

## Lean Six Sigma GREEN BELT Public / Individual Training Program

In - House / Group Training Available ( Upon Request )



### INTRODUCTION

The Green Belt Course is designed to improve process performance, deliver medium to high impact projects and achieve significant cost savings.

Six Sigma Green Belt is designed so that people acquire the special skills and knowledge required before leading or

Green Belts will effectively use the Six Sigma tools in their organization, with customers and suppliers for achieving business improvement results.

Green Belts will gain thorough understanding of all aspects of the DMAIC model in accordance with Six Sigma principles.

Green Belts will gain knowledge of Lean enterprise concepts and will be able to identify non-value-added ele-

*Duration = 6 Days*

### COURSE CONTENT / CURRICULUM

#### SESSION 1: DEFINE & MEASURE PHASE / 2 Days

- ◆ 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
- ◆ Financial Analysis and Cost Savings
- ◆ Root Cause Analysis (RCA) Tools
- ◆ Operational Definition
- ◆ Data Collection Plan
- ◆ Basic Statistics and Sampling Techniques
- ◆ Capability Analysis and Sigma Value
- ◆ Graphical & Value Analysis
- ◆ Detailed Process Mapping
- ◆ Fishbone Diagram
- ◆ Failure Modes and Effects Analysis (FMEA)

#### SESSION 2: ANALYZE PHASE / 2 Days Hypothesis Testing

- Type 1 & Type 2 error
- Degree of Freedom
- Power and Sample Size
- 1 Sample t-Test
- 2 Sample t-Test
- Paired t-Test
- ◆ Statistical Root Cause Analysis
- ◆ Advanced Graphical Analysis
  - Sigma Value / Z-Bench
  - Graphical Tools for Statistics
  - Pareto Charts
- One way ANOVA
- Two way ANOVA
- Test of Equal Variance (TOEV) Tables
- 1 Proportion Test
- 2 Proportion Test
- Chi-Square Test

- Run Charts
- Dot Plots
- Scatter Plots
- Matrix Plots
- Histograms
- Time Series Plots
- ◆ Regression Analysis
  - Correlation Analysis
  - Simple Linear Regression
  - Multiple Regression
  - Best Subset Regression

- ◆ Value Stream Mapping (VSM)
- ◆ Summarising Potential Factors and Potential Solutions

#### SESSION 3: IMPROVE & CONTROL PHASE / 2 Days

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

#### METHODOLOGY

- ◆ Simulation
- ◆ Activities
- ◆ Own Software
- ◆ Own Books
- ◆ Q & A
- ◆ Group Discussions
- ◆ Case Study
- ◆ Talk over Tea
- ◆ Networking

