



### Lean Continuous Improvement: 4.0 CEUs/40 PDUs

This Lean Continuous Improvement course, 100% online, provides the essential and advanced Lean tools and methods. In six weeks, participants will learn the concepts and principles of Lean management to help them optimize processes, increase quality, and drive customer and business value.

This course offers a unique, learner-centered experience tailored to the needs of professionals, incorporating engaging video lectures, thought-provoking group discussions, self-assessment activities and real-world scenarios. In addition to the course content and activities, participants are encouraged to engage in weekly group discussions and live review sessions conducted by an instructor. This course does not have any prerequisites.

### Learning Outcomes

Upon the successful completion of the Lean Continuous Improvement course, participants will be able to:

1. Define the principles and philosophy of Lean
2. Identify Lean Continuous Improvement opportunities
3. Interpret the purpose and applicability of the Lean tools

### Assessment Strategy

#### Multiple Choice Quizzes (3 attempts, 70% min)

During this course, participants must complete three multiple choice quizzes to assess their knowledge of the content presented in the prior modules. Participants are provided with three attempts to pass each quiz with a score of 70% or better.

- Week 2 (20 questions)
- Week 4 (20 questions)
- Week 6 (25 questions)

#### Self-Assessment Activities

Self-assessment activities are in each course module to provide participants with an opportunity to reinforce understanding or enforce memorization of important knowledge. These activities may include group discussions, multiple choice and matching exercises. The activities are not graded and may be retaken ad infinitum.

### Course Overview

#### Module 1: Introduction

##### *Description:*

Lean Continuous Improvement is based on five main principles: Value, Value Stream, Flow, Pull and Perfection. During the first week of the course, participants are asked to indicate the differences between Lean and Six Sigma, outline the evolution of quality and provide an overview of the five main principles.



### *Learning Objectives:*

- Define Lean and Six Sigma
- Outline the five principles of Lean

### **Module 2: Waste**

#### *Description:*

Participants describe the components of Gemba and Waste Walks.

#### *Learning Objectives:*

- Describe types of Waste
- Discuss Gemba
- Outline Waste Walks

### **Module 3: Lean Methods**

#### *Description:*

Participants describe Lean Flow, Pull, mistake proofing and rapid change models.

#### *Learning Objectives:*

- Examine Lean Flow and Pull
- Characterize mistake proofing (poka yoke)
- Discuss Rapid Change/Single Minute Exchange of Dies (SMED)

### **Module 4: Improvement Methods**

#### *Description:*

Participants are introduced to concepts and calculations for Single Minute Exchange of Dies (SMED), Overall Equipment Effectiveness (OEE) and Total Productive Maintenance (TPM). Practice for these calculations will be provided with feedback for mastery of the concepts and application through an assignment sheet.

#### *Learning Objectives:*

- Compute Overall Equipment Effectiveness (OEE)
- Determine Total Productive Maintenance (TPM)
- Discuss Implementation
- Describe Kanban

### **Module 5: Kaizen Events**

#### *Description:*

Participants gain basic and advanced knowledge of Kaizen events.

#### *Learning Objectives:*

- Discuss A-3 Thinking
- Describe the use of Kaizen events
- Outline the ways Kaizen events can impact process improvement efforts



## **Module 6: Standardization**

### *Description:*

Participants describe and define standard work, operating procedures and management techniques. Participants will complete an assignment to identify components of Standard Operating Procedures.

### *Learning Objectives:*

- Describe 7S Concepts
- Characterize the Visual Workplace
- Define Standard Work
- Discuss the Lean framework of integration