



Internationally Accredited by:



Lean Six Sigma Certification Black Belt Level (8 Days) Classroom Sessions Comprehensive Course

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 & principles, including supporting systems and tools.
- Black Belts will demonstrate team leadership, understand team dynamics & 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.

Price: \$4,715 + GST (Includes Examination & Completion Certification)

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 & Continuous Improvement Specialists & Others.

Course Content

Session 1: Define & Measure Phase (3 Days)

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| <ul style="list-style-type: none"> • Introduction & Overview of Six Sigma • Cost of Poor Quality (COPQ) • Drill Down Tree & Pareto Chart • Project Charter Development • Teams & Stakeholder Analysis • Voice of Customers (VOC) & Kano Model • SIPOC & Basic Process Mapping | <ul style="list-style-type: none"> • Quality Functional Deployment (QFD) • Financial Analysis & Cost Savings • Root Cause Analysis (RCA) Tools • Cause & Effect Matrix • Operational Definition • Data Collection Plan • Basic Statistics & Sampling Techniques | <ul style="list-style-type: none"> • Measurement System Analysis (MSA) • Capability Analysis & Sigma Value • Graphical & Value Analysis • Detailed Process Mapping • Fishbone Diagram • Failure Modes & Effects Analysis (FMEA) |
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Session 2: Analyze Phase (2 Days)

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| <ul style="list-style-type: none"> • Hypothesis Testing • Advanced Statistical RCA tools <ul style="list-style-type: none"> ◦ Type 1 & Type 2 error, Degree of Freedom, Power & Sample Size, 1 Sample t-Test, 2 Sample t-Test, One way ANOVA, Test of Equal Variance (TOEV), 1 Proportion Test, 2 Proportion Test, Chi-Square Test, Non-Parametrics Analysis and Two Way ANOVA | <ul style="list-style-type: none"> • Advanced Graphical Analysis <ul style="list-style-type: none"> ◦ Sigma Value / Z-Bench, Graphical Tools for Statistics, Pareto Charts, Box Plots, Run Charts, Dot Plots, Scatter Plots, Matrix Plots, Histograms, Time Series Plots • Regression Analysis | <ul style="list-style-type: none"> ◦ Correlation Analysis, Multiple Regression, Simple Linear Regression, Best Subset Regression • Value Stream Mapping (VSM)- Current State • Summarizing Potential Factors & Potential Solutions |
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Course Content (Cont.)

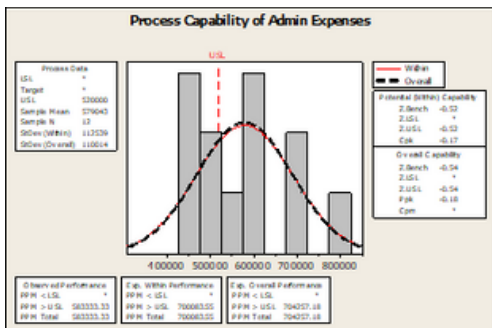
Session 3: Improve & Control Phase (3 Days)

- Generating Improvement Ideas
- Design of Experiment (DOE)
- Evaluating & Selecting Best Solutions
- Solution & Training Implementation Plan
- Develop & Execute Pilot Plan
- Lean Enterprise Training
- Cost & Benefit Analysis (ROI)
- Process Control Plan
- Standard Operating Procedures (SOP)
- Statistical Process Control (SPC)
- Best Practice and Replication Opportunities
- Process Ownership & Dashboards

Minitab During Black Belt Lean Six Sigma Training

Where applicable, during the training course, our consultants will provide the participants with training on how to analyse Quality data using the Minitab software which is widely used by Lean Six Sigma practitioners.

Example of Minitab Software:



Our consultants will also provide candidates with useful excel quality templates & tools

Examination & Certification: We will administer an examination for the participants upon completion of their training. The examination consists of the following (on last day of training):

LSS Green Belt Level (Internal Exam & Certification)

- Exam Type: Multiple Choice Questions
- No. of Questions: 50 Questions
- Examination: Open Book Examination
- Passing Rate: 70% and above
- Duration of Exam: 2 Hours
- Location of Exam: At training location
- Cost: Inclusive of training



For further enquiries:

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