

Problem Solving Tools and Techniques - NFQ Level 8

Module Lead by: Dr John Noonan, Practitioner Lecturer,
Faculty of Science and Engineering Flexible Learning Centre.

Overview:

This module explains the principles of 6 Sigma and how they can be implemented in the manufacturing and service sectors to deliver strategic objectives. Discuss approaches to quality improvement problem solving and customer impact. Review approaches to Problem Identification and Problem Solving Discuss the roles required for implementation (Executive Leadership, Master Black Belt, Black Belt, Green Belt).

Course Structure:

- **Type:** Part-time, online – evenings
- **Duration:** 5 weeks
- **Lectures:** 1.5 hr live online and recorded lectures, plus 5-8 hrs self-guided study per week.
- **Start date:** September 2022
- **Closing date:** 10th August 2022
- **Course contact:** Susie.Boekhout@ul.ie
- **Cost:** €600
- **Qualification:** Certificate of Completion and University Transcript for 6 ECTS credits

Learning outcomes:

On the successful completion of this module participants will:

- To develop and apply the tools and techniques of Quality Management and control.
- To develop and apply the Taguchi method.
- Introduce some of the key Six Sigma tools used e.g., SPC, FMEA, DOE etc. - specifically in the non-manufacturing sector.
- Introduce some of the other Problem-Solving key tools used e.g.,
 - 8D, Root Cause Analysis,
 - Seven Quality Control Tools I,
 - Seven Management Tools I,
 - Taguchi Methods,
 - QFD,
 - Trizz,
 - FMEA.
- Introduce the use of suitable software.
- Implementation of continuous improvement techniques.

Assessment:

There is no final exam for this module. You will be assessed through continuous skill-based assignments, provided by your lecturer and tutor.

Entry Requirements:

A minimum Level 7 qualification. Where an applicant does not meet the entry requirements, they can be evaluated under the UL RPL (Recognition of Prior Learning) policy and may be interviewed to ascertain their suitability for the programme.

How do I apply?

To apply simply follow the link [here](#).

Please make sure you quote the module code AU4044 when applying. Please upload any relevant qualification transcripts and a recent CV in the supporting documents section.