### **COURSE OUTLINE: SSBB**

#### Introduction

- 1. A brief history of Quality
- 2. What is Quality (Definitions) and service or product
- 3. Quality Gurus & their contribution to Quality
- 4. Enterprise wide View
- 5. Leadership
- 6. Six Sigma Roles and Responsibilities
- 7. Team Formation
- 8. Team Facilitation
- 9. Team Dynamics
- 10. Time Management For Teams
- 11. Team Decision making Tools
- 12. Management and Planning Tools
- 13. Team Performance Evaluation And Rewards
- 14. Overview of DMAIC

#### Define

- 1. Important Stakeholders
- 2. Impact On Stakeholders
- 3. Critical To Requirements
- 4. Benchmarking
- 5. Business performance measures
- 6. Financial measures
- 7. VOC
- 8. Kano's Customer Satisfaction Levels
- 9. Juran's Customer Needs
- 10. Market Research
- 11. CTQ Flowdown
- 12. QFD
- 13. Performance Metrics
- 14. Project Charter
- 15. Charter Negotiation
- 16. Project management plan and Baselines
- 17. Project Tracking

### Measure

- 1. Processes, Process characteristics, process flow metrics, inputs and outputs
- 2. Process maps and Flow chart
- 3. SIPOC
- 4. Data Type & Measurement scale
- 5. Data Collection
- 6. Sampling strategies
- 7. Fishbone Diagram
- 8. Relational Matrices or Prioritization Matrix
- 9. Basic Statistics
- 10. Analytical Statistics
- 11. Gauge R & R
- 12. Process Capability Analysis

## Analyze

- 1. Correlation and Regression Analysis
- 2. Testing of Hypothesis
- 3. FMEA
- 4. Gap Analysis
- 5. The Five Whys
- 6. Pareto Diagram
- 7. Tree Diagram
- 8. Non value added activities
- 9. Cost of poor Quality (COPQ)

# Improve

- 1. DOE
- 2. Poka-yoke
- 3. 5S
- 4. SMED
- 5. Continuous Flow Manufacturing
- 6. Kaizen
- 7. Kanban
- 8. Theory of constraints
- 9. Risk analysis

#### Control

- 1. Statistical Process Control
- 2. Other Control Tools
- 3. Maintain Controls
- 4. Sustaining Improvements

## DFSS

- 1. DFSS
- Case Study 1
  - 1. Case Study 1 Part 1 (2 hours)
  - 2. Case Study 1 Part 2 (2 hours)

## Case Study 2

- 1. Case Study 2 Part 1 ( 2 hours )
- 2. Case Study 2 Part 2 ( 2 hours )