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## LEAN SIX SIGMA

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**Length:** 2 Days

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### Course Content:

#### Module 1 – Introduction to Six Sigma

- Origin of Six Sigma
- What is Six Sigma?
- Why does it work?
- What it means statistically
- What it means practically
- DMAIC

#### Module 2 – Six Sigma Key Concepts

- Voice of the Customer
- Introduction to Variation
- Baseline / Entitlement / Benchmark
- The Hidden Factory
- Rolled Throughput Yield
- Defects vs. Defectives
- Six Sigma metrics – DPU / DPMO / Sigma level

#### Module 3 – Introduction to Lean

- Origins of Lean
- Five principles of Lean
- Attributes of a Lean Enterprise
- The Lean Roadmap
- Benefits of Lean
- Obstacles to adopting Lean
- Lean Terms and Measurements
- Root Cause Analysis (RCA)

#### Module 4 – Waste

- Definition of Waste
- The 8 types of Waste
- I'M PIT ROW®
- Symptoms and Causes of Waste
- Common Contributors to Waste

#### Module 5 – 5S

- Principles of Housekeeping
- Sort
- Store
- Shine
- Standardize
- Sustain

#### Module 6 – Value

- Define Value
- Characteristics of Value
- Value-Added vs. Non-Value Added Activities
- Value-Added / Total Time Ratio

#### Module 7 – Flow

- Take time
- Standardized Work
- Workload Balancing
- Cross training

#### Module 8 – Pull

- Pull vs. Push
- Kanban
- Single-piece Flow vs. Batch
- Lead Time
- The Folder Game

#### Module 9 – Value Stream Mapping

- What is Value Stream Mapping (VSM)?
- Current-state VSM
- Future-state VSM
- Benefits of VSM

#### Module 10 – Mistake Proofing

- Control Methods
- What is Mistake Proofing?
- Levels of Error Prevention
- Mistake Proofing Examples
- Types of Errors
- Causes of Human Errors
- Anticipating Errors – FMEA

#### Module 11 – Kaizen

- What is Kaizen?
- History of Kaizen
- Kaizen Events
- POWER Kaizen®
- Success Stories