



**LEAN  
SIX SIGMA**  
FRANCE

**Training & Certification**

Lean Six Sigma Yellow Belt

## Training & Certification

# Lean Six Sigma Yellow Belt– 4 days

## Target audience

All sectors (industry and services)

- Project Managers / consultants (internal or external) in organization, quality, continuous improvement, or operational excellence
- Logistic Managers
- Supply Chain Managers
- Production Managers
- Operations Managers
- Quality Managers

## Training Objectives

### Lean Management module

- Understand the philosophy, tools and principles of Lean Management.
- Assess the production capacity, wastage of resources and delivery time of a production unit, a flow of activities or an organization.
- Draw up a process map based on field observations in order to describe and communicate the reality of operations.
- Analyze a process to locate and quantify bottlenecks, overcapacity, waste and malfunctions of all kinds.
- Make operations faster, more agile, efficient and reliable.
- Develop a performance management system based on field indicators and problem-tracking routines.
- Conduct a flow and/or organizational efficiency problem-solving workshop based on the “Kaizen Event” approach.

### Six Sigma Yellow Belt module

- Analyze the results of a customer satisfaction and expectations survey to identify the quality criteria to be improved.
- Assess the extent and cost of a quality problem.
- Determine the main root causes of a simple quality problem.
- Carry out a comparative assessment of different potential solutions.
- Develop a process performance management system.
- Conduct a DMAIC project to resolve a simple (“discernible”) quality problem.

## Program

### Days 1 & 2 - Lean Management: Solving Flow and Waste Problems

- History and positioning of Lean Management
- DMAIC and Kaizen Event method
- Process capability: cycle time and Takt time
- Work in progress, stock, wait time and Little's Law
- Value Stream Mapping (VSM)
- Load chart
- Analysis of added value and waste elimination
- Process Cycle Efficiency and Overall Process Efficiency
- First Pass Yield and Rolled Throughput Yield
- Theory of constraints and line balancing
- Continuous flow
- Pull flow and Kanban
- Visual Management, Poka-Yoke, 5S
- SMED
- Heijunka, dynamic capacity adjustment, and standardization
- Maximum acceptable work-in-progress (WIPmax)
- Kata and Short Interval Control
- Toyota Way
- Complex flow analysis
- Failure Modes and Effects Analysis (FMEA)

### Days 3 and 4 –Six Sigma Yellow Belt module

- History and positioning of Lean Six Sigma
- Typology (LSSx.0) of DMAIC problems and projects
- **Define**
  - Project launch
  - SIPOC
  - The 3 Voices
  - Critical To Satisfaction
  - Kano model
  - Problem statement, objective statement and project opportunity statement
  - Project Charter VI
- MAIC method to solve simple (“discernable”) statistical problems
- **Measure**
  - Problem metric

Measurement plan

Measurement system validation, precision and accuracy (agreement analysis)

Defective rate

Project charter v2

### **Analyze**

Pareto analysis

Five Whys

Project charter v3

- **Improve**

Research and selection of the solution

Business Case

Implementation of the solution

Improvement validation

### **Control**

Process performance monitoring dashboard

Response plan

## Pedagogy and Learning resources

- Inductive teaching
  - Experimentation of the Lean improvement method (Kaizen Event) through a role-play simulating a cross-functional company process.
  - Learning the DMAIC method by means of a company case study used as a common thread throughout the training.
- Group of no more than 12 people facilitated in such a way as to encourage interactivity, the sharing of ideas and experience and the development of one's professional network.
- Training material provided in PDF format.
- Self-assessment and practice test at the end of the course.

## Certification

Closed-book online examination with remote monitoring to be taken within 6 months after the course.

- Lean Management exam – MCQ - 25 questions – 50 minutes
- Six Sigma Yellow Belt exam – MCQ – 25 questions – 50 minutes

Passing criteria:  $\geq 60\%$

These exams validate the acquisition of basic knowledge in Lean Management and technical skills at the Six Sigma Yellow Belt level in accordance with the LSSx.0 knowledge body. The exams include a mix of recall questions (e.g. definitions), execution (e.g. calculations, tool selection), and application (e.g. drawing conclusions from results, making decisions in a given situation).