

# Certified Six Sigma Yellow Belt

## Why Attend

- This thought provoking course uses the renowned Motorola methodology to identify and solve problems in organizations. Targeting the yellow belt level, this course will provide participants with the knowledge to identify improvement opportunities in their organizations and help kick off the Six Sigma methodology with their teams. Participants will learn the different phases of Define, Measure, Analyze, Improve and Control (DMAIC) and how to build a project charter. Additionally, participants will learn about quality tools and statistics to help them formulate problem statements and translate them into measurable format. Participants will be provided with the tools to assess their organization's readiness to launch Six Sigma projects.

## Course Methodology

- The course will present participants with the chance to practice the skills acquired through exercises and case studies. Group and individual presentations will also be conducted. Additionally, videos will be shown about real life companies which have implemented the Six Sigma methodology.

## Course Objectives

By the end of the course, participants will be able to:

- Define and understand quality concepts and their evolution
- Discuss Six Sigma and why it is necessary to sustain business improvement
- Explain the role of Six Sigma in customer service and continual improvement
- Apply and implement the Define, Measure, Analyze, Improve and Control problem solving methodology
- Examine the statistical background supporting Six Sigma projects
- Compare between the various tools usually used in a Six Sigma project
- Explain how to deploy Six Sigma and assess organization readiness to launch a successful Six Sigma project

## Target Audience

- Managers, supervisors and professionals who wish to understand Six Sigma, its use and how it relates to work and business improvement.

## Target Competencies

- Deploying Six Sigma
- Problem solving skills
- Critical thinking skills
- Using applied statistics
- Change management techniques

### Introduction to quality

- Definition of quality
- History of quality
- Benefits of quality systems
- Meet the ISO 9000 family
- Cost of poor quality
- Evolution of quality management
- Quality management principles and six sigma
- Quality maturity ladder

### Definitions of Six Sigma

- Definition of Six Sigma and the meaning of sigma
- History of Six Sigma
- Benefits of Six Sigma for organizations
- Savings from Six Sigma
- Six Sigma as an improvement strategy
- Six Sigma in customer service
- Effects of Six Sigma on customer satisfaction
- Levels of sigma performance
- The Kano model and quality function deployment
- The fruit of Six Sigma

### Implementing Six Sigma

- The methodology
- The DMAIC stages (define, measure, analyze, improve and control)
- Roles of managers and employees
- Roles of green belts and black belts
- Six Sigma and Lean

### Statistical analysis in Six Sigma

- Sigma as a metric
- Sources of variation
- Calculation of process capability and sigma level
- The commute example

## Problem solving using Six Sigma

- Six Sigma tool box
- Control charts
- Pareto charts
- Cause and effect diagrams
- Why-why diagrams
- The turtle diagram

## Deployment of Six Sigma

- Project selection and charter importance
- Leadership and employee involvement
- Selection of Six Sigma projects: guidelines
- Characteristics of a successful Six Sigma project
- Corporate commitment: ten questions for leaders
- Sources of high impact opportunities
- Characteristics of projects to avoid