Lean Six Sigma Black Belt eLearning (ILSSI)

Durée : 98 heures / 6 mois d'accès / voucher d'examen ILSSI compris

Aperçu du cours

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.

Cette eLearning incluant la certification comprend :

• 98 heures d'apprentissage

• De nombreuses vidéos et exercices variés

• Le téléchargement possible de chaque cours avec prise de note

• Le suivi de la progression du cours

• Un forum de discussion

• Une application mobile pour apprendre et étudier où et quand vous le souhaitez

• **L'examen ILSSI Lean Six Sigma Black Belt**

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

COURSE & LEARNING OBJECTIVES

Upon completion of our Lean Six Sigma Black Belt training course, you will:

- 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
- Be able to apply Lean concepts such as 5S, waste reduction, process mapping, value stream mapping, mistake proofing, etc. in your workplace
- Have the skills to define, present and manage improvement projects

COURSE CONTENT

98 hour study time

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

- Part1
- Part2

Case Study 2

• Part1

• Part2

WHO SHOULD ATTEND?

This course is designed for employees and organizations requiring a standardized approach to problem solving for the purpose of continuous improvement. This would include team leaders, supervisors, associates, Quality Assurance Engineers, Project Managers, Software Professionals, Practitioners, Quality Assurance team members, Working Executives and Senior Management that will dedicate a small portion of their time applying the DMAIC and Kaizen tools to their natural work area.

This e-Learning is also suitable for those who want to lead improvement projects or those seeking to significantly improve business processes.

PRE-REQUISITES

Professionals wishing to take the Lean Six Sigma Black Belt (LSSBB) certification are recommended to be certified in Lean Six Sigma Green Belt (LSSGB). However, this is not essential as LSSGB principles and tools are also covered within the LSSBB course content.

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