# eLearning Lean Six Sigma Black Belt (ILSSI)

Duration : 40 hours / 180-day access / ILSSI exam voucher included

Cette formation Lean Six Sigma Black Belt (LSSBB) offre aux étudiants une compréhension approfondie des deux domaines complémentaires du Lean et du Six Sigma. Il couvre les outils et techniques utiles pour améliorer le processus de production, réduire les déchets et minimiser les défauts du produit final. Ce cours en ligne LSSBB permettra aux participants d'utiliser les connaissances acquises dans la direction de divers projets critiques dans leurs organisations. L'examen LSSBB est inclus dans le package eLearning.

Un professionnel Lean Six Sigma Black Belt a une compréhension approfondie de tous les aspects de la méthode Lean Six Sigma, y ??compris dans les sujets contenus dans les phases de définition, mesure, analyse, amélioration et contrôle (DMAIC) tel que défini par l'IASSC Lean Six Sigma Black Belt Body of Knowledge ™. Un Lean Six Sigma Black Belt comprend comment mettre en œuvre, exécuter, interpréter et appliquer Lean Six Sigma à un niveau de compétence avancé.

**ATTENTION : ce module eLearning et l'examen n'existent qu'en anglais !**

## Détails

* Code : LSSBBe

Public

Pré-requis
* Professionals wishing to take this certification are recommended to be certified in Lean Six Sigma Green Belt (LSSGB), but this is not essential.

## Objectifs
* Gain a comprehensive knowledge about the tools and techniques, advantages and challenges of the Six Sigma and Lean methodologies
* Have an in-depth knowledge on how to apply the DMAIC (Define, Measure, Analyze, Improve, and Control) principles
* Understand how Lean Six Sigma provides structure to continuous process and quality improvement
* Understand team dynamics and assign your teams members with roles and responsibilities
* Develop superior problem-solving skills that can be immediately applied in real world projects

## Programme

### Introduction to Lean Six Sigma
* A brief history of Quality
* What is Quality (Definitions) and service or product
* Quality Gurus & their contribution to Quality
* Enterprise wide View
* Leadership
* Six Sigma Roles and Responsibilities
* Team Formation
* Team Facilitation
* Team Dynamics
* Time Management For Teams
* Team Decision making Tools
* Management and Planning Tools
* Team Performance Evaluation And Rewards
* Overview of DMAIC

### Lean Six Sigma Methodology – Define
* Important Stakeholders
* Impact On Stakeholders
* Critical To Requirements
* Benchmarking

* Business performance measures
* Financial measures
* VOC
* Kano's Customer Satisfaction Levels
* Juran's Customer Needs
* Market Research
* CTQ Flowdown
* QFD
* Performance Metrics
* Project Charter
* Charter Negotiation
* Project management plan and Baselines
* Project Tracking

### Lean Six Sigma Methodology – Measure
* Processes, Process characteristics, process flow metrics, inputs and outputs
* Process maps and Flow chart
* SIPOC
* Data Type & Measurement scale
* Data Collection
* Sampling strategies

- Fishbone Diagram
- Relational Matrices or Prioritization Matrix
- Basic Statistics
- Analytical Statistics
- GaugeR&R
- Process Capability Analysis

## Lean Six Sigma Methodology – Analyze

- Correlation and Regression Analysis
- Testing of Hypothesis
- FMEA
- Gap Analysis
- The Five Whys
- Pareto Diagram
- Tree Diagram
- Non value added activities
- Cost of poor Quality (COPQ)

## Lean Six Sigma Methodology – Improve

- DOE
- Poka-yoke
- 5S
- SMED
- Continuous Flow Manufacturing
- Kaizen
- Kanban
- Theory of constraints
- Risk analysis

## Lean Six Sigma Methodology – Control

- Statistical Process Control
- Other Control Tools
- Maintain Controls
- Sustaining Improvements

## DFSS : Design for Six Sigma

- More on Lean
  - A Value Stream Map
  - Lean is Speed
  - Total Supply Chain
  - Lean Six Sigma Logistics
- Case Study 1-2
  - Part1
  - Part2

## Examination Guidelines

- This elearning package includes your online proctored examination powered by the International Lean Six Sigma Institute
- Upon successful completion of the exam, you will receive your Lean Six Sigma Black Belt Certificate
- The exam consists of 150 multiple-choice questions and each question only has one correct answer
- Time allowed: 3 1/2 hours
- Questions: 150
- Format: Online proctored examination

## Modalités

- Type d'action :Acquisition des connaissances
- Moyens de la formation :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- Modalités pédagogiques :Exposés – Cas pratiques – Synthèse
- Validation :Exercices de validation – Attestation de stages