



Internationally Accredited by:



Accelerated – Lean Six Sigma Black Belt Classroom Training + Certification (5 Days)

Price: \$2,500 + GST (Includes Examination & Completion Certification)

Objectives

- The Black Belt Course is designed to improve process performance, deliver high impact projects and achieve significant cost savings.
- The Certified Lean Six Sigma Black Belt is a professional who can explain Lean Six Sigma philosophies and principles, including supporting systems and tools.
- Black Belts will demonstrate team leadership, understand team dynamics and assign team member roles and responsibilities.
- Black Belts will gain thorough understanding of all aspects of the DMAIC model in accordance with Six Sigma principles.
- Black Belts will gain knowledge of Lean enterprise concepts, are able to identify nonvalue-added elements and activities.

Departments

Business Process Improvement, Change Management, Continuous Improvement, Project Management, Industrial Engineering, Production Management, Quality Management, Logistics, Contract Department, Innovation Department, Commercial Department, Business Development, Strategic Planning, Human Resource, Finance & Others.

Who Should Attend

Chief Executive Officers, Managing Directors, Executive Officers, General Managers, Managers, Executives, Engineers and Continuous Improvement Specialists & Others.

Course Content

Session 1: Define & Measure Phase (1 Day)

- Introduction & Overview of Six Sigma
- Cost of Poor Quality (COPQ)
- Drill Down Tree & Pareto Chart
- Project Charter Development
- Voice of Customers (VOC) & Kano Model
- SIPOC & Basic Process Mapping
- Financial Analysis & Cost Savings
- Root Cause Analysis (RCA) Tools
- Data Collection Plan
- Basic Statistics & Sampling Techniques
- Capability Analysis & Sigma Value
- Detailed Process Mapping
- Fishbone Diagram
- Failure Modes & Effects Analysis (FMEA)

Session 2: Analyze Phase (1 Day)

- Graphical & Value Analysis
- Hypothesis Testing
- Advanced Graphical Analysis
 - Sigma Value / Z-Bench, Graphical Tools for Statistics, Pareto Charts, Run Charts, Dot Plots, Scatter Plots, Matrix Plots, Histograms, Time Series Plots
- Regression Analysis
 - Correlation Analysis, Multiple Regression, Simple Linear Regression, Best Subset Regression
- Hypothesis Testing- P-Value & Statistical sample tests (overview)
- Type 1 & Type 2 Error, T-tests: 1 Sample & 2 Sample Tests incl. ANOVA, TOEV & Proportion Tests
- Value Stream Mapping (VSM)- Current State
- Summarizing Potential Factors & Potential Solutions

Session 3: Improve & Control Phase (1 Day)

- Generating Improvement Ideas
- Evaluating & Selecting Best Solutions
- Solution & Training Implementation Plan
- Develop & Execute Pilot Plan
- Lean Concepts & Error Proofing / Kaizen
- Cost & Benefit Analysis (ROI)
- Process Control Plan
- Standard Operating Procedures (SOP)
- Statistical Process Control (SPC)
- Best Practice & Replication Opportunities
- Process Ownership & Dashboards

