

# Course : Lean Software Development, implementation

*Practical course - 3d - 21h00 - Ref. LSD*

*Price : 2150 CHF E.T.*

Lean manufacturing is a design principle focused on value and the elimination of waste. Integrated into the agile philosophy, it becomes Lean Software development. This course will teach you how to integrate Lean Thinking practices and tools into your development teams, use Value Stream Mapping (VSM) to identify what's holding back productivity, and deliver the product customers really want.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Understand the philosophy and main principles of "[Lean Thinking]".
- ✓ Use Value Stream Mapping (VSM) to detect waste
- ✓ Develop and measure development performance indicators
- ✓ Implementing Lean best practices for code quality
- ✓ Building customer satisfaction indicators from a Lean perspective
- ✓ Positioning Lean in relation to other development quality management methods

## Intended audience

Chefs de projets développement, analystes développeurs, responsables méthodes Projet.

## Prerequisites

Basic knowledge of software development.

## Course schedule

### 1 Introduction to Lean Thinking

- The history of Lean.
- The major principles of "Lean Thinking".
- First presentation of Lean Software Development.

## PARTICIPANTS

Chefs de projets développement, analystes développeurs, responsables méthodes Projet.

## PREREQUISITES

Basic knowledge of software development.

## TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

## ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

## 2 Lean principles

- Eliminate waste.
- Building intrinsic quality.
- Promoting knowledge.
- Deliver fast.
- Delay the decision.
- Respect people.
- Optimize the entire system.

### Hands-on work

Reflection on Lean principles. Case studies.

## 3 Tools for measuring and calibrating the project

- A tool for calibrating the project, choosing the players and defining the target.
- Value Stream Mapping (VSM): a tool for identifying waste.
- Define performance targets.
- Quantify your activities.
- Measure software development efforts.

### Hands-on work

Define the target for an improvement project. Identify waste. Define performance indicators. Measure activities and compare with indicators.

## 4 Implementing Lean Software Development principles

- Reduce work partially done.
- Reduce excess functionality.
- Reduce problems with information transmission, waiting times and delays.
- Preserve the team's ability to react.
- Permanent feedback.
- Aim for quality: testing, TDD, TDR, continuous integration.
- Best practices for code quality: standards, code reviews, Refactoring, Pair Programming...

## 5 Lean metrics

- Lean and product vision, product value and fast delivery.
- Cycle time measurement.
- ROI measurement.
- Measuring customer satisfaction.

## 6 Lean and other methods

- Lean and Six-Sigma. Lean and CCMI.
- Lean and agile methods (XP, Scrum...).

### Hands-on work

Reflection on the positioning of different methods.

## 7 Case studies

- Choosing a subject. Applying Lean principles.
- Implementation of an action plan to support change.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## Dates and locations

### REMOTE CLASS

2026 : 16 Mar., 8 June, 21 Oct.