Six Sigma Green Belt (3 Days)

Course Overview:

Led by renowned PMP instructor, Barry Mulkhraj, this course is designed to equip participants with the knowledge, skills, and tools necessary to drive process improvement initiatives within their organizations. This comprehensive program covers the fundamental principles of Six Sigma methodology, with a focus on the DMAIC (Define, Measure, Analyze, Improve, Control) framework. Through a combination of interactive lectures, hands-on exercises, case studies, and practical application, participants will gain a deep understanding of how to identify opportunities for improvement, analyze data effectively, and implement sustainable solutions. Led by experienced instructors with extensive expertise in Six Sigma methodologies, this course provides participants with practical insights and real-world examples to enhance learning. Key topics include statistical tools and techniques, root cause analysis, process mapping, control charts, and lean principles. Participants will also learn how to prepare for the Six Sigma Green Belt certification exam, with access to study materials, practice exams, and exam-taking strategies. This course is ideal for professionals seeking to enhance their problem-solving skills, drive operational excellence, and contribute to organizational success. Whether you're a project manager, quality assurance professional, operations manager, or aspiring Six Sigma practitioner, this course will provide you with the knowledge and certification necessary to excel in your role and make a positive impact on your organization's performance.

Audience:

Professionals seeking to enhance their problem-solving skills and drive process improvement initiatives. Project managers, quality assurance professionals, operations managers, and individuals responsible for driving operational excellence. Anyone aspiring to obtain Six Sigma Green Belt certification and advance their career in quality management and process improvement.

Course Objectives:

- Understand the principles and methodologies of Six Sigma, including the DMAIC framework
- Apply statistical tools and techniques to analyze data and identify areas for improvement
- Develop and implement effective solutions to address process inefficiencies and defects
- Prepare for the Six Sigma Green Belt certification exam with confidence
- Gain practical insights and real-world examples to enhance learning and application

SSGB Course Outline:

1 - Introduction to Six Sigma

- Overview of Six Sigma methodology
- History and evolution of Six Sigma
- Importance of process improvement in organizations

2 – DMAIC Methodology

- Define Phase
  - Project selection criteria
  - Stakeholder identification
  - Problem statement formulation
- Measure Phase
  - Data collection methods
  - Measurement system analysis (MSA)
  - Process mapping techniques
- Analyze Phase
  - Statistical tools (e.g., hypothesis testing, regression analysis)
  - Root cause analysis methods (e.g., fishbone diagram, 5 Whys)
- Improve Phase
  - Design of experiments (DOE)
  - Lean principles and techniques
  - Solution implementation strategies
- Control Phase
  - Control plan development
  - Statistical process control (SPC) methods
  - Transition planning and sustainability

3 – Statistical Tools and Techniques

- Overview of common statistical tools used in Six Sigma
- Application of tools such as:
  - Control charts
  - Pareto analysis
  - Process capability analysis
  - FMEA (Failure Mode and Effects Analysis)
  - Regression analysis
  - ANOVA (Analysis of Variance)

4 – Case Studies and Practical Application

- Analysis of real-world case studies across various industries
- Hands-on exercises and simulations to reinforce learning
- Group discussions and problem-solving sessions

5 – Measurement System Analysis

- Overview of SSGB certification exam format and requirements
- Study materials and resources recommendation
- Practice exams and quizzes
- Exam-taking strategies and tips

6 – Instructor-Led Sessions

- Experienced instructors with real-world Six Sigma expertise
- Interactive lectures and demonstrations
- Q&A sessions for clarification and deeper understanding

7 – Customization for Industry Relevance

- Tailoring examples and case studies to participants' industries
- Addressing specific challenges and opportunities in different sectors