



## SSBB Certification Online Course and Exam

Delivery Method: Online + Classroom thru internet

Validity for doing test: 6 Months

Classroom training: 5 sessions

# SixSigma BlackBelt Certification Online + Classroom Course and Exam

## Course Description

SixSigma BlackBelt course focuses on providing students with comprehensive understanding of the various SixSigma tools and techniques useful to improve the production process and minimize defects in the end product with a greater focus on the practical implementation of these tool and techniques in the organization. The participants will definitely be able to use the knowledge you gained in this course in managing SixSigma projects in their respective organizations.

## Course Objective

This course aims to:

- provide comprehensive knowledge to participants about the tool and techniques, advantages, and challenges of the SixSigma methodology.
- provide knowledge to students to form and effectively lead a SixSigma project team.
- provide knowledge to students to apply DMAIC (Define, Measure, Analyze, Improve, and Control) and various SixSigma tools in process and quality improvement.
- to equip students with knowledge to communicate using SixSigma concepts
- familiarize participants on how to assess and manage project risk.
- equip students with knowledge to avoid pitfalls in implementing SixSigma.

Contact us to book a course

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Visit our websites for more info

[www.innovationtech.se](http://www.innovationtech.se)

[www.e-training.se](http://www.e-training.se)

## Course Outcome

- Participants will be able to relate SixSigma concepts to the overall business mission and objectives.
- Participants will be equipped with the knowledge needed for production process improvement in their organizations and help their organizations adopt SixSigma methodology.
- Participants will be able to play the role of a BlackBelt and will be able to define, present and manage SixSigma projects
- Participants have knowledge pertaining to and can anticipate issues related to the practical implementation of SixSigma.
- Participants are armed with the proper tools to address, resolve, and take the lead on production issues in their organizations.
- Participants will develop superior problem solving skills that can be immediately applied in real world projects.

## Course Methodology

A highly engaging and interactive course that ensures better internalization of SixSigma concepts and principles.

- Work through the course rather than just listening for higher retention of concepts and theory.
- Group exercises that demonstrate and bring to life the concepts being taught.
- Practical implementation issues are discussed with relevant SixSigma tools and techniques.
- Integrated role play with all the SixSigma concepts that make the participants work through an entire SixSigma project.
- Work through multiple case studies to test the understanding of the method.
- Learn to carry out analysis with the help of globally used Minitab software.

## Takeaways

- Workbook
- Case study booklet
- Role play documents
- SixSigma BlackBelt Online course covering comprehensive SixSigma concepts
- SixSigma BlackBelt Certificate after completing the online course and exam

## Audience Profile

This course is for employees and organizations requiring a standardized approach to problem solving for the purpose of continuous improvement.

This would include team leaders, supervisors, associates, Quality Assurance Engineers, Project Managers, Software Professionals, Practitioners, Quality Assurance team members, Working Executives and Senior Management that will dedicate a small portion of their time applying the DMAIC tools to their natural work area.

- Individuals seeking to significantly improve business processes
- Managers and employees who want to get certified as BlackBelt in SixSigma.
- Any other professional members who are doing research, innovations or consulting in process improvement practices.

## Course Outline

### Introduction to SixSigma

- A brief history of Quality
- What is Quality (Definitions) and service or product
- Quality Gurus & their contribution to Quality
- Enterprise wide View
- Leadership
- SixSigma Roles and Responsibilities
- Team Formation
- Team Facilitation
- Team Dynamics
- Time Management For Teams
- Team Decision making Tools
- Management and Planning Tools
- Team Performance Evaluation And Rewards
- Overview of DMAIC

### SixSigma Methodology – Define

- Important Stakeholders
- Impact On Stakeholders
- Critical To Requirements
- Benchmarking
- Business performance measures
- Financial measures
- VOC
- Kano's Customer Satisfaction Levels
- Juran's Customer Needs
- Market Research
- CTQ Flowdown
- QFD
- Performance Metrics
- Project Charter
- Charter Negotiation
- Project management plan and Baselines
- Project Tracking

### SixSigma Methodology – Improve

- DOE
- Poka-yoke
- 5S
- SMED
- Continuous Flow Manufacturing
- Kaizen
- Kanban
- Theory of constraints
- Risk analysis

### SixSigma Methodology – Measure

- Processes, Process characteristics, process flow metrics, inputs and outputs
- Process maps and Flow chart
- SIPOC
- Data Type & Measurement scale
- Data Collection
- Sampling strategies
- Fishbone Diagram
- Relational Matrices or Prioritization Matrix
- Basic Statistics
- Analytical Statistics
- Gauge R & R
- Process Capability Analysis

### SixSigma Methodology – Analyze

- Correlation and Regression Analysis
- Testing of Hypothesis
- FMEA
- Gap Analysis
- The Five Whys
- Pareto Diagram
- Tree Diagram
- Non value added activities
- Cost of poor Quality (COPQ)

### DFSS

- DFSS

### Case Study 1

- Case Study 1 Part 1
- Case Study 1 Part 2

### Case Study 2

- Case Study 2 Part 1
- Case Study 2 Part 2