- Designing machines, devices and components, and performing stress-analyses on these systems
- Understanding instrumentation and the control of mechanical devices
- Planning, prioritising, working to deadlines and under pressure
- Working in multidisciplinary teams
- Communication
- Problem-solving through logic and creative and innovative approaches
- Numeracy and IT skills, with excellent use of analytical skills
- Project management
- Awareness of cost/value
- Awareness of social, cultural, environmental, health and safety, and wider professional responsibilities
- Attention to detail
- Good judgement and acceptance of responsibility



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

BMERM structured PhD	MEng Electronic Engineering (Renewable Energy Systems)
Mechanical Engineering PhD	MSc in Applied Physics
Engineering Research PhD	MSc in Biomedical Engineering
GradDip in Advanced Materials	MSc in Physics, Maths and Stats
GradDip in Chemical Engineering	MSc in Project Management
GradDip in Computer Aided Engineering Product Design	MSc in Sports Performance
GradDip in Computer Engineering	PhD in Continuous Crystallisation
MSc in Software Engineering	

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Abbott Vascular	Creganna Medical	Jaguar Land Rover
ABP	Dell EMC	Jim Mullins Engineering
Abtran	Dell Filtration	Johnson & Johnson



ACE Winches	DePuy	Jones Engineering Group
Act flow	Dornan Engineering Ltd	Kearys Motorrad
Airbus UK	Douglas Control & Automation	Keltech Engineering
Alkermes	Éirecomposites	Kerry Group
ASML	Element Six	Kerry Mechanical Engineering
Atlantic Projects Company	Enterprise Ireland	Kirby Group Engineering
BCD Engineering	EPS	Kostal
BD GenCell	ESB International	Life Technologies
Biomass Heating Solutions	ESB Networks	LotusWorks
Biomass Heating Solutions	ESML	McHale
Bombardier Aerospace	Flex	Medtronic
Bord Gáis	Flow-Tech	Megadale
Bord na Móna	Flow Technology	Mercury Engineering
Boston Scientific	Gas Networks Ireland	MKO Partners
Bus Éireann	GE Sensing EMEA	Modular Automation
Byrne-Mech Engineering	GenCell	Molex
CAE Parc Aviation	Glanbia	Murphy International
Casey Technology	Hexcel	Radley Engineering Ltd
CERUS	H.I. Fraser	Realtime Technologies
CG Power Systems Ireland	ICE Buildings	Ryanair
Cook Medical	IComp	Schivo
	Intel	
	Irish Cement	



Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey

Assembly Technician	Manufacturing Engineer
Associate R&D Engineer	Manufacturing Engineering Technician
Automation Engineer	Mechanical Design Engineer
Automation Project Engineer	Mechanical Engineer
Business and System Integration Analyst	MEP Supervisor
Cables Engineer	Planning Engineer
CAD Technician	Plant Engineer
Calibration Specialist	Process Development Engineer
Calibration Technician	Process Improvement Engineer
Commissioning Engineer	Process Technician
Computer Design	Product Design Engineer
Control Engineer	Product Development Engineer
Customer Engineer	Profile Engineer
Design Assurance Engineer	Process Engineer
Design Engineer	Project Engineer
EASA Part 21 Design Engineer	Project Manager
Electrical Engineer	Quality Assurance Engineer
Engineering Assistant	R&D Prototype Technician
Engineering Cadet	Research and Development Engineer
Engineering Professional Development Programme	Research Assistant
Graduate Design Engineer	Software Engineer
Graduate Engineer	Stores Manager
Graduate Mechanical Engineer	Stress Engineer
Graduate Programme	Supplier Quality Engineer
Hyperbaric Systems Project Engineer	System Install Engineer
KTP Associate	Technical Services Graduate Engineer
Lead Developer	Test Engineer
Maintenance Manager	Trade Development Executive
	Trainee R&D Engineer



Bachelor of Science in Mobile Communications and Security

Introduction

Computers, networks and mobile devices are everywhere today. We rely on them for our banking, shopping, entertainment and health, sending and storing all kinds of sensitive and important data. But are they safe? When you use an ATM machine, how do you know that your transaction is secure? When you order online, how can you trust the system not to give away your credit card details? Thanks to mobile devices, people are now contactable wherever they are. This 'always connected' status enables us to work from many locations. But how can you be sure that someone isn't snooping on your connection?

In a wireless connected world populated by computer viruses, spyware, malware and bots, security is vital. As the world is becoming increasingly interconnected through telecommunication networks, cloud computing and the internet, there has been a rapid growth in security software and the electronic communications market. Companies, governments and research organisations in Ireland and across the world are actively seeking professionals to design, manage and secure applications and networks.

The BSc in Mobile Communications and Security in UL is about teaching you how to build secure systems to protect vital information, such as bank details and medical records. You will be equipped with the expertise to be a leader in the ongoing mobile networking revolution. You will be taught key concepts in computer and web security, including: Software Development, Networking, Data Forensics, Ethical Hacking, Encryption, Computer Law and Ethics, Cloud Computing fundamentals and security.

By the end of this course, you will be well placed to build the secure and safe networks and systems of the future, in addition to tackling web- and computer-based crime. Our well-equipped and modern laboratory facilities will enable you to acquire practical experience that will make you very competitive in today's job market – and tomorrow's.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Designing and testing networks, computer software and security
- Programming and software development skills
- Using specialist knowledge creatively and innovatively to solve problems
- Developing for the Internet of Things—from sensors to cloud
- Pragmatism and practicality to turn a concept into reality
- Written and oral communication
- Teamwork
- Project management
- Professionalism and the ability to work to an ethical code



- Developing mobile devices and applications
- Sensors, analog and digital circuits and systems
- Operating systems (e.g. Linux)
- Computer forensics and law
- Distributed and cloud computing

Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

MEng in Computer and Communications Systems

Research Masters and PhDs

MEng in Information and Network Security

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Buffalo Technologies

FireEye

KEMP Technologies

Dell EMC

HP

Lorgan Technologies

ENET

Intel

Pilz

EtQ

Investec

Version 1

Fidelity Investments

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Associate Cloud Engineer

Sales Technician

Associate Technical Support Engineer

Software Engineer

Embedded Software Engineer

Technical Implementation Consultant

Graduate Software Engineer

Technical Remote Specialist

IT Consultant

Technical Support Engineer



Bachelor of Science in Music, Media and Performance Technology

Introduction

The aim of the BSc in Music, Media and Performance Technology programme is to equip you with degree-level competence in music, media and performance technologies. This includes the digital arts, the music technology and media industries and, more broadly, other sectors that use digital media technologies.

Facilities include digital recording studios, video editing and mastering suites. In addition to professional-grade video recorders and editing equipment, a dedicated digital media lab provides state-of-the-art software and hardware for both audio and video applications.

This programme will:

- Give you expertise in music and digital video media technologies
- Teach you the skills required for the creative use of music and video digital media
- Help you to acquire the expertise needed for you to take an active role in the diverse field of digital media
- Support you in your development of a critical and independent approach to problem-solving that will help you to reach your full potential throughout your career
- Enhance your capacity to learn independently, by your own resources

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Conducting research
- Audio visual coding (broad technical and practical skills in audio, video, digital into design and realtime performance)
- Digital media software (e.g. editing, post-production, mastering)
- Graphics (e.g. design, motion graphics, titling)
- Sound engineering (e.g. recording, tracking, mixing, production)
- Sound design (e.g. synthesis, surround sound)
- Theatrical production (e.g. digital sets, projection mapping)
- Video production (e.g. videography, lighting, sound)
- Critical analysis
- Commercial and cultural awareness of the media and creative industries
- Teamwork: a flexible, creative and independent approach to tasks
- The ability to work to a brief and meet deadlines
- Mobile application design (e.g. innovation, prototyping)



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

GradDip in Computer Engineering	MA in Irish Media Studies
HDip in Software Development	MA in Sonic Arts
MA in Art and Design and Media Technology	MA in Technical Communication and E-Learning
MA in Broadcast Production	MSc in Music Technology
MA in Business Management	PhD in Computer Science

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Abtran	Harvest Digital	QLX Lighting
Alan Johnson Sound	HMS	River Deep Mountain High
Amazon	Ideabubble	Sabis International School



Apple	Galway Bay FM	Offline Central
Balleruaille	Happy Ending Productions	Sambro
Barclays	Instillo	Score Music Interactive
Bet365	Intellectual property rights	Spin South West
Booking.com	International House Mataró	Three
Boston Scientific	Itgs Labs	SpunOut
Byrne, Curtin & Kelly Accountants	Jump n' Shout Media	Star Systems
Captivio	KPMG	Taxback.com
Digital River	Media Designers	Telegael
Dreamcatcher Productions	Music Generation Limerick	Tricycle Interactive Design
EPIK (English programme in Korea)	Neil Quinn Design	University of Limerick
Ericsson	Notting Hill Housing	Voxpro
		Zagg International

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Android Developer	Customer Service
Audio Technician	Data Analyst
Call Centre Operator	Director, Music Producer, Songwriter
Client Account Executive	E-Gaming Executive
Content Manager	English Language Teacher



Film & Television Camera Trainee	Music Tutor
Freelance Sound Engineer	Production Assistant
Internal Communications Assistant	Programmer
IOS Advisor (Tech Support)	Radio Presenter
IT Assistant	Researcher/Assistant Editor
IT Consultant	Runner
Light Technician	Software Developer
Manager, Editor, Producer and Contributor	Sound Editor
Marketing Account Executive	Sound Engineer
Media Editor	Support Staff (Teaching Assistant)
Media Producer	Teacher
Mobile UI Developer	Technical Support



Bachelor of Science in Pharmaceutical and Industrial Chemistry

Introduction

Are you interested in a career that makes a practical contribution to addressing the challenges we face in the world? Are you curious about the discovery of new drugs to fight disease, the development of chemicals for consumer goods (detergents, paints, cosmetics, etc.) and the invention of new materials for next generation solar cells, batteries and medical devices? Have you a flair for science and technology? Would you like to use these talents in a well-paid, intellectually satisfying and productive career as a professional chemist? If so, this programme may be for you.

The Pharmaceutical and Industrial Chemistry programme qualifies you for employment in a variety of professional careers in the pharmaceuticals and chemicals sector. Several features of the course structure ensure that you are well prepared for the challenges of a position in these fields immediately on graduation. Fundamental and applied aspects of organic, inorganic, physical and analytical and materials chemistry are covered, as well as key chemical engineering topics.

The course is accredited by the Institute of Chemistry of Ireland and the Royal Society of Chemistry (RSC) with graduates eligible for RSC Chartered Chemist status.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Analysing and problem-solving
- Monitoring/maintaining records and data
- Working in teams
- Communicating (verbal and written)
- Excellent laboratory techniques
- Specific knowledge in the traditional fields of chemistry, inorganic, organic, physical, analytical and materials
- Strong mathematical and numerical ability
- Time management
- IT skills



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

GradDip in Chemical Engineering	MSc in Applied Analytical Chemistry
Graduate Entry Medicine	MSc in Materials/Nanotechnology
Professional Master's in Education	PhD in Chemistry/Nanotechnology
MA in Business Management	

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Boston Scientific	Regeneron
Bristol-Myers Squibb	Universities and Institutes of Technology
Coca-Cola	Vistakon
Cook Medical	

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Graduate Research & Development Chemist	Production Engineer
Teaching Assistant	Regulatory Affairs Specialist
Operations Associate	Research Chemist
Product Design Lead	



Bachelor of Science in Product Design and Technology

Introduction

This programme teaches you to design everyday products that are innovative and useful to the consumer. Understanding the product user's needs is central to the UL design philosophy; combining this with knowledge of technology, manufacturing and materials ensures the products you design are innovative and useful. Acceptance of the products by the consumers depends entirely on the designer's understanding and attention to the details of the user's needs. The products that UL students design are many and varied: medical devices, transport vehicles, furniture, consumer goods, household items, mobile phones, sports equipment and anything else you can imagine.

The course will develop your skills in design to allow you to plot your own future career through creative thinking processes. You will learn to research and understand user behaviours so that you can provide people with the products and services that best suit their needs.

Through four years of design education, you will design products and services across a broad range of themes and subjects, including: future technologies, healthcare and wellbeing, consumer electronics, sustainability and social impact, and user experience. Our creative and technical staff will teach you how to combine imagination with practical skills and cutting-edge technologies to innovate, create and embody your design ideas.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Communicating (verbal and written)
- Problem-solving
- Understanding user experience
- Working independently using personal initiative
- Using commercial and entrepreneurial skills
- Presentation skills
- Ability to work to deadlines
- Teamwork
- Visual and spatial awareness
- General and specialist IT skills (e.g. CAD)



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

GradDip in Computer Aided Engineering Product Design	MSc in Marketing, Consumption and Society
MA in Business Management	PhD in EcoDesign: Sustainable Materials
MA in Interactive Media	PhD in Sustainable Electronics
MA in Technical Communication and E-Learning	Postgraduate Certificate in Education
MBS Management and Marketing	Research Master's in Design
Masters in International Entrepreneurship Management	Specialist Diploma in Innovation Management
MSc in Biomedical Engineering	

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Allied Patent Research & Development	Bolgers Engineering	EJ
Asmythics Experience	Bord Gáis Energy	CISD
Auto Process Design	Boston Scientific	Cook Medical
Creganna Tactx Medical	Intel	Ohshima
Dawnlough Ltd	Kirby Group Engineering	Omos
DePuy	Lake Region Medical	Portwest
Element Six	LirChild Sportswear	ProSys Sampling
Energized Work	Logitech	Solid Works Ltd
FDK Engineering	Medtronic	Stryker
Feeney Keating Engineering	Microsoft	TIDI
Fleming Medical	Modular Automation	Tidi Solutions Ltd
Ground Construction	Molex	Valeo Vision Systems
Jones Engineering	Nexus Innovation Centre	Virgin Media
		Vistakon



Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Associate Product Development Engineer	Process Developer
Associate Research & Development	Product Design Associate
BIM/CAD Designer	Product Designer
CAD Design Engineer	Product Development Engineer
Data Analyst	Product Engineer
Design Engineer	Product R&D
Document Controller/Project Administrator	Project Manager
Graduate Design Engineer	Prototype Technician
Graduate Industrial Designer	R&D Engineer
	Service Engineer
Head of Design	Technician
Manufacturing Engineer	Temporary Associate R&D Engineer
Mechanical Design Engineer	UX and design
Mechanical Engineering Intern	Web Designer
Technology Transfer Engineer	



Bachelor of Science in Technology Management

Introduction

The BSc in Technology Management is a course unique to UL, offering a mix of engineering and business studies subjects. It opens up opportunities for you to work in numerous roles in a wide range of industries. Technology Management has been designed and developed in consultation with a panel of leading industrial experts to ensure that you will have the skills needed by industry.

You will experience a broad range of subjects that will give you a good insight into the workings of modern industry. Because of the mix of business and engineering subjects, graduates have a strong track record of securing employment. All subjects on the course are taught as if you have never experienced that subject before, and are taught through lectures, tutorials and/or practical, hands-on sessions.

Employability skills from this degree

Graduates from this programme develop employability skills including:

- Problem-solving through logic and creative and innovative approaches
- Planning, prioritising, working to deadlines and under pressure
- Communicating and working in multidisciplinary teams
- Numeracy and IT skills, with excellent analytical skills
- Attention to detail
- Good judgement and acceptance of responsibility
- CAD—ability to interpret engineering drawings towards design considerations
- Quality systems and measurement—Lean Thinking & Lean Tools (DIMAC,A3)
- Supply Chain: MRP, ERP, forecasting
- Operations management
- Foundations of business—HR/ER, accountancy, financial planning, marketing, entrepreneurship
- Technology design management—automation, new product development



Further study options for graduates with this degree

The following provides a sample of further education qualifications that graduates have pursued.

GradDip in Computing	MSc in Supply Chain Management
MSc in Project Management	MSc in Work and Organisational Behaviour

Organisations employing graduates with this degree

The following provides a sample of organisations that have employed graduates of this programme.

Boston Scientific	Glenisk	Roche
Dell EMC	Kerry Ingredients	Tippo International
Ecopower	LITEC Mouldings Ltd	Vistakon

Job titles for graduates with this degree

The following provides a sample of initial roles listed in the Graduate Outcomes Survey (GOS) by graduates approximately one year after graduation.

Engineer	Production Supervisor
Maintenance Planner	Production Support Manager
Manufacturing Engineer	Quality Compliance Specialist
Operations Personnel	Quality Engineer
Production Graduate	Test Technician



