

# Lean Six Sigma Green Belt Training (3 Days)

## DAY 1

### **Define Phase**

- Introduction to Six Sigma
- Six Sigma Fundamentals
- How to Select Projects
- Scoping Your Project (High-level process maps, COPIS)
- Project Mandates – Building Your Business Case
- Building Your Project Team

### **Measure Phase**

- Process Mapping
- Root Cause Analysis (Fishbone Diagrams, Tree Diagrams, etc.)
- FMEAs
- Data Collection (Sampling Strategies, Sample Size, Data Collection Sheets)
- Static Statistics
- Graphical Tools (Paretos, Histograms, Box Plots, etc.)
- Dynamic Statistics Process Capability (Cp, Cpk, Pp, Ppk)
- Measurement System Analysis/Gage R & R

## DAY 2

### **Analyze Phase**

- Multi-Vari Analysis
- Inferential Statistics
- Introduction to Hypothesis Testing
- Hypothesis Testing Normal Data (Z-, T-, and F-Tests; ANOVAs)
- Hypothesis Testing Non-Normal Data (1-Sample Sign, 1-Sample Wilcoxon, Mood's Median, Proportions tests)
- Hypothesis Testing Discrete Data (Goodness of Fit, Chi Square Contingency Tables)

## **DAY 3**

### **Improve Phase**

- Lean Tools (5S, Cellular Design, Plant Layout, POUS, Kanbans, etc.)
- Correlation
- Simple Linear Regression
- Multiple Linear Regression
- Design of Experiments (Full Factorials)

### **Control Phase**

- Human Side of Change
- Dealing with Resistance
- Improved Process Capability Analysis
- Poka-Yoke
- Risk Analysis
- Statistical Process Control (SPC)
- Six Sigma Control Plans