# Black Belt in Lean Six Sigma Certification

Reducing Waste and Minimizing Variability to Increase Business Value

## Introduction

The Black Belt in Lean Six Sigma Certification program trains participants in the fundamentals of the Lean Six Sigma methodology and develops them into expert practitioners who can eliminate or address any obstacles the company may encounter. Lean Six Sigma combines Lean and Six Sigma, two well-known approaches for process optimization. This management approach reduces waste and streamlines procedures to improve organizational efficiency.

Because of the benefits they offer a company, Black Belt professionals are highly sought after and seen as specialists and change agents.

Within an enterprise, the Lean Six Sigma improvement process is led by a Certified Six Sigma Black Belt. They are adept at inspiring, motivating, and influencing project teams, which gives them the leadership skills necessary to put a Six Sigma plan into practice.

**The following will be covered in this Course N Carry Black Belt in Lean Six Sigma Certification training course**:

- Six Sigma Lean Methodology
- The Model DMAIC
- Process and Quality Enhancement Instruments, Methods, and Plans
- Under a Lean Six Sigma Black Belt, Leadership

## Objectives

**Upon completion of this training program for Black Belt in Lean Six Sigma Certification, you will be able to:**

- Create a culture of constant improvement known as "kaizen."
- Discover cutting-edge resources and creative problem-solving methods to tackle the most challenging issues.
- Maximize the benefit of business procedures
- Boost teamwork and leadership abilities

- Achieve professional advancement by earning a Lean Six Sigma Black Belt.

## Training Methodology

With a practical and applied focus, this Black Belt in Lean Six Sigma Certification training session will be very dynamic and participatory. Interactive lectures, case studies, group activities, process simulations, and individual exercises are all included.

The trainer's own experience will serve as the basis for selecting examples and practical exercises that are pertinent to the delegates' businesses.

## Organizational impacts

**Benefits to the organization from sending personnel to Black Belt in Lean Six Sigma Certification training session include:**

- The capacity to put Lean six sigma black belt techniques and strategies into practice.
- The total effect will show up as better staff services or more commitment to the process, which will produce a higher-quality final product.
- Capacity to apply six sigma concepts to enhance processes and establish high quality control, leading to better final goods or services and increased customer satisfaction
- A happier workplace and higher levels of employee satisfaction
- Data analysis, problem-solving, and an outcome-driven emphasis on cutting waste and boosting productivity

## Personal Imapct

**Attending this training session will benefit delegates in the following ways:**

- A broad range of leadership competencies
- A capable leader with the ability to drive projects and effect change
- Enhanced comprehension of business and analytical skills
- Increased self-worth and setting yourself apart from the competitors with your skill set
- Knowledgeable about several strategies for dramatically cutting expenses and raising income
- A select group of Black Belt experts

## Who should attend?

Employees at any level who are interested in implementing and driving change within the organization can substantially benefit from this Course N Black Belt in Lean Six Sigma Certification training course, which is appropriate for a wide spectrum of professions.

### This may consist of:

- Supervisors, Group Heads, and Managers of Business Process Optimization
- Professionals expected to participate in the business transformation program of their organization
- Workers with a strong desire to implement change throughout the company's divisions
- Senior Managers interested in learning about Lean Six Sigma
- Employees at all levels from different business units

# Course Outline

# Day 1

### Overview of Lean Six Sigma

- Six Sigma: What Is It?
- Lean: What Is It?
- Lean Six Sigma's past
- Just-in-Time Production
- DMAIC Methodology
- Pull-Kanban Systems
- Overview of Define Phase
- Determine the First Requirements (CTQs)
- Diagrams of Affinity and Interrelationships
- The customer's voice (VOC)
- Launch a Lean Six Sigma Initiative
- Advanced Process Diagramming

# Day 2

### Overview of the Measure Phase

- Price of Non-Conformance and Conformance, or Cost of Quality
- Control Diagrams
- Quality Function Deployment (QFD)
- Failure Modes and Defects Analysis (FMEA)
- Explain Performance Measures
- Plan your data collection and analyse your measurement systems
- Measure rest and recuperation

- The Seven Wastes, or Muda

# Day 3

## Overview of the Analyse Phase

- How to Determine Process Capability
- Imagine Process Goals
- Acknowledge Diversity and Muda Sources
- Pareto Charts
- The Fish Bone/Ishikawa/Cause and Effect
- Analysis of the Root Causes
- 5S Tidying
- The Five Reasons

# Day 4

## Overview of the Improved Phase

- Piloting and Experimenting
- Proofreading Errors (Poka Yoke)
- Establish Tolerance Boundaries and Reaffirm the Solution
- PDCA
- Solving Issues
- Generating ideas
- Six Hats
- Impact Ease Matrix

# Day 5

## Introduction to Control Phase

- Verify the Measurement System and the Fix
- Create Process Control Plan
- Give the customer the solution, then wrap up the project.
- Project Documentation for Lean Six Sigma
- Black Belt Statistics
- Minitab Program
- Roles and Duties for Black Belts