

Hands-on course , 5
day(s)
Ref : GLB

Participants

Professionals who wish to consolidate their knowledge of Lean Six Sigma®.

Pre-requisites

Have obtained Lean Six Sigma® Yellow Belt certification IASSC. An experience on a Lean project and / or Six Sigma is desirable but it is not a prerequisite for certification.

Next sessions

Lean Six Sigma®, Green Belt, certification

OBJECTIVES

This training will allow you to consolidate your knowledge of Lean Six Sigma® method. You acquire the knowledge to lead a project to improve independently within your company. You will also be prepared to spend the Green Belt Lean Six Sigma® certification IASSC.

1) Introduction and reminders

2) The "Analyze" phase

3) The "Improve" phase

4) The "Control" phase

1) Introduction and reminders

- The Green Belt objectives. The certification process.
- Reminders of the DMAIC process. The Six Sigma fundamentals.
- Reminders of Lean principles. The different types of waste.
- Reminders "Define" and "Measure" phases of the the Yellow Belt perimeter.

2) The "Analyze" phase

- The variation models: analysis and multi-variances graph, application cases, interpretation of analytical data.
- Statistical inference: central limit theorem, standard error, ...
- Hypothesis testing introduction : objectives, concept of central tendency, types of hypothesis testing, ...
- Hypothesis testing with normal data: sample size, various hypothesis tests on averages, analysis, ...
- Hypothesis testing with non-normal data: equal variance data, medians, proportions tests, contingency.

3) The "Improve" phase

- Regression modeling process.
- Advanced process modeling.
- Linear and non-linear regression. Multiple linear regression (MLR).
- Introduction to the experience design.
- How to describe the differences between the physical model and experimental design(DOE: Design Of Experiment).
- Explaining OFAT experimentation and weaknesses.

4) The "Control" phase

- Reminders: Control and Lean tools, 5S, Kanban, Poke-Yoke, ...
- Reminders: Control Plan Six Sigma, cost-benefit analysis, ...
- Advanced experimentation: using the results of a DOE to determine the degree of improvement of the process, ...
- Capacity analysis: the ability of the process, selecting the method of analysis, interpretation, ...
- Defect control: prevention methods, tools and techniques, ...
- SPC presentation : Statistical Process Control.
- To describe the SPC chart elements and SPC chart objectivest.
- To describe the 9 steps of the methodology implementation of a control board.