# Science & Technology part-time courses

Our Science & Technology courses offer participants rewarding career prospects in a variety of areas, such as thriving industry sectors or upskilling 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 individual needs.





# Science & Technology Studies (Diploma/Degree)

## **Diploma**

The Diploma 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.

# **Degree**

The Degree further advances your knowledge and skills to meet the requirements of hightech industries. The modular structure is designed in the same format as the Diploma. The syllabus provides a comprehensive grounding in the foundations of Science, Engineering and Technology, and introduces areas of specialist knowledge found in hightech operational environments.

# **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.

### **Entry Requirements**

A Pass in Leaving Cert Maths is required for the Diploma. For all other courses a minimum Level 7 of 90 ECTs is required in relevant area. (IELTS)/TOEFL certificate is required if English is not your first language.

### **Career Opportunities**

Our part-time courses are designed to support individuals seeking career advancement in high-tech industries such as medical devices, pharmaceuticals, biotechnology, and manufacturing, as well as those interested in specialising in a specific area of science and technology.

Key Facts									
Blended Learning Course	NFQ Level	ECTs	Duration	Modules	Fee				
Science & Technology Studies - <b>Diploma</b>	7	120	2-4 yrs	20	€4,445 p.a. (€445 per				
Science & Technology Studies - Degree	8	120	2-4 yrs	19	(€445 per module)				

# Advanced Manufacturing part-time courses

Prepare for the evolving world of smart, sustainable, and highly automated industries with our cutting-edge manufacturing courses. Our courses will equip learners with the critical skills, knowledge, and practical experience needed to thrive in tomorrow's manufacturing landscape.

# **Digitalisation of Manufacturing Processes**

The Diploma in Digitisation of Manufacturing Processes is designed to prepare students for the evolving demands of the manufacturing industry by focusing on the digitalisation of production processes. Learners will gain a solid foundation in materials processing and digital manufacturing, combining theoretical knowledge with practical application.

### **Digitally Enabled Connected Medical Devices**

The Diploma in Digitally Enabled Connected Medical Devices prepares students to meet industry demands by enhancing the functionality of modern medical devices. Learners will gain essential knowledge of simple electronic systems used in medical device manufacturing while exploring smart technologies and printed electronics.

# **Intelligent Manufacturing Industry 5.0**

The Diploma in Intelligent Manufacturing Industry 5.0 provides students with key insights into intelligent manufacturing, with a focus on Industry 5.0. Learners will explore the principles of Industry 5.0 from both a theoretical and practical perspective.

### **Manufacturing Automation**

The Diploma in Manufacturing Automation equips students with the skills and knowledge required to work with automated systems in the manufacturing industry. Learners will gain a solid understanding of manufacturing automation and programming through both theoretical study and practical application.

### Sustainability of Manufacturing Systems

The Diploma in Sustainability of Manufacturing equips students to work in the evolving field of sustainable manufacturing. Learners will explore key environmental challenges and discover opportunities for implementing sustainable changes at both a strategic and practical level within enterprises.

#### **Key Enabling Technologies**

The PG Cert in Key Enabling Technologies equips industry professionals with advanced skills in areas like AI, advanced materials, and nano-electronics. Designed for applied, workplace-relevant learning, it supports leadership in digital and sustainable manufacturing. This interdisciplinary programme helps professionals drive innovation, upskill for evolving roles, and meet Ireland's future industrial and research needs.

Key Facts								
Blended Learning Course	Award	NFQ Level	ECTs	Duration	Fee			
Digitalisation of Manufacturing Processes	Diploma	8	30	1 year	€2,720			
Digitally Enabled Connected Medical Devices	Diploma	8	30	1 year	€2,720			
Intelligent Manufacturing Industry 5.0	Diploma	8	30	1 year	€2,720			
Manufacturing Automation	Diploma	8	30	1 year	€2,720			
Sustainability of Manufacturing Systems	Diploma	8	30	1 year	€2,720			
Key Enabling Technologies	PG Cert	9	30	1 year	€4,170			