NUI Galway
OÉ Gaillimh

FOCUSSED LEARNING. ENDLESS POSSIBILITIES.

SPECIALIST DIPLOMA IN LEAN & QUALITY SYSTEMS

CELEBRATING 50 YEARS

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

REASONS TO STUDY THIS COURSE:

- Students will develop an understanding of lean thinking and lean tools and gain a technical knowledge of quality science and specialist knowledge of Six Sigma techniques.
- You will understand enterprise modelling and simulation with an emphasis on optimising business processes and skills in change management.
- You will also have an appreciation of lean and quality systems within manufacturing and services sectors.

COURSE FACTS

ECTS: 30

NFQ Level: 8

Duration:
1 year, part-time

Mode of study:
Online Learning

Fees:
EU: €2,060 **Non-EU:** €2,560

Start date: September

CONTACT

Course Administrator
+ 353 (0)91 494060
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APPLY ONLINE:
www.nuigalway.ie/adultlearning/how-to-apply

Specialist Diploma in

LEAN & QUALITY SYSTEMS

YOUR PART-TIME COURSE:

The course is intended for those who wish to focus their skills with a view to moving into specialist and hybrid lean roles, e.g. internal lean consultants, waste minimisation specialists, process optimisation advisors. It is also suitable for those who wish to upskill and specialise. On completion of the course, graduates will have highly marketable, up-to-date knowledge and skills relevant to product, process and service optimisation and improvement. Expertise in Lean and Six Sigma is currently in strong demand across all sectors.

YOUR MODULES:

- Lean Thinking/Lean Tools
- Quality Science Six Sigma
- Problem Solving Tools & Techniques
- Enterprise Modelling & Simulation
- Project

Students will have the opportunity of gaining Green Belt certification as an optional extra. The cost of Green Belt certification is not included and is generally in the region of €235. Participants register for this exam separately if they so choose.

ENTRY REQUIREMENTS:

Applicants must have a level 7 qualification. 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.

DELIVERY & ASSESSMENT:

The course is delivered using an online learning approach with Saturday workshops (approximately 10 hours per module). The delivery model also includes self-directed learning elements. Students complete a project which requires them to apply their knowledge to real-world scenarios.

CAREER OPPORTUNITIES & FURTHER STUDY:

Graduates find employment in well-established industries which are embedded in the local economy, providing a basis for sustainable long-term employment and career advancement. Graduates can opt to progress to the BSc in Science & Technology Studies (NFQ level 8) with credit for their studies.

MODULES

LEAN THINKING/LEAN TOOLS

The module provides an overview of the Toyota Production System (TPS) and the 5 Lean Principles. Learners examine the main components of the TPS system including Just-in-Time (JIT) and cellular manufacturing. The module covers the main lean tools including Value Stream Mapping, 5S, Kaizen, and Standard Work. The principles behind each of the tools and the various elements involved in effectively using these tools is discussed.

QUALITY SCIENCE - SIX SIGMA

This module introduces the concept of Quality Science. Learners will gain an understanding of the Six Sigma methodology, and gain a foundation in the statistical methods and statistical thinking that forms the basis of the Six Sigma process. Learners build on this foundation so that they have the confidence and statistical skills necessary to visualise and interpret data. Learners develop a working knowledge of the statistical package Minitab.

PROBLEM SOLVING TOOLS & TECHNIQUES

The Problem Solving Tools and Techniques module gives learners an understanding of the tools and techniques used by organisations to implement Six Sigma projects. Learners analyse problems and learn how to target areas applicable to Six Sigma methodologies.

ENTERPRISE MODELLING & SIMULATION

Enterprise modelling is the process of building models of whole or part of an enterprise using process models, data models, resource models and/or new processes etc. Enterprise modelling deals with the process of understanding an enterprise and improving its performance through creation of enterprise models. It is based on knowledge about the enterprise, previous models and/or reference models.

LEAN & QUALITY SYSTEMS PROJECT

In this project the learner will complete a literature review on a topic that is relevant to both the course and to their own work. The learner will develop a project plan and execute a practical research project using well established research methodology methods. Students will be allocated an academic supervisor who will work with them to offer guidance and ensure the successful completion of the project. This module will enable the learner to develop their project management skills, team-working and communication skills.

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