Lean Six Sigma Green Belt for project managers Training Course

Professional Development Training Course Outline

Category	Project Management	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Lean Six Sigma Green Belt for Project Managers Training Course is a performance-driven training program designed to equip project leaders with structured problem-solving, process optimization, and data-driven decision-making capabilities. By integrating Lean principles and Six Sigma DMAIC methodology, the course enables project managers to eliminate waste, reduce process variation, improve quality, and deliver measurable business value. Strong emphasis is placed on continuous improvement, stakeholder alignment, and project governance to ensure sustainable operational excellence across industries.

This course focuses on practical application of Lean Six Sigma tools within project environments, enabling participants to lead improvement initiatives, manage cross-functional teams, and align improvement projects with strategic objectives. Through analytics, process mapping, root cause analysis, and performance metrics, participants gain the competence to manage improvement projects end-to-end while driving efficiency, cost reduction, risk mitigation, and customer satisfaction.

Programme Curriculum

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Course Objectives

1. Understand Lean Six Sigma principles and Green Belt competencies for project management.
2. Apply DMAIC methodology to improve project and operational performance.
3. Identify waste and inefficiencies using Lean process analysis tools.
4. Use data analytics to support evidence-based project decisions.
5. Define project problems using structured problem statements and KPIs.
6. Conduct root cause analysis using Six Sigma techniques.
7. Apply statistical tools for performance measurement and control.
8. Improve process capability and consistency across projects.
9. Manage stakeholders and change during improvement initiatives.
10. Integrate Lean Six Sigma into project lifecycle management.
11. Apply risk management and quality control techniques.
12. Measure financial and non-financial benefits of improvement projects.
13. Lead continuous improvement culture within project teams.

Organizational Benefits

- Improved project delivery efficiency and predictability
- Reduced operational waste and process variation
- Stronger data-driven decision-making capabilities
- Improved quality and customer satisfaction outcomes
- Enhanced cost savings and productivity gains
- Standardized project improvement methodologies
- Improved risk identification and mitigation
- Increased employee engagement in improvement initiatives
- Stronger alignment between projects and strategic goals
- Sustainable culture of continuous improvement

Target Audiences

- Project managers and project leads
- Program and portfolio managers
- Operations and process improvement managers
- Quality assurance professionals
- Business analysts and performance managers
- Change management professionals
- Engineers and technical project leads
- Consultants and continuous improvement practitioners

Course Duration: 10 days

Course Modules

Module 1: Introduction to Lean Six Sigma for Project Managers

- Overview of Lean and Six Sigma philosophies
- Role of Green Belt in project environments
- Continuous improvement mindset and culture
- Linking improvement projects to business strategy
- Overview of DMAIC framework
- Case Study: Lean Six Sigma adoption in a project-driven organization

Module 2: Project Selection and Charter Development

- Identifying high-impact improvement opportunities
- Developing problem statements and business cases
- Defining project scope and objectives
- Stakeholder identification and alignment
- Risk assessment during project selection
- Case Study: Selecting a Lean Six Sigma project portfolio

Module 3: Define Phase Tools and Techniques

- Voice of the customer analysis
- SIPOC diagrams for process definition
- Critical-to-quality identification
- Defining success metrics and KPIs
- Communication planning in Define phase
- Case Study: Defining scope creep issues in project delivery

Module 4: Process Mapping and Value Stream Analysis

- Creating process maps and swimlane diagrams
- Identifying waste using Lean principles
- Value stream mapping techniques
- Bottleneck identification
- Opportunities for cycle time reduction
- Case Study: Mapping an end-to-end project approval process

Module 5: Measure Phase and Data Collection

- Defining data requirements for measurement
- Data collection planning and validation
- Measurement system analysis
- Establishing baseline performance
- Data integrity and reliability checks
- Case Study: Measuring delays in project execution

Module 6: Descriptive Statistics for Project Managers

- Understanding data types and distributions
- Mean, median, and variation analysis
- Graphical analysis and visualization
- Interpreting performance trends
- Using data to support decisions
- Case Study: Analyzing project cost overruns

Module 7: Root Cause Analysis Techniques

- Cause-and-effect diagrams
- 5 Whys analysis
- Pareto analysis for prioritization
- Failure mode identification
- Linking causes to project outcomes
- Case Study: Root cause analysis of missed project deadlines

Module 8: Analyze Phase Hypothesis Testing

- Introduction to hypothesis testing concepts
- Identifying statistically significant factors
- Correlation and regression basics
- Data-driven validation of assumptions
- Interpreting analytical results
- Case Study: Validating drivers of schedule slippage

Module 9: Improve Phase Solution Design

- Generating solution alternatives
- Lean improvement techniques
- Risk analysis for proposed solutions
- Pilot testing and experimentation
- Evaluating improvement impact
- Case Study: Implementing workflow automation in projects

Module 10: Change Management and Implementation

- Managing resistance to change
- Stakeholder communication strategies
- Training and capability building
- Implementation planning and sequencing
- Monitoring adoption and engagement
- Case Study: Leading change during process redesign

Module 11: Control Phase and Sustainability

- Developing control plans
- Standard operating procedures
- Visual management and dashboards
- Process ownership and accountability
- Sustaining improvement gains
- Case Study: Maintaining performance improvements post-project

Module 12: Financial Analysis of Improvement Projects

- Cost-benefit analysis techniques
- Calculating ROI and savings
- Financial validation of improvements
- Linking results to organizational goals
- Reporting value to leadership
- Case Study: Financial impact of cycle time reduction

Module 13: Risk Management and Quality Control

- Identifying project risks and controls
- Control charts and monitoring tools
- Preventive versus corrective actions
- Managing variation in processes
- Ensuring compliance and quality standards
- Case Study: Quality control in multi-project environments

Module 14: Integrating Lean Six Sigma with Project Management

- Aligning DMAIC with project management phases
- Governance and reporting structures
- Resource planning and prioritization

- Managing multiple improvement initiatives
- Integrating tools with PM methodologies
- Case Study: Combining Lean Six Sigma with Agile projects

Module 15: Capstone Improvement Project

- Selecting a real-world improvement challenge
- Applying DMAIC end-to-end
- Data analysis and solution development
- Presentation of project outcomes
- Lessons learned and best practices
- Case Study: Green Belt project presentation and evaluation

Training Methodology

- Instructor-led lectures and conceptual briefings
- Hands-on exercises using real project data
- Group workshops and collaborative problem-solving
- Case study analysis and peer discussions
- Practical tool application and simulations
- Capstone project development and presentation

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.
f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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