

Lean Six Sigma Green Belt Training

Module 1: Introduction to Lean Six Sigma

- Overview of Lean and Six Sigma principles
- Evolution of process improvement methodologies
- Roles and responsibilities (Yellow Belt, Green Belt, Black Belt)
- Importance of quality and customer focus
- Overview of the DMAIC framework

Module 2: Process Mapping & Project Selection

- Understanding business processes and process flow
- SIPOC diagram in detail
- Value Stream Mapping (VSM) basics
- Project identification and selection criteria
- Project charter development

Module 3: Define Phase

- Voice of Customer (VOC) analysis
- Critical to Quality (CTQ) tree development
- Problem statement and goal setting
- Stakeholder analysis
- Risk identification at project initiation

Module 4: Measure Phase

- Data collection planning
- Types of data and measurement scales
- Measurement System Analysis (MSA) basics
- Process capability analysis (Cp, Cpk)
- Descriptive statistics and baseline measurement

Module 5: Analyze Phase

- Root cause analysis techniques
- Fishbone Diagram and 5 Whys
- Pareto Analysis
- Hypothesis testing (basic)
- Correlation analysis

Module 6: Improve Phase

- Solution generation techniques
- Lean tools application:
- 5S methodology
- Kaizen
- Waste elimination (TIMWOODS)
- Pilot testing and implementation planning
- Risk assessment and mitigation

Module 7: Control Phase

- Control plan development
- Introduction to Statistical Process Control (SPC)
- Control charts (basic)
- Standardization and documentation
- Sustaining improvements

Module 8: Lean Principles & Waste Management

- Lean thinking and principles
- Types of waste and identification techniques
- Process flow improvement
- Continuous improvement (Kaizen approach)

Module 9: Quality Tools & Data Analysis

- Pareto Charts and Histograms
- Scatter Plots
- Run Charts
- Cause-and-Effect Diagram
- Basic statistical tools using Excel/Minitab

Module 10: Project Execution & Team Collaboration

- Working on Green Belt projects
- Team collaboration and communication
- Basic project management concepts
- Reporting and presentation of findings
- Continuous improvement culture