

ASQ Approved Lean Six Sigma Green Belt





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REF: A1442 DATE: 2 - 6 September 2024 Venue: Milan (Italy) - Fee: 5940 Euro

#### Introduction:

This program is designed to prepare participants for the certification exam only.

This training program is a comprehensive program designed to equip professionals with the skills and knowledge to improve business processes using Lean and Six Sigma methodologies. It empowers them to make data-driven decisions and drive significant organizational improvements.

# **Programm Objectives:**

At the end of this program, participants will be able to:

- Understand and apply Lean Six Sigma principles and methodologies to various processes.
- Lead and manage Lean Six Sigma projects using the DMAIC framework.
- Collect, analyze, and interpret data to identify root causes of process issues.
- Develop and implement effective solutions to improve process performance.
- Sustain process improvements through effective control measures and continuous monitoring.
- Prepare for the certification exam.

# Targeted Audience:

- Mid-level managers looking to enhance their process improvement skills.
- Quality assurance professionals aiming to implement Lean Six Sigma methodologies.
- Engineers and project managers seeking to optimize operational efficiencies.
- Professionals in manufacturing, healthcare, finance, and service industries.
- Individuals preparing for the ASQ Lean Six Sigma Green Belt certification exam.

# **Program Outlines:**

#### Unit 1:

### Introduction to Lean Six Sigma:

Overview of Lean Six Sigma principles and methodologies.



- History and evolution of Lean and Six Sigma.
- Key benefits and applications in various industries.
- Roles and responsibilities in a Lean Six Sigma project.
- Introduction to DMAIC Define, Measure, Analyze, Improve, Control framework.

#### Unit 2:

### Define Phase:

- Understanding project selection and scope.
- Defining problem statements and project objectives.
- Identifying key stakeholders and their requirements.
- Developing project charters and SIPOC Supplier, Input, Process, Output, Customer diagrams.
- Utilizing voice of the customer VOC techniques.

### Unit 3:

#### Measure Phase:

- Introduction to process mapping and value stream mapping.
- Identifying and collecting relevant data.
- Understanding basic statistics and data types.
- · Conducting measurement system analysis MSA.
- · Calculating baseline performance metrics and process capability.

#### Unit 4:

## Analyze Phase:

- Performing root cause analysis RCA techniques.
- Utilizing tools like Fishbone diagrams, 5 Whys, and Pareto analysis.
- Conducting hypothesis testing and statistical analysis.
- Identifying and prioritizing potential causes of problems.
- Confirming root causes with data-driven evidence.



#### Unit 5:

# Improve and Control Phases:

- Developing and selecting improvement solutions.
- Conducting risk assessments and FMEA Failure Modes and Effects Analysis.
- Implementing solutions and managing change.
- Establishing control plans and standard operating procedures SOPs.
- Monitoring results and sustaining improvements with control charts and audits.
- Preparation for the certified exam.

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