# **Lean Six Sigma YELLOW BELT**

TRAINING COURSE OUTLINE





# **Program Overview**

Six Sigma yellow belts Training provides an introduction to process management and the basics tools of Six Sigma. This gives employee's a stronger understanding of processes. Enabling each individual to provide meaningful assistance in achieving the organization's overall objectives This Course is designed to provide a broad understanding of the Six Sigma improvement methodology, concepts and along with improvement methods including basic Statistical Process Control charts.

The DMAIC (D-Define, M-Measure, A-Analyze, I- Identify, C-Control) methodology is presented with case studies and examples drawn from business processes.

## **Duration**

2 - Days Program

# **Learning Objectives**

#### At the end of the training, participants are expected to:

- Understand the benefits and implications of Six Sigma program, and relate the concepts to the overall business mission and objective
- Apply the following basic process improvement tools within the Six Sigma DMAIC improvement model
  - Thought Process Map
  - Pareto Chart
  - Trend Chart
  - Fishbone Diagram
  - Corrective Action Matrix
  - FMEA
  - Benchmarking
  - Brainstorming
- Each Phase of the DMAIC methodology
- How to map a process and understand its inputs and outputs
- How to apply the Six Sigma mindset in his or her workplace on a daily basis



# **Target Audience**

Anyone who desires to play an important role as part of a Six Sigma improvement team who needs the tools necessary to define, measure, analyze, improve, and control Six Sigma improvement projects

# **Program Structure and Outline**

The Program is delivered using a combination of instructor-led lectures, case study and exercises on practical implementation of the concepts discussed within the training. The topics presented below define the areas of focus under the program.

#### Day 1

#### Introduction and Overview

- Quality & Quality Concepts
- Quality Frameworks
- Lean and Six Sigma The Linkages & Benefits
- Lean Six Sigma
  - What it is & Benefits / Applications
  - Approach & Methodology DMAIC
  - Typical Organization

#### Define

- Project Selection Approach
- VoC & Process Definition
- Process Mapping SIPOC
- Project Charter Creation

#### Measure

- Data Types and Measurement Modes / Techniques
- Sampling Analysis
- Basic Statistics
- Measurement System Analysis Gage R & R
  - Accuracy & Predictability
- Process Capability Introduction



## Day 2

## Analyze

- Analysis Types
- Qualitative Analysis
  - FMEA
  - Fishbone Diagram Root Cause Analysis
- Quantitative Analysis
  - Pareto Chart
  - Trend Analysis (Control Charts)

## *Improve*

- Decision Analysis
- Improvement Plan Creation
  - Brainstorming
  - Criteria Based Matrix
  - Mistake Proofing / Poka-Yoke
  - **■** 5S

#### Control

- Control Charts / SPC
- Control Plans
  - Components
  - Critical Success Factors
  - Sample

## Summary

