



Crystal Lean Solutions

**Training**  
Academy

# Lean Six Sigma Green Belt – Level 2



## Lean Six Sigma Green Belt – Level 2

<b>DURATION:</b>	5.5 Days
<b>ACCREDITATION:</b>	CPD Approved by Engineers Ireland
<b>COURSE CODE:</b>	1014

### AIM:

The Lean Six Sigma Green Belt programme provides you with the knowledge and skills to lead and deliver a Key Business Improvement Project. This is achieved through the understanding and utilisation of Lean and Six Sigma methodologies per ISO 13053-2:2011 'Quantitative methods in process improvement' and NSAI Swift 11 'Driving Competitiveness using Lean'. These tools focus on improving key Business metrics including improving Customer Satisfaction, Compliance, Cost, Delivery, and Supply

### OBJECTIVES:

At the end of the course, learners will be able to:

- ✿ Understand the DMAIC improvement methodology and Six Sigma tools
- ✿ Apply the Six Sigma DMAIC methodology to a business improvement project
- ✿ Collect and analyse data using the appropriate Six Sigma tools
- ✿ Apply Lean Methodology to a waste reduction project
- ✿ Understand team dynamics when delivering a project
- ✿ Achieve an approved recognised qualification

### THIS PROGRAMME IS FOR:

The Lean Six Sigma Green Belt course is suitable for those looking to develop the knowledge and skills to lead and deliver key business improvement projects, including:

- ✿ Continuous Improvement Leaders
- ✿ Engineers – Quality, Manufacturing
- ✿ Managers / Team leaders
- ✿ HR / Finance / Supply Chain / EHS / Laboratory
- ✿ Software Design and Developers

## **PROGRAMME CONTENT:**

### **Day 1 Introduction to Lean and Six Sigma**

- ✿ Introduction and benefits of Lean and Six Sigma and the DMAIC Methodology
- ✿ Define Phase (Problem charter, SIPOC, Process map)
- ✿ Graphical presentation of data
- ✿ Team management

### **Day 2 Define and Measure Phase**

- ✿ Value Stream Mapping
- ✿ Eight sources of waste
- ✿ Gauge repeatability and reproductivity (R&R)

### **Day 3 Measure and Analyse Phase**

- ✿ Process Capability Cp, Cpk
- ✿ Identification and verification of the root cause
- ✿ Fishbone diagram, failure mode and effects analysis (FMEA), 5 why analysis

### **Day 4 Improve Phase**

- ✿ Single minute exchange of dies (SMED)
- ✿ 5S and error proofing
- ✿ Statistical process control (SPC)

### **Day 5 Improve and Control Phase**

- ✿ Graphical Tools
- ✿ Introduction to design of experiments (DOE)
- ✿ Project Close out & Scorecards

### **Day 6 Examination**

## **ASSESSMENT:**

There are two requirements for certification described below as follows:

### **Assessment 1 Examination of Theory**

Assessment 1 includes an examination of theory presented during the programme. The assessment is an open book exam and consists of 80 questions, equally marked with each question worth 1 mark. The duration of the assessment is 3 hours. An open book examination permits learners to have support material available to them during the examination.

### **Assessment 2: Skills Demonstration through a Project**

The learner completes a project that demonstrates the learners understanding of each topic completed during training and how it applies to a real work example. Ideally the project should be relevant to your current or previous work environment. The project is presented as a presentation using the PowerPoint template provided. The project shows evidence of relevant reading for the project and include the bibliography.

An assessment brief is provided at the start of training programme.

**GRADING:**

The grading is a total of both the assessment and assignment with a minimum expectation of 50% for certification in both the exam and the assignment for certification.

**Pass 50% to 64%** Demonstrated fundamental knowledge and understanding of course material.

**Merit 65% – 79%** Demonstrated fundamental knowledge of course material and demonstrated ability to be able to apply in real-world situations.

**Distinction: 80% - 100%** Demonstrated deep understanding of the course material and application, being able to discuss the pros and cons of the course materials, theories and offer alternatives based on research.

**PROGRAMME DELIVERY:**

Classroom-based training

**TOTAL DURATION OF THE PROGRAMME INCLUDES:**

Classroom training: 5 days

Classroom Assessment: 3 hours

Self-directed learning: 57 hours

**CERTIFICATION CRITERIA:**

Attend all training days and successfully complete exam and project

**CERTIFICATION BODY:**

Crystal Lean Solutions with Engineers Ireland CPD approved accreditation

**RECOGNITION OF PRIOR LEARNING (RPL):**

Please discuss directly at [office@crystalleansolutions.ie](mailto:office@crystalleansolutions.ie)

**PRE-REQUISITE:**

None

**OTHER COURSES OF INTEREST FROM THE CLS TRAINING ACADEMY:**



- \* ASQ Lean Six Sigma Black Belt
- \* Professional Diploma in Project Management
- \* Constructive Conversations
- \* Effective Presentation Skills
- \* Change Management
- \* Human Error Problem Solving
- \* A3 Problem Solving