



Quality Management & Operational Excellence

Advanced Lean Techniques for Quality Improvement

Course Introduction

In today's competitive and fast-paced business environment, organizations must go beyond basic quality control to drive real, measurable, and sustainable improvement. Lean methodology, with its focus on eliminating waste and enhancing value, offers a proven framework for continuous improvement. However, applying advanced Lean techniques requires more than just an understanding of tools — it demands a mindset shift, data-driven decision-making, and strategic integration across departments.

This advanced program from BOOST is designed for professionals who already have a foundational knowledge of Lean and are seeking to take their capabilities to the next level. Participants will explore high-impact Lean techniques such as value stream mapping, takt time optimization, pull systems, visual management, Lean problem-solving (A3 thinking), and error-proofing (poka-yoke). The course emphasizes practical application, with simulations, team activities, and real-world case studies to ensure skills can be transferred immediately to the workplace.

By the end of the course, participants will be equipped to lead Lean improvement initiatives that not only improve processes but also enhance quality, reduce cost, and elevate organizational performance.

Target Audience

- Quality and Process Improvement Professionals
- Operational Excellence Leaders and Managers
- Production and Manufacturing Supervisors
- Continuous Improvement Specialists
- Engineers and Industrial Technologists
- Business Analysts and Process Owners
- Anyone involved in Lean, Six Sigma, or Quality Initiatives

Learning Objectives

1. Deepen their understanding of Lean principles and how they apply to advanced quality improvement.
2. Identify and eliminate the eight forms of waste at a strategic level.
3. Map and analyse end-to-end value streams for systemic improvement.
4. Apply takt time, heijunka (leveling), and flow optimization techniques to improve process stability.
5. Implement visual management tools to enhance transparency and team performance.
6. Use root cause analysis and A3 problem-solving for structured continuous improvement.
7. Apply poka-yoke (error-proofing) techniques to reduce defects and variation.
8. Facilitate Lean kaizen events to drive rapid quality improvement.
9. Link Lean initiatives to quality KPIs and business goals.
10. Develop a roadmap to implement Lean at the departmental or organizational level.

Course Outline

• 01 DAY ONE

Lean Thinking and Strategic Quality Alignment

- Recap of Lean Principles and Evolution
- The Cost of Poor Quality (COPQ) and Lean's Role in Addressing It
- Strategic Alignment of Lean and Quality Goals
- The Eight Wastes Revisited: Advanced Scenarios and Impacts
- Introduction to Lean Culture and Change Management

• 02 DAY TWO

Value Stream Mapping and Process Flow Optimization

- End-to-End Value Stream Mapping (VSM): Deep Dive
- Identifying Bottlenecks and Non-Value-Added Activities
- Takt Time, Cycle Time, and Lead Time: Advanced Applications
- Heijunka and Flow Optimization Techniques
- Balancing Workloads and Reducing Delays
- **Exercise:** Build a Future-State VSM

• 03 DAY THREE

Visual Management, Pull Systems, and Error-Proofing

- Introduction to Visual Management and 5S at an Advanced Level
- Implementing Kanban Systems and Pull Scheduling
- Mistake-Proofing (Poka-Yoke) Techniques and Tools
- Applying Error-Proofing in High-Risk Environments

• 04 DAY FOUR

Structured Problem Solving and Lean Tools Integration

- Root Cause Analysis: 5 Whys and Fishbone Diagrams
- A3 Thinking and Structured Problem-Solving
- DMAIC vs. PDCA vs. A3: Selecting the Right Framework
- Facilitating Cross-Functional Kaizen Events

• 05 DAY FIVE

Measuring Impact and Sustaining Lean Quality Initiatives

- Linking Lean to Quality KPIs and Business Metrics
- Sustaining Improvement: Daily Management Systems
- Coaching and Leadership Roles in Lean
- Building an Implementation Roadmap for Your Team

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 30, 2025	July 4, 2025	5 days	4250.00 \$	UAE - Abu Dhabi

FROM	TO	DURATION	FEES	LOCATION
Sept. 29, 2025	Oct. 3, 2025	5 days	4250.00 \$	UAE - Dubai
Dec. 15, 2025	Dec. 19, 2025	5 days	4950.00 \$	Turkey - Istanbul