

# TRAINING PROGRAM

## Black Belt - Lean

v. 06/2023



### Objectives of the training

- ★ Define and deploy a Lean approach adapted to the company and its strategic objectives.
- ★ Analyze the criteria for identifying simple or complex Lean projects.
- ★ Carry out complex Lean projects at the Black Belt Lean level
- ★ Select and implement the right Lean tools at the Black Belt Lean level
- ★ Lead, animate and organize the approach in project mode.

**Teaching methods:** 100% online training.  
One virtual classroom/week, virtual business simulation, mini-games, videos and quizzes.

**Evaluation & success :** Black Belt Lean certification. Final MCQ online with CESI Certification.

**Prerequisites:** 5 years of professional experience. Internet connection and compatible browser (Chrome or Firefox)

**Accessibility :** the training is accessible to people with disabilities. Contact us so that we can adapt your training.

### 3 OFFERS

to match your level

#### Complete training

**2,490€**

VAT excl

Included :  
Yellow Belt, Green Belt,  
Black Belt 7-Shapes School

Training dates  
on the next page

**36h on 12 weeks**

#### For certified Yellow Belt

**1,890€**

VAT excl

Included :  
Green Belt, Black Belt  
7-Shapes School

Training dates  
on the next page

**26h on 8 weeks**

#### For certified Green Belt

**1,390€**

VAT excl

Included :  
Black Belt  
7-Shapes School

Training dates  
on the next page

**13h on 4 weeks**

**TEST our DEMO**

## TRAINING **CONTENT**

### **Black Belt**

Week 9, Week 10  
Week 11, Week 12

### **Green Belt**

Week 5, Week 6  
Week 7, Week 8

### **Yellow Belt**

Week 1, Week 2  
Week 3, Week 4

Training **DATES 2023**  
- **contact us** -

### **In-company group**

Minimum 8 people  
Customized dates

### Week 1 : Define your Lean project (~3 hours)

★ **Welcome Virtual Class**

★ **Positioning Quiz**

- The philosophy of Lean Management
- Manage your Lean project with the DMAIC method
- Value Added Value and Non Value Added
- Simple diagnostic tools: The 7 wastes, the Gemba Walk, the indicators, the dashboard
- Implementing the 5S
- Project management: SMART goals, project scoping, building the right team, managing risks

★ **Quiz : The basics of Lean and the definition of a project**

★ **Virtual class : Project scoping, SMART objective, etc.**

### Week 2 : Measure and analyze the current performance (~3 hours)

- Make the right diagnosis
- Advanced diagnostic tools: VSM, Spaghetti Flow, Relocation, Logistician assignment
- OEE & GEE
- Others diagnostic tools : 4W1H, Ishikawa & 5 WHYs
- Kanban
- Poka Yoke

★ **Quiz : Measure and analyze flow performance**

★ **Reccurent quiz**

★ **Virtual class: complements to the notions of the week**

### Week 3 : innovating to achieve objectives (~3 hours)

- Little's Law and the Theory of Constraints
- Leading a Kaizen project and example
- Batch size and Work-In-Process (WIP)
- Application of all the notions from the beginning of the training
- Example of a performance project

★ **Quiz : Initiate improvements projects**

★ **Virtual class : use the DMAIC method**

### Week 4 : Control that the performance is sustainable (~4 hours)

- Involve your staff
- Creativity and constraints
- Basics of visual management
- Difficult challenges

★ **Quiz : Controle and sustain performance**

★ **Yellow Belt 50 questions quiz**

★ **Virtual class : complements to the notions of the week**

### **Week 5 :** Take into account the customer's request (~3 hours)

- Queueing Management Tool
- Customer order
- VSM information and calculations
- OEE, GEE and Takt Time calculations
- ★ **Quiz : Constraints related to customer orders**
- ★ **Quiz VSM**
- ★ **Virtual class : ABC/Fmr, VSM, Takt Time et cycle efficiency**

### **Week 6 :** Controlling the product mix (~3 hours)

- Kanban : How it works
- SMED, TPM and EPEI
- Product mix and changeover planning
- Difficult challenges
- ★ **Quiz : Tools and methods linked to product mix**
- ★ **Virtual class : the 7+1 questions of the VSM, Autonomous Production Unit**

### **Week 7 :** Set up a Lean management and logistic rounds (~3 hours)

- Lean and logistics control tools
- Kaizen meetings
- Provision of components and quality control tools
- Challenges: find solutions to different problems in a factory
- ★ **Quiz : Green Belt certification preparation**
- ★ **Virtual class : Heijunka box, milkman system and kitting**

### **Week 8 :** Preparation week - Green Belt certification

- Challenges: find solutions to different problems in a factory
- Revision tools: virtual classes slides, cheat sheets
- ★ **Quiz : Green Belt 50 questions quiz**
- ★ **Virtual class : Challenge debriefing and questions/certification**

### Week 9 : Applications of the main quality tools & line balancing (~3 hours)

- Muda, Muri and Mura
- Application of the main quality tools (Andon, Jidoka & Pokayoke)
- The Yamazumi or "balancing diagram"
- Reduce quality problems and line balancing at Takt Time

★ **Quiz : quality and Yamazumi**

★ **Virtual class : Line balancing rules + examples**

### Week 10 : Advanced OEE & GEE and failure management (~3 hours)

- Advanced OEE & GEE
- Application of the different types of maintenance & balancing of lines
- Production standards
- FMECA

★ **Quiz : OEE and GEE calculations and maintenance types**

★ **Virtual class : Failure management and maintenance efficiency**

### Week 11 : Apply the principles of just-in-time (~3 hours)

- Internal logistics: advanced operations (MADC)
- Kanban calculations and applications and EPEI method (batch size calculation)
- Future VSM (FVSM) examples and calculations
- Application: Kanban loop calculations and just-in-time implementation

★ **Quiz : Just-in-time principle and Kanban loop calculation (production and logistics)**

★ **Virtual class : Pull flow applications**

### Week 12 : Line design and architecture - The continuous flow (~3 hours)

- Principles and examples of line architecture
- Production management methods (MTO, MTS, CTO,...)
- Organizational rules and production standards
- Opening on Supply chain and Lean Office / Services techniques - Agile

★ **Quiz : Black Belt certification preparation**

★ **Virtual class : debriefing and questions/certification**