



Quality Management & Operational Excellence

Lean Six sigma – Green Belt

Course Introduction

Six Sigma are quality improvement methodologies structured to reduce waste and product or service failure rates to a negligible level. Six Sigma companies typically spend less than five percent of their revenues addressing and repairing quality problems.

Six Sigma

To achieve these levels, the Six Sigma process encompasses all aspects of a business; including management, service delivery, and design, production and customer satisfaction. As a philosophy, Six Sigma drives business culture and requires a nearly flawless execution of key processes, making Six Sigma a high standard for companies and individuals to achieve.

DMAIC problem-solving

By reducing process variation, Six Sigma frees an organization to focus on improving process capability. As sigma levels increase, the cost of poor quality decreases and profitability increases.

This is why Six Sigma is highly associated with the delivery of consistent, world-class quality. The Six Sigma Green Belt Training Program provides you with an overview of the Six Sigma and Lean concepts and tools, including Six Sigma deployment practices, project development, and the DMAIC problem-solving approach. Once you've completed this program, you'll be ready to successfully participate in a Six Sigma team.

Target Audience

- practitioners in quality and audits
- Senior members and managers of organisations who need to understand the significance of training employees on quality management
- Quality team members
- Professionals aspiring to undertake a quality-related certification
- Construction project owners
- Design consultants

- Construction contractors

Architects

Non-engineering construction professionals

Learning Objectives

- Application of Six Sigma; Six Sigma tool kit to deploy
- Value-stream process mapping; tracking process defects
- DPU, DPMO and Sigma level exercise
- Statistical process control, principles and applications
- Variable control charts, attribute control charts
- Discipline problem solving
- Identifying and verifying root cause
- Permanent corrective action (PCA); preventing recurrence
- DMAIC Methodology -Define, measure, analyze, improve, control DMAIC checklists
- Failure mode and effects analysis

Course Outline

• 01 DAY ONE

Why Six Sigma?

- Definition of Six Sigma
- Origins and Success Stories
- How to Deploy Six Sigma
- Leadership Responsibilities
- Data-driven Decision Making
- DEFINE: Project Definition
- Tasks
- Work Breakdown Structure
- Pareto Diagrams
- Project Charters

- DEFINE: Project Selection
- Project Prioritization
- Variable Prioritization

• 02 DAY TWO

MEASURE: Tools and Objectives

- Measure Stage Objectives
- SIPOC C. Cause and Effect Diagrams
- Check Sheets
- MEASURE: Process Capability
- Histograms
- Probability Plots
- Process Variation
- Benefits of Control Charts
- Capability and Performance Indices
- Relative to Process Control
- Interpretation

• 03 DAY THREE

ANAL YZE: Introduction to Regression Analysis

- Scatter Diagrams
- Linear Model
- Interpreting the ANOVA Table
- Overview of Multiple Regression Tools

• 04 DAY FOUR

IMPROVE: Tools and Objectives

- Improve Stage Objectives
- Tools to Prioritize Improvement Opportunities
- Testing improvement using significance t-test

• 05 DAY FIVE

CONTROL: Tools and Objectives

- Control Stage Objectives
- Control Plans
- Training
- Measuring Improvement

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 4, 2025	May 8, 2025	5 days	4250.00 \$	Bahrain - Manama
Aug. 4, 2025	Aug. 8, 2025	5 days	5950.00 \$	USA - Los Angeles
Oct. 6, 2025	Oct. 10, 2025	5 days	4250.00 \$	UAE - Dubai
July 27, 2025	July 31, 2025	5 days	4250.00 \$	KSA - Riyadh
Aug. 4, 2025	Aug. 8, 2025	5 days	2150.00 \$	Virtual - Online