Lean Six Sigma Green Belt Certification Training

Day 1: Introduction & DEFINE Phase
Topics:

Introduction to Lean, Six Sigma & DMAIC

Roles: Green Belt vs. Black Belt

Voice of the Customer (VOC) and CTQs

Project charters and problem statements

SIPOC diagram (Suppliers, Inputs, Process, Outputs, Customers)

High-level process mapping

Day 2: MEASURE Phase
Topics:

Types of data (continuous vs. discrete)

Operational definitions

Measurement systems analysis (MSA)

Process mapping: Swimlane diagrams

Introduction to basic statistics

Baseline performance: Process capability (Cp, Cpk)

Day 3: ANALYZE Phase
Topics:

Root cause analysis (5 Whys, Fishbone/Ishikawa)

Hypothesis testing basics (p-value, significance)

Correlation vs. causation

Graphical analysis (scatterplots, run charts)

Failure Mode and Effects Analysis (FMEA)

Day 4: IMPROVE Phase
Topics:

Brainstorming and solution selection

Prioritization matrix

Pilot testing and simulation

Lean tools: 5S, Kaizen, Kanban, Poka-Yoke

Design of Experiments (DoE) – Intro

Day 5: CONTROL Phase & Certification Prep

Topics:

Control plans and process monitoring

Statistical Process Control (SPC)

Control charts (X-bar, R, p, np)

Visual management and standard work