



SIX SIGMA GREEN BELT

Training Program

A STEP-BY-STEP-APPROACH-TO-GET
CERTIFIED!!

What Is The Six Sigma Certification?

Six Sigma is a rigorous and systematic method of improving operational performance by leveraging various tools to identify and eliminate defects. This method has direct and tangible applications in almost all manufacturing processes but it can also be used to find bottlenecks and improve the performance in service-related organizations. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization.

The whole concept behind Six Sigma can be summarized into three important tenets:

1

Reducing process variation is the key to making processes predictable and stable.

2

Process variations in manufacturing and service-based businesses are products of characteristics or inputs that can be measured, analyzed, controlled and improved.

3

The success of the Six Sigma approach and sustaining the achieved results requires organization commitment and support of top-level management in any company.

“Six Sigma is a business management strategy, originally developed by Motorola in 1986, that today enjoys wide spread application in many sectors of industry”

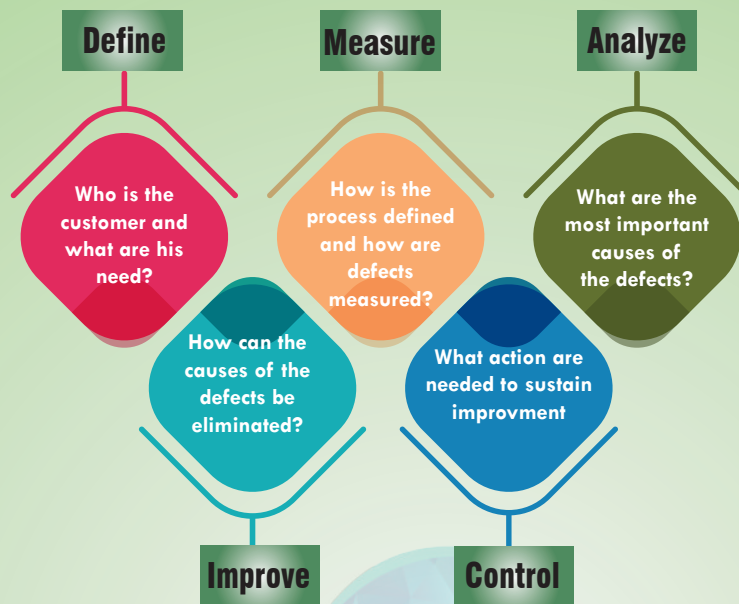
What makes Six Sigma special?

The following are the characteristics of Six Sigma that sets it apart from all the other quality improvement methodologies:

- Six Sigma puts a premium on aspects of the process that can be measured and quantified. As a result, this makes the financial returns easy to assess so the progress of the quality improvement project can always be tracked and assessed against the associated costs and goals.
- Six Sigma is a method that is strongly driven by management support and leadership. It is a cultural transformation and not a one-off project. Thus, it has a higher chance of sustaining results versus other methods.
- Six Sigma emphasizes the importance of decision-making based on data which can be verified and tested by statistical methods. This eliminates the subjectivity of the decision-making process and ensures that decisions are backed by evidence and not assumptions.

Making these attributes possible is the cornerstone of the Six Sigma approach best represented by the acronym DMAIC. This stands for Define, Measure, Analyze, Improve and Control. These five steps form the backbone of the Six Sigma approach and is cyclic in nature. This means that process improvements never really end; instead, the results achieved by a previous improvement project forms the baseline for a succeeding project that seeks to build on top of the most recent successes.

PHASE OF SIX SIGMA



The DMAIC Methodology for Six Sigma

Characterstics of Six Sigma

Differentiator	Six Sigma
Prime Interest	Reduce
The way they look at the world	Problem/Defect
Primary Interest	Reduce variation to reduce defects
Secondary Effects	Improved quality, better performance, reduced waste, less inventory, faster throughput. uniform output
Format	Project Format, Resources spread over month
Scope and Scale	Complex problems that require indepth analysis: Cross-functional Specialists.

Six Sigma appeals to tech and manufacturing companies which already have an affinity for statistics and data management. Six Sigma provides a framework through which the in-house statistical knowledge can be leveraged and targeted towards process improvements that help increase yield by reducing defect.

The Importance of Getting a Six Sigma Certification

A Six Sigma practitioner is a professional process improvement expert. As a professional, you are expected to own the management of quality processes in organizations and drive the process forward to achieve the target goals. You are expected to be well-versed in the details of each step, and demonstrate expertise in using the tools and concepts necessary to make the process a success.



Yellow Belt
Business leaders, provide resources and support implementation.



Green Belt
Carry out Six Sigma projects related to their jobs, ideate, analyse & recommend.



Black Belt
Lead Six Sigma Project teams, enable statistical decision making



Master Black Belt
Experts and culture -changes, train and mentor Black Belts/ Green Belts.

Organizations look to quality management professionals to guide their employees on a path towards continuous improvement. In this regard, your leadership in mentoring the team assigned to you, as well as your technical proficiency in using all the tools available at your disposal should be well established.

So, how does one acquire the skills necessary to become a Six Sigma practitioner and quality management professional? This is where the Six Sigma certification process becomes an important step for establishing your qualifications and expertise.

Six Sigma qualifications are classified into different levels called “belts” mirrored from the different belt colors in martial artists. Each belt corresponds to a different level of skillset, responsibility, and expectation. The belt classifications also correspond to different roles during the implementation phase of a project that utilizes the Six Sigma methodology.

Green Belt

The Industry-wide standard recognizes Green Belt as the most basic certification level available. Professionals who are green belt-certified are expected to be familiar with the tools required to execute the “Measure-Analyze” portion of the process. Companies often identify some of their employees to undergo Green Belt certification; upon completion, these employees then take on team roles in Six Sigma projects while continuing to hold their original responsibilities in the organization. For consulting professionals who are not part of the organization but are hired specifically for Six Sigma projects because of their green belt qualification, the expectation is often to become part of the team, or manage small teams for execution of projects with a relative small scope or goal.

Career Prospective

From a career perspective, this will open plenty of doors for you. Many Six Sigma experts are often hired as consultants to help start-up Six Sigma projects in a company or provide coaching and mentorship to newbie Six Sigma practitioners. Others are hired to review existing processes and propose improvements where necessary – much like a troubleshooter or a problem-solver add who is impartial and untainted by existing organizational culture.

There are also instances when organizations, particularly tech and manufacturing companies, hire engineers or other professionals on the basis of their Six Sigma qualification. Having passed a green belt certification process, for example, you are already expected to be well-versed with different methods of analyzing problems to reduce cost, boost revenue, streamline inefficient processes, or simply have the ability to think through problems in a logical manner.

“Getting a Six Sigma certification opens doors for many career opportunities, whether as a consultant or a direct hire by a tech or manufacturing company.”

So, why is it important to obtain a Six Sigma certification?

“Six Sigma can be applied to many aspects of business and therefore can benefit almost all companies who want to make their business processes efficient. By enrolling in Six-Sigma training and obtaining a certification, you will be able to help to grow up in your professional career”

- A Six Sigma certification gives you a bankable edge when looking for work as a quality management professional.
- A certification in Six Sigma demonstrates that you have a sound understanding of various methods of problem solving, cost reduction, and improvement of many manufacturing processes.
- Obtaining a certification establishes your credentials as a trained and experienced quality management professional.
- Becoming a recognized Six Sigma professional sets you up for more career opportunities whether as a process improvement specialist, Six Sigma team leader or mentor, or even as someone qualified for a higher management position.

Industries with growing demand for Six Sigma Certifications.



Many employers and companies seek professionals with Green Belts in variety of positions like; Getting certified should definitely be considered but not limited to people in the following roles in any Industry:

- Six Sigma Consultant/ Trainer/ Sales consultant
- Lead Manufacturing Engineer/GM/VP/CO/DM
- Process Development Engineer/ Business Head
- Compliance Structural Engineer/QA/QC
- Reliability Engineer/ Senior consultant
- Operating System Specialist/Business Analyst
- Senior IT Project Manager
- Warehouse Operations Manager
- Business Process Analyst
- Data Scientist/Production Manager
- Project Engineer/Quality Controller
- Director, Performance Excellence

At the end of Certybox's training in Six Sigma Green Belt, participants will be able to:

- Describe the basics of Six Sigma
- Describe the activities of the Define phase
- Explain the tasks performed in the Measure phase
- Perform data analysis and hypothesis testing in the Analyze phase
- Identify the possible improvement actions for the performance of variations in the Improve phase
- Define efficient operating levels for KPIV and KPOV in the Control phase

What we can offer?

- ASQBoK aligned Six Sigma Green Belt self-learning courseware
- Instructor helpline post training
- ASQ Certified Six Sigma Green Belt simulated mock exams
- 24/7 support
- Online Training covering all objectives
- Practice Tests
- Certification valued and approved by Industry
- Course Completion Certificate recognised globally



Choose the best for your Six Sigma training and certification needs. Choose Certybox!



Course Agenda

INTRODUCTION TO SIX SIGMA

- ◆ Basics of Sigma
- ◆ What is Six Sigma
- ◆ Six Sigma Approach
- ◆ Six Sigma As A Measure
- ◆ Why Six Sigma?
- ◆ History of Six Sigma
- ◆ Process for Six Sigma – DMAIC
- ◆ Structure of Six Sigma Teams
- ◆ DMAIC and DMADV
- ◆ Normal Distribution Curve or Bell Curve

ANALYSE PHASE

- ◆ Overview
- ◆ Data Analysis – Scope
- ◆ Pareto Chart
- ◆ Run Chart
- ◆ Histogram
- ◆ Box Plot
- ◆ 5-WHY Analysis
- ◆ Hypothesis Testing
- ◆ Regression Analysis
- ◆ ANOVA

DEFINE PHASE

- ◆ DEFINE Phase: A Snapshot
- ◆ Overview
- ◆ Project Charter
- ◆ Defects Per Million Opportunity (DPMO)
- ◆ Voice of the Customer (VoC)
- ◆ Critical -To-Quality (CTQ)
- ◆ S-I-P-O-C and C-O-P-I-S
- ◆ Process Mapping & Flowcharting

IMPROVE PHASE

- ◆ Overview
- ◆ Generating creative solution ideas
- ◆ Anti-Solution Technique
- ◆ Chain Letter Technique
- ◆ Assumption Busting Technique
- ◆ Tree Diagram
- ◆ Failure Modes & Effects Analysis (FMEA)
- ◆ Statistical Process Control (SPC) Control Charts

MEASURE PHASE

- ◆ Overview of the MEASURE phase
- ◆ Data Types
- ◆ Operational Define on Worksheet for base lining
- ◆ Data Collection Plan / Form (DCP / DCF)
- ◆ Statistics
- ◆ Measurement System Analysis (MSA)
- ◆ Process Capability Indices (PCI)

CONTROL PHASE

- ◆ Overview
- ◆ Process Management Charts
- ◆ Process Dashboards
- ◆ Process Control Plan (PCP)

