Introduction to Lean Six Sigma Green Belt Course

This dynamic program trains participants to become certified Lean Six Sigma Green Belt professionals, integrating Lean principles and statistical analysis. The course enhances core competencies in World-Class business processes, positioning professionals to elevate operational effectiveness, reduce operating costs, and improve industry reputation.

The course emphasizes creating customer value by applying Lean Six Sigma principles to improve business operations, reduce variations, and strategically drive business excellence.

Targeted Groups

This course is ideal for:

- **Quality Assurance Professionals**
- **Managers, Supervisors, and Professionals** seeking to implement Six Sigma in their organizations

Course Objectives

Participants in the Lean Six Sigma Green Belt certification course will be equipped to:

- **Understand the foundation** of Lean Six Sigma.
- **Deploy Six Sigma** effectively to improve business operations.
- **Learn Lean methodology** and Six Sigma analytics to optimize processes.
- **Integrate Lean Six Sigma principles** to minimize variations and reduce costs.
- **Acquire the necessary skills and behaviors** to fully implement Lean Six Sigma.
- **Leverage Lean Six Sigma as a strategic business tool**.
- **Enhance profit margins** by controlling process variation and increasing process stability.
- **Upgrade professional standards** by applying Lean Six Sigma tools proficiently.

Targeted Competencies

By the end of the course, participants will be competent in:

- **Effective deployment of Six Sigma** tools and principles.
- **Proficient problem-solving** and **critical thinking**.
- **Applied statistics** for process analysis.
- **Expertise in Green Belt Lean principles** and Six Sigma techniques.

Course Content

Unit 1: Introduction and Define Phase of Lean Six Sigma Green Belt

- Introduction to **Six Sigma** and its historical context.
- Key roles and responsibilities in Six Sigma.
- **Cost of Poor Quality (COPQ)** and its impact on business.
- Understanding the **Voice of the Customer (VOC)** and **Critical to Quality (CTQ)**.
- Defining **Six Sigma metrics** and methods for project selection.
- Developing a **project charter** and **problem statement**.
- Crafting **SIPOC diagrams** to map processes.
- Using **Pareto analysis** for effective project scoping.
- Engaging in **case studies** to apply concepts.

Unit 2: Measure Phase of Lean Six Sigma Green Belt

- Introduction to **Six Sigma-level calculations** and **process capability indices**.
- Using **Minitab** for statistical analysis.
- Understanding different **types of data** and **fundamental statistics**.
- Developing a **measurement plan** and conducting **data sampling**.
- Identifying **Xs** (input variables) that affect **Ys** (process outcomes).
- Performing **Measurement Systems Analysis (MSA)** and **normality analysis (NA)**.

Unit 3: Analyze Phase of Lean Six Sigma Green Belt

- Exploring the **seven classic quality tools**.
- Implementing **Statistical Process Control (SPC)** and **control charts**.
- Selecting and analyzing key variables for process control.
- Using **process mapping strategies** to analyze workflows.
- Undertaking **qualitative analysis (QA)** and applying **FMEA** to identify risks.

Unit 4: Improve and Control Phases of Lean Six Sigma Green Belt

- Advanced **graphing techniques** and **scatter plot interpretation**.
- Applying **process modeling regression** and advanced modeling techniques.
- Understanding **hypothesis testing** and conducting **pilot tests**.
- Developing **Six Sigma control plans** for sustainable process improvements.
- Completing projects and transitioning control.

Unit 5: Lean Thinking and Six Sigma

- **Defining Green Belt Lean principles** and embracing **lean thinking**.
- Understanding and eliminating **types of waste (MUDA)**.
- Differences between **Lean** and **Six Sigma philosophies**.
- Introduction to **Lean Toolbox**, including **visual factory** and **5S** techniques.
- Implementing **error-proofing processes** using **Poka Yoke** tactics.

What is Lean Six Sigma Green Belt Training?

Lean Six Sigma Green Belt training is a certified path for professionals aiming to deepen their expertise in quality management and process improvement. This training provides the knowledge and tools to drive **process improvements**, delivering substantial value to organizations by reducing waste, improving efficiency, and ensuring higher standards of operational excellence.

Enrolling in a **Lean Six Sigma Green Belt training course** or seeking **Lean Six Sigma Green Belt certification** ensures that professionals are well-equipped to enhance their organization’s performance and competitive edge.