SANDHOLM EXCELLENCE CENTER

Training and consulting in quality management, excellence and continual improvements since 1971.

Six Sigma Green Belt training

A training program about Six Sigma methods and tools that give results

This training program introduces the many methods and tools essential to obtaining conclusive results when solving problems and working with continual improvements in Six Sigma Green Belt projects. There is an emphasis on practical applications and how to achieve good results. The main objective is problem-solving and systematic improvement work in all kinds of processes.

When working with systematic problem solving and continual improvements, there are some essential steps: collect and analyze facts about the organization to find areas for improvement, select and prioritize improvement projects, define and scoop problems, identify root causes, find and implement solutions, follow-up improvements etc. To do this successfully, having a solid knowledge base of problem-solving methods and QC tools is critical.

All processes contain important aspects that can be measured. Effective improvement work should be based on facts. To understand data, it is important to have good knowledge of methods for statistical data och process analysis. The methods covered in this course can be used to detect any special causes of variation and predict/prevent unwanted behaviour in the process.

Purpose
To provide the knowledge and ability to apply effective methods and tools for continual improvements and problem-solving. Further, the participants will gain the knowledge and ability to apply these methods and tools effectively to improve profitability, cost efficiency, and customer satisfaction substantially.

After completing the course, participants will be able to analyze and improve process output more effectively. The course offers a Six Sigma Green Belt diploma.

Aimed at
Persons that participate in, or will take part in, improvement teams or problem-solving Six Sigma Green Belt projects.

General information
Parallel to the Six Sigma Green Belt training program the participants apply the knowledge learned in an improvement project in their organization.

The software Minitab will be used in many analyses.

The lectures will be led by consultants from Sandholm Associates and will be given in English.

Documentation
Participants will receive relevant course material which will serve as a useful reference after the course.

Length
6 days

Place
The course is given online through Zoom.

CONTENT ➔ **Main parts of the *Six Sigma Green Belt training course*:**

- Quality, customer focus, and business development
- Introduction to Six Sigma and Lean
- Identifying improvement opportunities and selecting projects
- Organization, roles, and responsibilities for improvement work
- Methods for problem-solving - DMAIC
- Basic project management for improvement projects
- Define a problem and set a scope
- Identifying a Business case
- Customer and process perspective on improvements Measure and understand the problem

- Root cause analysis and techniques for solving problems
- QC-tools
- Introduction to statistical analysis
- Understanding variations
- Practical statistics
- Control charts
- Capability studies
- Implementation of solutions
- Controlling and follow-up improvements

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Course schedule – Six Sigma Green Belt training

Day	Content
Day 1	Quality management, excellence, and continual improvements
	Introduction to Six Sigma and Lean
	Management of improvements
	Infrastructure for improvements – roles and responsibilities
	Introduction to DMAIC
	Identifying and selecting improvement projects
Day 2	Phase 1: Define
	Problem statement and limitations
	Identifying a Business case
	SIPOC and Voice of the Customer
	Project management for improvement projects
	Phase 2: Measure
	Identifying project CTQ, Y and x
	Data collection
Day 3	Phase 3: Analyze
	Root cause analysis and problem-solving
	QC-tools
	Identifying and testing remedies Phase 4: Improve
	Leading change and dealing with attitudes
	Implementation of solutions
	Phase 5: Control
	Follow-up and reporting
	Examination and graduation Basic statistics
Day 4	Introduction to Minitab
	Understanding variations
	Normal distribution
Day 5	Analysis of variation and process stability with control charts
	Use of I-mR and Xbar-R diagrams
Day 6	Capability studies
	Capability index – Cp and Cpk