

Lean Six Sigma - Green  
Course certification training

**Course Agenda**

## **Index**

Module 1: Evaluation & Introduction to Lean Six Sigma

Module 2: Define

Module 3: Measure

Module 4 - Analyse

Module 5 - Improve

Module 6 - Control

## **Course Curriculum**

### **Module 1: Evaluation & Introduction to Lean Six Sigma**

- History & Evolution of Six Sigma
- Six Sigma & Lean Definition
- COPQ
- Variation
- DMAIC Phases
- Six Sigma Roles & Responsibilities

### **Module 2: Define**

- Project Charter
- Project Charter Contents
- Process Mapping
- SIPOC
- Identifying Customers & VOC
- Establishing VOC to CTQ
- KANO Model
- RACI Model
- Quiz

### **Module 3: Measure**

- What is Data?
- Data Classification & Type
- Data collection plan
- Sampling & Sampling Strategies
- Mean
- Median
- Mode
- Range

- Variance
- Standard Deviation
- Case Study – Basic Statistics
- Normal Distribution
- Testing Normality
- Histogram
- Dot Plot
- Box Plot
- Time Series Plot

#### **Module 4 - Analyse**

- Measurement System Analysis
- Accuracy & Precision
- Repeatability
- Reproducibility
- Gage R & R study
- Process Capability
- Capability Formulas
- DPMO, DPU, DPO
- Rolled Throughput Yield
- 7 QC Tools
- Central Limit Theorem
- Hypothesis testing
- Alpha risk
- Beta Risk
- t-test

#### **Module 5 - Improve**

- Improvement Strategy
- Regression
- Correlation
- Scatter Plot
- Brainstorming
- 5S
- FMEA

- Piloting Solutions
- Automation
- Regression
- Correlation
- Scatter Plot
- Brainstorming
- Automation
- Mistake Proofing

### **Module 6 - Control**

- Statistical Process Control
- SPC Selection Process
- Control Plan