

Lean Manufacturing Course Objectives

Unit 1 | Lean Concepts

- Understand the reasons for implementing lean.
- Learn the terms, tools, and techniques used in lean.
- Identify the types of waste that can be eliminated with lean.
- Describe the components and elements of a lean effort.
- Explain value stream mapping, techniques for analyzing the current state map and for envisioning the future state of the workflow.
- Describe why and how lean can apply to finance, maintenance, sales and R&D processes.
- Compare and contrast the linkages and differences between lean and six sigma initiatives.

Unit 2 | Lean Practices

- Streamlining the Value Stream: Learn how to use value stream maps to create macro-facility workflows and micro-process workflows.
- Workplace Organization: Understand how the 5S's establish a structured approach for storing materials, supplies, and equipment in work areas.
- Predictability & Consistency: Discover how quality improvement techniques such as GR&Rs, SPC, DOE, DFA/DFM, and (especially) mistake-proofing help prevent problems and lead to robust processes.
- Set-Up Reduction: Investigate how to slash set-up and change-over times and understand how important fast set-ups are to lean efforts.
- TPM: Learn how to improve equipment reliability by applying TPM methods.
- Visual Workplace: See how visual controls and visual displays reinforce and enhance a lean effort.
- Support Processes: Recognize how important lean scheduling, lean purchasing, lean accounting, and lean warehousing practices are to supporting and sustaining a lean manufacturing effort.
- Continuous Improvement: Explore the options for keeping a lean effort viable and vital.

Unit 3 | Implementing Lean

- Understand how important it is to address people issues as cross-training and flexible staffing practices are introduced.
- Review the types and forms of data needed to support lean implementation.
- Explore forms used to help plan and track lean efforts.
- Investigate layout options and methods to determine the best option for your workflow and facility.
- Learn how a lean warehouse complements lean manufacturing.
- Review a systematic roadmap for introducing and implementing lean.
- Explore 12 common lean pitfalls and learn how to avoid them.