

# € TRAINING

ASQ Approved Lean Six Sigma Black Belt



31 March - 4 April 2025  
Rome (Italy)



# ASQ Approved Lean Six Sigma Black Belt

REF: A1731 DATE: 31 March - 4 April 2025 Venue: Rome (Italy) - Fee: 5940 Euro

## Introduction:

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

The ASQ Approved Lean Six Sigma Black Belt Training Program provides comprehensive training on Lean Six Sigma methodologies and techniques approved by the American Society for Quality ASQ. It empowers participants to drive organizational excellence through data-driven decision-making and continuous improvement initiatives.

## Program Objectives:

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

- Understand and apply Lean Six Sigma principles and methodologies effectively.
- Lead DMAIC projects and drive process improvement initiatives as a Black Belt.
- Identify and prioritize improvement opportunities using statistical tools and techniques.
- Analyze data to identify root causes and develop data-driven solutions.
- Implement and sustain process improvements to achieve organizational goals.

## Targeted Audience:

- Quality professionals seeking advanced certification in Lean Six Sigma.
- Project managers and team leaders involved in process improvement initiatives.
- Engineers and analysts responsible for quality and efficiency improvements.
- Professionals aiming to lead and mentor Lean Six Sigma project teams.
- Individuals seeking career advancement opportunities in quality management.

## Program Outlines:

### Unit 1:

#### Introduction to Lean Six Sigma and Black Belt Role:

- Overview of Lean Six Sigma methodology and its significance in process improvement.
- Understanding the role and responsibilities of a Lean Six Sigma Black Belt.

- Key concepts and principles of Lean and Six Sigma methodologies.
- Relationship between Lean Six Sigma and organizational performance improvement.

## Unit 2:

### Define Phase:

- Understanding the Define phase of the DMAIC Define, Measure, Analyze, Improve, Control methodology.
- Defining project goals and objectives aligned with organizational priorities.
- Identifying stakeholders and understanding their requirements.
- Creating project charters and defining project scope.
- Developing SIPOC Suppliers, Inputs, Process, Outputs, Customers diagrams.

## Unit 3:

### Measure Phase:

- Understanding the Measure phase of the DMAIC methodology.
- Selecting appropriate metrics and data collection methods.
- Conducting process mapping and identifying key process variables.
- Performing capability analysis and establishing baseline performance.
- Developing data collection plans and conducting measurement system analysis MSA.

## Unit 4:

### Analyze Phase:

- Understanding the Analyze phase of the DMAIC methodology.
- Identifying root causes of process variation and defects.
- Applying statistical tools such as hypothesis testing and regression analysis.
- Conducting Pareto analysis and fishbone Ishikawa diagrams.
- Using process mapping to identify improvement opportunities.

## Unit 5:



### Improve and Control Phases:

- Understanding the Improve and Control phases of the DMAIC methodology.
- Generating and evaluating potential solutions to address root causes.
- Implementing process improvements and conducting pilot tests.
- Developing control plans to sustain improvements.
- Establishing monitoring and control mechanisms to prevent regression.
- Preparation for the certification exam.

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