

Lean Six Sigma **YELLOW BELT** Certification

EdutechNest, A joint venture between Munjal Group and Indian Centre for Research and Manufacturing Excellence(ICME), focuses on empowering individuals through comprehensive PG Diploma training programs, Certificate Programs. Combining Munjal Group's sustainable technology expertise with ICME's Lean Consulting and manufacturing proficiency, we bridge skill gaps and pave the way for significant career growth. Our aim is to cultivate a workforce ready to tackle present and future industry challenges with innovation and sustainability at its core.

About the Program

The program will enable participants to practice a simple and highly effective project roadmap which will accelerate the operations/Process excellence, business growth and cost savings/ profits. This roadmap implements all Deming Lean & Six Sigma principles and ensures a robust Indianized Six Sigma system at lowest investment.

Introduction

- The Yellow Belt Participants will have in-depth knowledge of Lean Six Sigma and the five phases practical terms.
- This course is designed to provide a broad understanding of Lean Six Sigma methodology, concepts, and language, along with a complete toolbox of basic process improvement methods
- This program was developed to encourage the candidates to be responsible for the development of process maps to support Lean Six Sigma projects.
- The Yellow Belt Participants will participate as core team members or subject matter experts on a project.
- Yellow Belt Participants will gain knowledge of Lean enterprise concepts, enabling them to identify non-value- added elements and activities



Methodology

DMIAC

- ✓ Problem solving Methodology
- ✓ Basic of Statistics & application
- ✓ Methodology selection
- ✓ Developing Team Project charter
- ✓ Project Selection



DMIAC

- ✓ Data collection & analysis
- ✓ SIPOC
- ✓ Process Mapping
- ✓ RCA & 7 QC tools
- ✓ 7 Nonvalue wastage
- ✓ Kaizen
- ✓ Prioritization Matrix of Action Plan
- ✓ Implementation Action Plan
- ✓ Sustainability of Project

Day -1

Overview

- Introduction and ground rules of Six Sigma
- Six Sigma Overview
- History of Six Sigma
- Value of Six Sigma
- Where it can be used
- Lean Overview
- History of Lean
- PDCA
- Lean Principles
- Waste
- Where it can be used
- Other Methodologies (PDCA, SDCA and A3)

Define Phase

- Voice of Customer, Voice of Process, Voice of Business (Balanced Scorecard)
- Project Selection Process
- VOC to CTQ to Primary Metric (Problem Definition Tree)
- Project Management Basics
- Charter
- Scoping
- Metrics
- GANTT Charts
- Risk Analysis
- Financial Benefits Assessment
- Team Dynamics and Stages
- Roles and Responsibilities
- Lean Tools (5S and Standardization)

Measure Phase

- Process Maps
- Basic Probability Concepts and Central Limit Theorem
- Collecting and summarizing data
- Graphical techniques
- Introduction to MINITAB®
- Basics of Measurement Systems Analysis

- Accuracy
- Precision
- Discrimination
- GR&R Studies
- Linearity
- Process Stability
- Process Capability
- DPMO
- DPU
- Sigma Level
- CP
- CPK
- Ø Lean Tools (OEE)

Day -2

Analysis Phase

- Cause and Effect Diagrams
- Cause and Effect Matrix
- Introduction to Hypothesis Testing (Type I and Type II Errors)
- Correlation and Regression
- Compare Means, Variances and Proportions
- Lean Tools (5 Why Analysis)

Improve Phase

- Lean Tools (Waste Elimination, Kaizen)
- Brainstorming Techniques
- Solution Selection
- Basics of FMEA

Control phase

➤ Control Methods (Documentation & Control Charts)

- Lean Tools (Poka-Yoke, Visual Control)
- Control Plan (Discussion on sustenance)
- Project Closure
- Tollgate review
- Lessons learnt
- Replication
- Handover meeting

Examination / Certification

Candidates are required to pass a Multiple-Choice Question (MCQ)-based classroom examination measuring the comprehension of Lean Six Sigma Yellow Belt Body of Knowledge. The duration of the examination is 60 minutes, with 50 MCQs, offered in English.

All candidates scoring 70% or above are awarded with Certified Lean Six Sigma Yellow Belt