



# Six Sigma Green Belt training

## A training program about Six Sigma methods and tools that gives results

This training program introduces the many methods and tools that are 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 kind 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 it is important to have a solid knowledge base over problem-solving methods and QC-tools.

All processes contain important aspects that can be measured. Effective improvement work should be based on facts. To be able to understand data it is important to have good knowledge in methods for statistical data and 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 used in continual improvements and problem solving. Further, the participants will gain the knowledge and ability to apply these methods and tools effectively to achieve substantial improvements in profitability, cost efficiency, and customer satisfaction.

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

### Aimed at

Persons that take part 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 the own organization.

The software Minitab will be used in many analyses.

The lectures will be led by consultants from Sandholm Associates and is 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 at Tegnérsgatan 40, Stockholm or online via 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, rolls 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



## Course schedule – Six Sigma Green Belt training

<b>Dag</b>	<b>Content</b>
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