



## ASQ Approved Lean Six Sigma Green Belt Training

### Description

#### Introduction

##### Who should attend:

Individuals from all organization departments including finance, quality and business operations staff functions as well as those who have direct intervention as process owners or stakeholders.

#### Objectives

- Practice the Six Sigma methodology and apply the roadmap.
- Apply the principles of the Six Sigma DMAIC performance improvement model.
- Set up and execute process-level improvement projects.
- Collect and analyze process data and develop process maps.
- Employ statistical analysis using statistical tools and software.

#### Content

##### Six Sigma Overview

- History and Origins
- Why Six Sigma?
- Cost of Poor Quality
- Project Details

##### Define Phase: Tools and Methods

- Charter the Improvement Project
- Define the Scope
- Six Sigma Project Definition
- Project Selection Process
- Define the Voice of Customer (VOC) and CTQ

- Kano Model Analysis
- Team Development Phases
- Communication Plan
- Project Planning and Management

### **Measure Phase: Introduction and Tools**

- Computing DPMO and Sigma
- Process Mapping
- FMEAs and Cause and Effect
- Graphical Analysis
- Analysis of Variance and Multi Plot Diagrams
- Histograms
- Measurement Systems Analysis: Gauge R&R
- Sampling Techniques
- Introduction to Minitab and QIMacro Software

### **Analyze Phase: Introduction and Tools**

- Probability and Basic Statistics
- Control Charts and Stability
- Data Normality
- Process Capability, Cp and Cpk
- Types of Data

### **Improve Phase: Introduction and Tools**

- Piloting and Implementation
- Introduction to Lean Enterprise
- Types of Waste
- Lean Tools
- 5S Program
- Value Stream Mapping
- Lean – Kaizen

### **Control Phase: Introduction and Tools**

- Statistical Process Control
- Standardization and Documentation
- Control Plans
- Mistake Proofing

### **Green Belt Project/ Tollgate Review**