



LEAN SIX SIGMA GREEN BELT TRAINING

Drive Quality With Proven Tools

Empowering Teams to Solve Problems,
Improve Efficiency, and Drive Results



Overview

- **Audience:** Professionals involved in project execution and quality improvement.
- **What's Covered:** Intermediate tools for data collection, statistical analysis, and Lean methodologies.
- **Outcomes:** Lead process improvement projects with measurable outcomes.
- **Duration:** 48 Hours.
- **Certification:** Green Belt Certification.

About Us

StonePath Business Solutions specializes in transforming manufacturing and operational processes through expert Lean Six Sigma training and consulting. Focused on measurable results, we empower teams with the skills to drive efficiency, reduce waste, and enhance quality across all operational levels. With a commitment to continuous improvement and industry-leading expertise, StonePath is the partner of choice for companies aiming to achieve sustainable operational excellence.





Course Content

Module 1: Introduction to Lean Six Sigma

- Overview of Lean and Six Sigma
- History and evolution
- Key principles and methodologies
- Roles and Responsibilities (Green Belt, Black Belt, Master Black Belt)

Module 2: Foundational Principles and Tools

- Waste Identification and Elimination
 - 8 Wastes (Muda)
- Mapping using software tools (e.g., Lucidchart, Microsoft Visio, Minitab Workspace)
- Value Stream Map (VSM), Process Maps, etc.
 - 5S Methodology
 - Sort, Set in order, Shine, Standardize, Sustain
 - Digital tools for 5S implementation
 - Kaizen and Continuous Improvement
 - Leading Kaizen events
- Project selection and tracking (ClickUp, Microsoft Project,)
- Collaborative tools (e.g., Trello, Asana)

Module 3: Six Sigma Fundamentals

- Manufacturing Excellence through DMAIC Framework (Define, Measure, Analyze, Improve, Control)
 - Introduction to statistical process control
 - Descriptive statistics, probability distributions
- Standard Deviation and controlling variation through leading indicators and machine learning
 - Introduction to statistical process control
 - Introduction to statistical software (e.g., Minitab, Excel)

Module 4: Define Phase

- Project selection and charter
- Project scope, goals, and objectives
- Using project management software (e.g., Microsoft Project, Smartsheet)
- Understanding the Voice of the Customer (VoC)
 - Data collection methods (surveys, interviews)
- Customer feedback tools (e.g., SurveyMonkey, Google Forms, data analysis)



Course Content

Module 5: Measure Phase

Process Mapping and Data Collection

Digital tools for process mapping (e.g., Lucidchart, Microsoft Visio, Minitab Workspace)

SIPOC diagrams

Overall Equipment Effectiveness (OEE) evaluation

Leveraging Computerized Maintenance Management Systems (CMMS) (e.g., Limble)

Leveraging IoT technology to improve OEE

Conducting SMED (single minute exchange of die) to reduce change over times

Measurement System Analysis (MSA)

Gage R&R studies

Minitab for MSA

Module 6: Analyze Phase

Data Analysis and Hypothesis Testing

Statistical analysis methods (ANOVA, regression)

Data analysis software (e.g., Minitab, Excel)

Calculating Process Capability using Minitab

Root Cause Analysis

Fishbone diagram, 5 Whys

Using Software for Failure Modes and Effects and Analysis (Minitab, Excel)

Prioritization Tools

Module 7: Improve Phase

Solution Selection Matrix

Brainstorming techniques

Piloting and Testing Solutions

Poka-Yoke Fundamentals

Module 8: Control Phase

Sustaining Improvements

Control plans and documentation

Digital Work Instruction platforms (e.g., VKS, Dozuki)

Monitoring tools (e.g., Real Time SPC using Minitab)

Automation and Control

Introduction to Change Management through Quality Management Systems

Software introduction for QMS (e.g., QPulse, iQMS)



Course Content

Module 9: Technology Integration

- IoT in process monitoring and control
- IoT platforms and tools (e.g., AWS IoT, Azure IoT)
- IoT and ERP
- IoT and CMMS

Module 10: Capstone Project (if applying for Green Belt Certification)

Capstone Project

- Practical project applying learned concepts
- Requires company project with goal of saving at least 25K annually
- Company letter with Controller or Project Champion signature attesting to project savings.
- Project presentation and evaluation

