

Training Black Belt

Lean Six Sigma



Prix 10.000€ HT



Public :

Any person in charge of the improvement of the performance of service activities and industrial processes.



Trainer :

Master Black Belt



Organisation of training

Training lasting 20 days in 5-day session: theoretical courses and practical examples. And follow-up of the project of each participant. This training is eligible for certification Black Belt IASSC requirements

Prerequisite: A Lean Six Sigma project of complexity Black Belt
We validate the academic knowledge and the business success of both projects.

contact@athena-luxembourg.com

Operational Objectives :

- Understanding of a Lean approach six Sigma, and its relationship with the company's strategy.
- Understanding his Black Belt role as host of improvement team.
- Knowledge characterize a project, to build and lead a team around a Lean Six Sigma project.
- Understanding and knowledge to apply the Lean Six Sigma approach throughout a project to improve the performance of an industrial process.
- Knowledge using the tools and techniques at different stages of the process, and to apply them effectively as part of a project to improve.
- To present results at every stage of the process.
- To identify opportunities for projects improving and qualify them.
- Knowledge lead Lean Six Sigma projects with perimeters, issues, complexities better than the Green Belt.
- Know coach of the Green Belt on their project, particularly during the statistical analysis of data.
- Know coach of the Green Belt on their project, particularly during the statistical analysis of the use advanced statistical techniques (test of hypotheses, plan experiments,...) during the stages of a Lean Six Sigma project and apply effectively.
- Knowledge working with Champions and different stakeholders throughout a project to deal with the difficulties encountered.
- At the end of the training, the trainee pilot, one or more project teams Lean Six Sigma can claim a Black Belt certification, based on respect of the methodology, the proper use of tools and validation of the progress and expected.

Optional Service :

Coaching for the follow-up of projects to achieve the objectives more quickly and more effectively.

Training Program

Duration : 4 Weeks :

Week 1 :

- Introduction to Six Sigma
- Basic Statistics
- Capability for continuous and attributive data
- SIPOC
- Process Map
- Cause & Effect Matrix
- FMEA Six Sigma
- Numerical Evaluation of Metrics
- Measurement System Evaluation

Week 2 :

- Introduction to Hypothesis Testing
- Data collection and sample size consideration
- Proportion Test
- T Test
- ANOVA
- Residuals
- Chi Square Test
- Regression
- Data mining

Week 3 :

- Introduction to Six Sigma Black Belt
- Introduction to Non-Parametric Hypothesis Testing
- Mann-Whitney Test
- Kruskal-Wallis Test
- Mood's Median Test
- Introduction to DOE
- Full Factorial DOE
- Fractional Factorial DOE

Week 4 :

- Pooling
- Aliasing
- Center Points
- Black Box
- Response Surface
- Multi Linear Regression
- Auto Correlation
- Control Plan