

ASQ APPROVED LEAN SIX SIGMA GREEN BELT

"Drive Process Excellence and Operational Efficiency Using Proven Lean Six Sigma Methodologies"

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

The modern business landscape demands efficiency, quality, and continuous improvement. Lean Six Sigma combines two powerful methodologies — Lean, which focuses on waste elimination, and Six Sigma, which aims for defect reduction through data-driven decisions. Together, they form a structured approach to problem-solving and process optimization across all industries.

The ASQ Approved Lean Six Sigma Green Belt course is designed to develop professionals who can lead improvement projects, apply analytical techniques, and deliver measurable results. It provides participants with a deep understanding of Lean tools, Six Sigma principles, and the DMAIC (Define-Measure-Analyze-Improve-Control) methodology.

This course aligns with the American Society for Quality (ASQ) Body of Knowledge, ensuring that participants meet international standards for Lean Six Sigma Green Belt certification. Through practical exercises, simulations, and case studies, participants will gain the confidence to identify inefficiencies, reduce variation, and improve overall organizational performance.

Objectives

By the end of this course, participants will be able to:

- Understand the principles and concepts of Lean and Six Sigma methodologies.
- Apply the DMAIC framework for structured problem-solving.
- Identify and eliminate waste (non-value-added activities) in processes.
- Measure and analyze process performance using statistical tools.
- Implement data-driven improvements to enhance quality and efficiency.
- Develop and manage process improvement projects effectively.
- Sustain improvements through control and standardization.
- Prepare for the ASQ Green Belt certification examination.

Why Attend

The Lean Six Sigma Green Belt certification is recognized globally as a mark of quality excellence. By attending this course, participants gain valuable skills in process optimization, quality control, and operational improvement — applicable across industries such as manufacturing, healthcare, IT, finance, and energy.

Participants will be empowered to lead medium-scale improvement projects, contribute to cross-functional teams, and support their organizations in achieving higher productivity and customer satisfaction. The training provides not only theoretical knowledge but also practical applications to real-world business challenges.

Target Audience

This course is suitable for professionals at all levels who are involved in process improvement or operational excellence initiatives, including:

- Process Improvement Specialists and Quality Engineers
- Operations, Manufacturing, and Production Managers
- Supply Chain and Logistics Professionals
- Project Managers and Team Leaders
- Data Analysts and Business Analysts
- Service and Support Professionals
- Anyone preparing for ASQ's Certified Lean Six Sigma Green Belt exam

Individual Benefits

- Gain internationally recognized Lean Six Sigma Green Belt certification.
- Develop problem-solving and analytical thinking capabilities.
- Learn to lead and manage process improvement projects effectively.
- Enhance career prospects in quality, operations, and management roles.
- Build proficiency in statistical tools and quality improvement methods.
- Acquire practical experience through real-world case studies.

Organizational Benefits

- Improve process efficiency and reduce operational costs.
- Enhance product and service quality through systematic problem-solving.
- Develop an in-house culture of continuous improvement.
- Increase customer satisfaction and business competitiveness.
- Establish a skilled workforce capable of leading improvement projects.
- Support organizational goals through data-driven decision-making.

Instructional Methodology

The course combines classroom instruction with interactive learning methods, including:

- Instructor-led sessions aligned with ASQ standards
- Group exercises and real-world project simulations
- DMAIC-based problem-solving workshops
- Statistical analysis using software tools (e.g., Minitab)
- Case studies demonstrating successful Lean Six Sigma projects
- Mock exams and exam-preparation guidance
- Continuous feedback and mentoring from certified instructors

Course Outline

Module 1: Introduction to Lean Six Sigma

- History and evolution of Lean and Six Sigma
- Key principles, terminology, and benefits
- The role of Green Belts in improvement projects
- Understanding variation and process capability

Module 2: Define Phase

- Project selection and scoping
- Understanding customer requirements (VOC)
- SIPOC diagrams and process mapping
- Problem statement and project charter development

Module 3: Measure Phase

- Data collection planning and measurement systems analysis
- Identifying key process performance indicators (KPIs)
- Process capability analysis (Cp, Cpk)
- Measurement errors and calibration techniques

Module 4: Analyze Phase

- Identifying root causes using cause-and-effect analysis
- Data analysis and hypothesis testing
- Pareto charts, regression analysis, and ANOVA
- Correlation between variables and identifying improvement areas

Module 5: Improve Phase

- Generating and evaluating potential solutions
- Design of Experiments (DOE) and pilot testing
- Lean tools for process improvement (5S, Kaizen, Value Stream Mapping)
- Implementing changes to eliminate waste and defects

Module 6: Control Phase

- Developing control plans and standard operating procedures (SOPs)
- Statistical process control (SPC) and control charts
- Sustaining improvements and monitoring performance
- Knowledge transfer and continuous improvement culture

Module 7: Lean Tools Integration

- Just-in-Time (JIT), Kanban, and Pull Systems
- Mistake-proofing (Poka-Yoke) and visual management
- Process flow optimization and cycle time reduction

Module 8: ASQ Exam Preparation and Case Studies

- Review of ASQ Green Belt Body of Knowledge (BoK)
- Exam structure, format, and sample questions
- Real-world Lean Six Sigma project examples
- Discussion on best practices for implementation

Certification

Upon successful completion of the course and project assessment, participants will receive an ASQ Approved Lean Six Sigma Green Belt Certificate.

This certification demonstrates professional competence in applying Lean Six Sigma methodologies to drive measurable business improvements, reduce waste, and enhance operational performance — in alignment with international ASQ standards.

Why Choose MAWA Events

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Interested in running this course for your team?

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