

Lean Fundamentals

Download Whitepaper: Accelerate Your Modernization Efforts with a Cloud-Native Strategy
Get Your Free Copy Now

Course Number: SIX-110

Duration: 3 days

Overview

Course Description

This Lean Fundamentals training gives attendees a high-level overview of Six Sigma and the five principles of Lean. Participants learn how to reduce waste, use Lean tools and methods, address constraints, implement an effective Lean 5-step (5S) environment, adopt continuous improvement, and more.

Note: This is a 3-day course if taught online. Adding an extra day for more hands-on lab time is recommended for on-site delivery.

Skills Gained

- Lean and Six Sigma, their foundations, and key developments in their application
- Use Lean tools and methods to ensure the success of the Lean transition
- Understand Kaizen Blitz and the structure of Kaizen events
- Complete and sustain an effective 5-step (5S) environment
- Quantify the impact of 5S through inventory, space, and time savings
- Explore the types of activities found in processes

- Identify waste and incorporate methods to reduce the impact
- Conduct basic Root Cause Analysis (RCA) and establish functional mistake-proofing methods
- Calculate the pulse of the process to meet the business demands and maintain flow
- Identify and address constraints within a process
- Establish signaling methods for work task completion
- Implement Generic Pull and 2-Bin Kanban systems
- Identify and remove unnecessary steps

Prerequisites

No prior experience is presumed.

Training Materials

All Lean training students receive comprehensive courseware.

Software Requirements

Minitab is preferred but not required. A [free 30-day trial](#) is available for student usage.

Audience

Course Details

Outline

- Introduction
- Lean and Six Sigma
 - A brief history of Lean and Six Sigma in various industries and processes
 - Why businesses should adopt a continuous improvement mentality
- Project Definition and Approach
 - Game plan for the implementation
 - Lean tools and methods
 - Kaizen Blitz and the structure of Kaizen events
- 5-Step (5S) and Visual Management
 - The proper organization of the work environment
 - The 5S environment
 - The impact of 5S through inventory, space, and time savings

- The 5 Principles of Lean & A3
 - The five principles of Lean, as delineated by Jones and Womack
 - A3 thinking and 8-step practical problem-solving
 - The relationship between A3 & DMAIC
- Principle One: Specify Value
 - Customer value add, business value add, or non-value add
- Principle Two: Identifying the Value Stream
 - State process map for wastes and value
 - Maps, time, and metrics
 - Identifying hidden factories and hidden work
- Root Cause Analysis (RCA) and Point of Cause
 - Using RCA to establish functional mistake-proofing methods
- Ideal and Future State Mapping
 - Using True North to guide the next iteration of the process, the Future State
- Principle Three: Removing Barriers to Flow
 - The methods to identify and address various types of constraints within a process
 - Work cells
- Principle Four: Implementing Pull
 - Setting up the process to accommodate inventory fluctuation to maintain a constant flow
 - Generic Pull and 2-Bin Kanban systems
- Principle Five: Pursue Perfection
 - Implementing control and mistake-proofs to eliminate non-value-added processes
- Conclusion