



SSGB Certification Online Course and Exam

Delivery Method: Online + Classroom thru internet

Validity for doing test: 6 Months

Classroom training: 2 sessions

SixSigma GreenBelt Certification Online + Classroom Course and Exam

Course Description

SixSigma GreenBelt course focuses on providing students with an 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

Course Objective

Upon completion of the SixSigma GreenBelt course, participants will learn how to:

- Identify project selection and evaluation criteria.
- Plan and execute SixSigma projects
- Form and effectively lead a SixSigma project team.
- Apply DMAIC (Define, Measure, Analyze, Improve, and Control) and various SixSigma tools in process and quality improvement.
- Assess and manage project risk.
- Significantly increase profitability through SixSigma projects.
- Avoid pitfalls in implementing SixSigma.
- Integrate and enhance innovation and problem solving skills

Contact us to book a course

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www.innovationtech.se

www.e-training.se

Course Outcome

- This course aims to familiarize Participants with the tool and techniques, advantages, and challenges of the SixSigma methodology.
- Participants will be equipped with the knowledge needed for production process improvement in their organizations and help their organizations adopt SixSigma methodology.
- Participants are led through simulated case scenarios during which they use SixSigma concepts for solving simulated problems.
- 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 GreenBelt Online course covering comprehensive SixSigma concepts
- SixSigma GreenBelt 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.

- Future managers who want to get certified as GreenBelt in SixSigma.
- Management and Engineering Students who are desirous to be more resourceful and employable.
- Project Management Professionals (PMP) who wants to earn PMI PDUs by learning nuances of Quality paradigm.
- Any other professional members who are doing research, innovations or consulting in process improvement practices.

Course Outline

Introduction to SixSigma

- History of Quality (Deming, Juran, JIT, Ishikawa, Taguchi, etc.)
- Evolution of SixSigma
- Defining SixSigma – philosophy and objectives
- Overview of SixSigma DMAIC process

Stakeholders & Setting up a SixSigma Project

- Identifying and Documenting stakeholder requirements
- Project Selection Criteria
- Project Planning
- Managing Team Dynamics
- Important project management & planning tools

SixSigma Methodology – Define

- Inputs – Need for SixSigma project, Executive management sponsorship, core team identified
- Tools
- Organization hierarchy
- High level process maps
- High level Pareto charts
- Idea generation and categorization tools

Outputs

- Project charter
- Established metrics
- Problem statement
- Roles & responsibilities

SixSigma Methodology – Measure

- Objectives of Measure Phase
- Inputs – the outputs of the Define phase

SixSigma Methodology – Improve

- Objectives of Improve Phase
- Inputs – outputs of the Analyze phase
- Tools
- Returns on investment
- Solution design matrix
- Design of experiment
- Taguchi robustness concepts
- Response surface methodology
- Project planning and management tools
- Prototypes

Outputs

- Cost / benefit for different solution
- Selection of solutions for implementation
- Implementation plan

Tools

- Data collection tools and techniques
- Measurement scales
- Validation techniques (Gauge R & R)
- Statistical distributions
- Data mining
- Run charts
- Process map
- Stakeholder tools
- Process costs

Outputs

- Well defined processes
- Baseline process capability
- Process parameters affecting CTQs
- Cost of poor quality (COPQ)
- Measurement system

SixSigma Methodology – Analyze

- Objectives of Analyze Phase
- Inputs – outputs of the Measure phase
- Tools
- Ishikawa diagram
- Failure mode and effects analysis
- Hypothesis testing
- Process capability study

Outputs

- Important causes of defects
- Special and common causes of variation
- DPMO and sigma level

SixSigma Methodology – Control

- Objectives of Control Phase
- Inputs – outputs of the Improve phase
- Tools
- Control plan
- Statistical process control
- Lean enterprise
- 5S
- Kaizen
- Kanban
- Total productive maintenance
- Measurement system reanalysis

Outputs

- Implemented solutions
- Revised measurement system
- Control plan for sustaining benefits
- Improves process capability
- Lessons learned

Case Study

- Case Study Part 1
- Case Study Part 2
- Case Study Part 3