

# Postgraduate Diploma in Entrepreneurship and MedTech



 HCl funding available for the 2023/2024 and 2024/2025 academic years

University

Pathway to Level 9
 Master of Science Degree

 Industry-led content and guest speakers

This NEW Postgraduate Diploma which is funded under the Human Capital Initiative and designed in conjunction with the MedTech industry, aims to develop the necessary skills required to strategically support the development and manufacture of medical technologies. Learners will acquire cross skills in regulatory, advanced preclinical testing methods and entrepreneurship to meet the needs of the Medtech sector. The programme will suit graduates with either a science or engineering background and are aiming to progress their careers in a leadership/managerial role.

<b>Course Title</b> Postgraduate Diploma in Entrepreneurship and MedTech		60	<b>NFQ Level</b> 9	<b>Campus</b> Galway City	<b>Duration</b> One year	<b>Delivery</b> Blended Full-time	
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# Why Study?

This programme has been designed to meet the growing demands of companies in filling leadership and operational roles in research and development. The programme was developed based on industry needs, which was endorsed by the Western Regional Skillnets and the Human Capital Initiative.

The Postgraduate Diploma in Science in Entrepreneurship and MedTech will provide students with a detailed understanding of global regulatory strategies, design control and risk management for medical technologies. The programme will also cover topics such as industrial pre-clinical evaluation and assessment for technologies under development. In addition, the programme will include content on strategic marketing and communication; leadership and teams; managing innovation; finance and accounting.

Through a series of workshops and networking events, the CEO Masterclass will deepen learners understanding of the business theories and strategies associated to support the innovation journey of a medical technology. On completion of the CEO Masterclass module, students will be expected to present a viable business case for the development of a new medical technology.

The programme will be delivered by both academics and key experts through a flexible blended approach, with students expected to attend one day a month for on-site activities.

Human Capital Initiative (HCI) Funding will only be available for 2023/24 and 2024/25.

# **Course Content**

## Semester 1 Modules (Jan – May)

## Strategic Marketing and Communications 5 Credits

This module aims to provide learners with the latest thinking and practice in strategic marketing and communications, with a particular twist on marketing of innovation, growth and sustainable performance.

## Principles of Finance and Accounting 5 Credits

Introducing a detailed look at financial management in industry, its relationship to financial accounting and management accounting, the budgeting process, capital investment appraisal, the importance and management of working capital, and finance and investment decision-making based on accounting statements.

## Medical Technologies 5 Credits

This module aims to give students a deep understanding of the medical technology field, with a special focus on medical device design and engineering. The topics will be presented through case studies and will include a team project demonstrating the ability to develop a medical device concept incorporating several existing and emerging technologies, including software as medical device (SaMD).

# Global Regulatory Strategies for Medical Technologies 5 Credits

Students will learn about key regulatory principles are a priority for inclusion at design and development stage of medical technologies, which when incorporated competently and accurately, will ensure the positive delivery of safe and effective technologies for human use.

## Pre-clinical Evaluation and Assessment 10 Credits

Providing learners with a detailed knowledge of the relevant information required in test protocols and complete test reports for pre-clinical performance evaluation and assessment of technologies in a premarket submission to regulatory bodies. A focus is given to non-clinical bench performance testing, biocompatibility evaluation, human factors and software verification in validation and will explain the guidance documentation in place by the various regulators for Medical Technologies.

## Semester 2 Modules (Sep – Dec)

#### Design Control and Risk Management 5 Credits

Module content includes the full Design and Development process including the full product life cycle from product concept to product launch, encompassing the phases of Design and Development and the elements of Design Control as required to ensure regulatory compliance. This module gives the students an understanding of the practical needs of industry and of Risk Management as it applies to the design, development process and to medical device design.

#### CEO Masterclass 5 Credits

The CEO Masterclass will focus on the key processes and building blocks to support the innovation journey of medical technologies from concept phase to marketplace. Industry speakers will introduce a range of commercialisation strategies based on customer value proposition, key business processes and profit realisation. This will be enhanced through a number of workshops focussed on intellectual property, commercialisation, healthcare reimbursement models and RDI funding.

#### Managing Innovation 5 Credits

Providing learners with an understanding of innovation at individual and firm level. An appreciation of the ever-changing macro and microenvironments and stakeholder interest for contemporary organisations will be integral to the module.

#### Leadership and Teams 5 Credits

Effective leadership is needed to understand, predict, plan and communicate the nature of organisational change and manage the response. Learners will be equipped with the knowledge, skills and attitudes necessary to effectively lead and collaborate with teams in a variety of organisational settings.

#### Research Project 10 Credits

Students will undertake a research project, which should take the form of a literature review and proposal for the development of medical technology (biopharmaceutical or medical device product) to prevent, treat or diagnose a specific medical condition.

## **Learning Approach**

The programme will be delivered by both academics and key industry experts through a flexible blended approach. The average weekly contact hours for the proposed programme is 9/10 hours. Learners will be required to attend the Galway City campus one day each month with the remaining content delivered online. Lectures delivered online are recorded by the lecturer so that students can access the recorded version for study in their own time. This flexibility will allow students on the programme to manage their studies, work, and other commitments.

# What is HCI funding?

The Human Capital Initiative (HCI) Pillar 1 offers free and discounted full-time courses, designed to meet priority industry skills needs. Each year, the Higher Education Authority (HEA) approves courses for HCI funding, which covers 90%/100% of the courses' tuition fees.

This Level 9 course is HCl funded for the 2023/2024 and 2024/2025 academic years. If you are employed and enrol in this course, 90% of the tuition fee is funded and you are only required to pay the remaining 10% tuition fee, totalling €720. If you are unemployed, HCl will cover 100% of the tuition fee.

Visit springboardcourses.ie for more information.



PHILIPS

## **Entry Requirements**

A H2.2 Bachelor degree at level 8 in any cognate discipline or equivalent in science, technology or engineering, is the minimum entry requirement for this programme.

Applicants who do not hold the specified qualification, may be eligible to apply through the ATU RPL (Recognition of Prior Learning) process for admission to the programme.

## How to Apply

Applications should be made through the Springboard courses website **HEA - Springboard+** springboardcourses.ie

I want to know more. Who can I talk to?

Dr. Eugene McCarthy, Head of Department, will be happy to discuss the course detail further.
E Eugene.McCarthy@atu.ie
For Springboard enquiries, please contact:
Peter Butler E Peter.Butler@atu.ie

Or find out more at www.atu.ie



Springboard+ is co-funded by the Government of Ireland and the European Union.







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# **Career Opportunities**

Data collated during stakeholder consultation expect graduates to fill roles in:

- Principal Scientist/Engineer
- Project Manager/Team Lead
- Associate Director
- Core Technology Operations
   Representative





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