

COURSE AGENDA

OVERVIEW OF SIX SIGMA

- Overview of Six Sigma
- Agents of Change
- Six Sigma Implementation Process
- PDCA-Plan Do Check Act
- Organizational Goals and Objectives

BUSINESS PROCESS MANAGEMENT

- Business Process Management
- Voice of the Customer
- Focus Groups and Critical-To-Quality Tree
- Tools for Statistical Analysis
- Business Results

PROJECT MANAGEMENT AND SELECTING SIX SIGMA PROJECTS

- Project Management and Selecting Six Sigma Projects
- Planning Tools
- Tree Diagram
- Six Sigma Team Leadership
- Team Dynamics and Performance
- Team Effectiveness Tools
- Negotiation and Conflict Resolution Techniques
- Management and Planning Tools
- Prioritization Matrix

THE DEFINE PHASE

- The Define Phase
- Goals and Metrics

THE MEASURE PHASE

- The Measure Phase
- SIPOC, Cause and Effect Diagrams and Check Sheets
- Statistics, Probability, Collecting and Summarizing Data
- Methods for Collecting Data (application)
- Graphical Methods, Histograms and Scatter Diagrams
- Probability Distributions Commonly Used by Six Sigma Black Belts
- Measurement Systems
- Process Capability Analysis
- Process Performance Indices
- Estimating Process Yield through RTY and Sigma Level

THE ANALYZE PHASE

- The Analyze Phase
- Evaluating the Regression Equation
- Using the Multiple Regression Equation
- Contingency Tables

THE IMPROVE PHASE

- The Improve Phase
- Principles of Design of Experiments
- Mixture Experiments

THE CONTROL PHASE

- The Control Phase
- Selection and Application of Control Charts
- PRE -Control
- Understand Appropriate Uses of Moving Averages Charts

LEAN CONCEPTS

- Lean Concepts
- Theory of Constraints
- Lean Thinking
- Continuous Flow Manufacturing
- Non-Val Added Activities
- Cycle - Time Reduction
- Lean Tools
- Total Productive Maintenance (TPM)

DESIGN FOR SIX SIGMA

- Design for Six Sigma
- Noise Strategies
- Failure Mode and Effects Analysis (FMEA)
- Special Design Tools