



OLLSCOIL NA GAILLIMHÉ  
UNIVERSITY OF GALWAY

# FOCUSSED LEARNING. ENDLESS POSSIBILITIES.

Science & Technology  
Studies

- + Part-time
- + Flexible
- + Online
- + Connected
- + Career
- + Opportunity

Our **Science & Technology** courses offer participants rewarding career opportunities in a variety of areas, with opportunities to join thriving industry sectors or the opportunity to upskill and be ready to avail of promotional opportunities. Our courses are developed to address current and future skills requirements of the high-tech sector ensuring that our graduates are well positioned to withstand the challenges of working in a changing economic environment. Courses offer a comprehensive range of educational opportunities and we have a range of progression pathways to suit your individual needs.

### Awards

There are three levels of academic awards available at undergraduate level:

#### **Diploma in Science & Technology**

Level 7 (120 ETCS)

#### **B.Sc. in Science & Technology**

Level 8 (120 ETCS)

#### **Specialist Diploma**

Level 8 minor awards (30 ETCS)

In addition, students can take modules for Continuous Professional Development (CPD) on a standalone basis.

### Contact

Course Administrator  
+ 353 (0)91 494060  
sciencetech@  
universityofgalway.ie



### Apply online:

**www.  
universityofgalway.ie  
adult-learning/  
how-to-apply**

# Science & Technology Studies

## Diploma in Science & Technology Studies

This course focuses on the knowledge and skill requirements of high-tech industries. The modular structure is designed with flexibility in mind, enabling students to balance study with work and other commitments and to accumulate credits over a timeframe that suits their lifestyle. Learning is delivered via a blend of distance and online resources, on campus tutorials and labs, and company-based projects.

The Diploma consists of 20 modules to be completed over a minimum of 2 and a maximum of 4 years. Core modules cover foundations of Science, Engineering, Management and IT; a range of elective modules allow participants to specialise in an area of particular interest to them.

**Entry Requirements:** Applications must hold a Pass in Leaving Certificate Mathematics. An International English Language Testing System (IELTS)/ TOEFL certificate is required if English is not your first language to indicate your competency in written and spoken English for the course you are interested in taking.

### Course Facts

**ECTS:** 120

**NFQ Level:** 7

**Duration:** 2–4 years, part-time

**Mode of study:** Blended learning

**Fees:** See course website  
[www.universityofgalway.ie/courses/adult-and-continuing-education-courses/science-technology-studies-diploma](http://www.universityofgalway.ie/courses/adult-and-continuing-education-courses/science-technology-studies-diploma)

**Start date:** September

## Degree in Science & Technology Studies

This course further advances your knowledge and skills to meet the requirements of high-tech industries. The modular structure is designed with flexibility in mind, enabling students to balance study with work and other commitments and to accumulate credits over a timeframe that suits their lifestyle. The modular structure enables you to study at a pace that suits you. The syllabus provides a comprehensive grounding in the foundations of Science, Engineering and Technology, and introduces areas of specialist knowledge found in high-tech operational environments.

The Degree can be taken over two to four years. There are 11 core modules and 2 elective streams. The core modules are largely in the areas of production science, systems and operations management. The elective streams will enable students to specialise and deepen their knowledge in the following areas: Medical Device Science, Lean & Quality Systems, Regulatory Affairs, Automation & Control and Corporate Environmental Planning.

**Entry Requirements:** Applicants should have completed a Diploma at NFQ Level 7 of 90 ECTS minimum, in a Science, Engineering or Technical area, or otherwise prove that they satisfy the prerequisites of each of the modules as listed in the course outline section. An International English Language Testing System (IELTS)/ TOEFL certificate is required if English is not your first language to indicate your competency in written and spoken English.

### Course Facts

**ECTS:** 120

**NFQ Level:** 8

**Duration:** 2–4 years, part-time

**Mode of study:** Blended learning

**Fees:** See course website  
[www.universityofgalway.ie/courses/adult-and-continuing-education-courses/science-technology-studies-degree](http://www.universityofgalway.ie/courses/adult-and-continuing-education-courses/science-technology-studies-degree)

**Start Date:** September

## Diploma Cycle 120 ETCS

**5 ECTS 10 ETCS 20 ECTS**

Core Modules		Compulsory Modules (16)
Introduction to Learning	<b>Maths 2</b>	Introduction to Environmental Science
Chemistry	Statistics	Human Biology Fundamentals
Introduction to Management	Physics 1	Organisational Behaviour
Information Technology	Physics 2	<b>Project 1</b>
Introduction to Operations Engineering	Operations Engineering	<b>Project 2</b>
<b>Maths 1</b>		



Elective Modules		Choose (4)
Analytical Chemistry	Introduction to Management Science	Database Applications
Introduction to Quality Management	Design of Engineering Systems	CAD Modelling
Biology & Biotechnology	Science, Technology & Innovation	



**Qualification Awarded**  
**Diploma in Science & Technology Studies Level 7**



## Degree Cycle - 120 ETCS

**5 ECTS 10 ETCS 20 ECTS**

Core Modules		Compulsory Modules (11)
Product & Process Development	Management Information Systems	Environmental Science
Health & Safety Systems	Materials Science & Processes	Regulatory Compliance
<b>Project Management</b>	<b>Research Methodology</b>	Applied Innovation
Technology Innovation & Entrepreneurship	<b>Project 3</b>	



Elective Streams		Choose 2 Streams
<b>Automation &amp; Control</b> <ul style="list-style-type: none"> <li>• Automation 1</li> <li>• Manufacturing Technology</li> <li>• Automation 2</li> <li>• Machine Design</li> </ul>	<b>Medical Device Science</b> <ul style="list-style-type: none"> <li>• Mechanics of Solids</li> <li>• Human Anatomy &amp; Physiology</li> <li>• Medical Device Science</li> <li>• Biocompatibility &amp; Device Design</li> </ul>	<b>Lean &amp; Quality Systems</b> <ul style="list-style-type: none"> <li>• Problem Solving Tools &amp; Techniques</li> <li>• Enterprise Modelling &amp; Simulation</li> <li>• Lean Thinking Lean Tools</li> <li>• Quality Science Six Sigma</li> </ul>
<b>Regulatory Affairs</b> <ul style="list-style-type: none"> <li>• Introduction to Quality Management Systems</li> <li>• Fundamentals of EU Medical Device Regulations</li> <li>• Auditing and Compliance</li> <li>• Fundamentals of US Medical Device Regulations</li> <li>• Validation and Calibration</li> </ul>	<b>Corporate Environmental Planning</b> <ul style="list-style-type: none"> <li>• Environmental Management for Organisations</li> <li>• Environmental Leadership for Organisation</li> <li>• Energy Management</li> <li>• The Lean Organisation &amp; Technology</li> </ul>	

These elective streams may also be taken as standalone Specialist Diplomas/Cert (Level 8 – 30 ETCS)



**Qualification Awarded**  
**Degree in Science & Technology Studies Level 8**



OLLSCOIL NA  
GAILLIMHE  
UNIVERSITY  
OF GALWAY

## Specialist Diploma in Science & Technology Studies

Specialist Diploma awards are offered in the following areas:

- Lean & Quality Systems
- Medical Device Science
- Automation & Control
- Corporate Environmental Planning

The Specialist Diplomas are particularly suitable for those requiring up-skilling for career advancement or focused re-skilling for career change.

## Reasons to study this course:

- Our courses provide students with a comprehensive grounding in the theoretical foundations of Science and Engineering.
- You will develop important managerial skills such as problem solving, decision making and advanced communication skills.
- It introduces students to areas of applied and specialist knowledge found in today's high-tech environments, through the provision of elective streams allowing you to specialise in areas of interest to you.

### Course Facts

**Course Website:**  
[www.universityofgalway.ie/adult-learning/courses/science-&-technology](http://www.universityofgalway.ie/adult-learning/courses/science-&-technology)

### Contact

Course Administrator  
+ 353 (0)91 494060  
[sciencetech@universityofgalway.ie](mailto:sciencetech@universityofgalway.ie)

## Continuing Professional Development Credit in Science & Technology Studies

Modules can be taken on standalone basis from the suite of courses on offer. Each module has a specific number of credits attached to it and you may consider this option for upskilling and developing your continuing professional development portfolio to meet the requirements of your industry sector and/or profession. The modules are offered over one semester on a part-time basis September – December and January – May. Further information: <https://www.universityofgalway.ie/courses/cpd>

### Delivery & Assessment:

The course is delivered using a blended learning approach with Saturday workshops (approximately monthly). The delivery model also includes online learning and self-directed learning elements. Modules are assessed by a combination of written assignments, e-learning and multimedia activities, and written exams. Project modules are assessed by submission of written reports and presentations.

### Career Opportunities & Further Study:

The course is primarily intended to support those seeking career advancement in a variety of high-tech industries such as medical devices, pharmaceuticals, biotechnology and manufacturing or those with an interest in specialising in a particular area of science and technology.

