

ASQ Approved Lean Six Sigma Green Belt

Why Attend

Come and learn the breakthrough methodology that can save your company millions of dollars!

The Six Sigma methodology is a systematic application focused on achieving significant financial results and increasing customer satisfaction. When properly deployed on carefully selected business projects, this methodology can lead to a significant reduction, and in many cases elimination, of defects, process waste and out-of-control processes which translate into dramatic business gains.

This ASQ Approved Lean Six Sigma Green Belt course teaches participants the Define, Measure, Analyze, Improve and Control (DMAIC) methodology using case studies from various industries. Participants will learn to define improvement projects to satisfy customers and reduce variation. This 'Lean Six Sigma' training course will teach and prepare individuals to implement the principles, practices, and techniques of 'Lean Six Sigma'. Green belts traditionally lead process stakeholders and may be assigned specific process level improvement projects that normally do not require the statistical rigor demonstrated by a black belt. This course is quite intense and challenging yet satisfying in terms of the knowledge gained in 5 days.

Course Methodology

This course is instructor-led and classroom-based. The instruction is a blend of lectures, applications as well as individual and team based exercises. Laptop computers will be used extensively during the course to practice on Minitab. Various exercises and a full case study will be used to direct and illustrate the implementation of a project. Learned skills are practiced and applied through individual and team exercises as well as individual projects. Participants will be able to apply the concepts learned in the course to a business improvement project assigned to them by their management sponsor. Games and discussions will be used to enrich course delivery.

Course Objectives

By the end of the course, participants will be able to:

- Develop the Six Sigma methodology and apply its roadmap
- Apply the principles of the Six Sigma 'DMAIC' performance improvement model
- Examine in detail the various elements of building a complete project for improvement
- Develop statistical hypotheses using simple statistical tools
- Use quantifiable tools to solve problems related to an improvement project
- Eliminate waste and defects by applying Lean and Six Sigma
- Collect, analyze, and quantify data that enable process improvements
- Employ statistical analysis using statistical tools and software

Target Audience

Individuals from all organization departments including finance, quality and business operations staff functions as well as those who have direct intervention as process owners or stakeholders.

Target Competencies

- Applying Six Sigma
- Understanding Lean
- Using 5S
- Using poka yoke
- Understanding descriptive statistics
- Understanding hypothesis testing
- Understanding measurement system analysis
- Developing control charts
- Computing process capability

Associations

American Society for Quality (ASQ) : Meirc is an approved training provider in the region for the American Society for Quality (ASQ), the world leading authority on quality. With more than 100,000 members worldwide, ASQ advances learning, quality improvement and knowledge exchange to improve business results and create better workplaces and communities. Meirc’s association with ASQ is indicative of our joint commitment to support ASQ in its mission in this region. We cover topics on several quality-related topics such as six sigma green belts, lean principles and preparation for the certified Manager of Quality/ Organization Excellence.



Location & Date

15 Oct - 19 Oct, 2017
 Jeddah, English
 Movenpick Hotel City Star Jeddah

10 Dec - 14 Dec, 2017
 Dubai, English
 Novotel Al Barsha

Meirc reserves the right to alter dates, content, venue and trainer.

Fees: US\$

Per participant

US\$ 4,900

(including coffee breaks and a buffet lunch daily)



For companies that want to maximize the return on their investment in training: **Register 3 participants** on the same course and dates and pay only for 2.

Course Outline

- Six Sigma overview
 - History and origins
 - Why Six Sigma?

- Cost of poor quality
- Project details
- **Define phase: tools and methods**
 - Charter the improvement project
 - Define the scope
 - Six Sigma project definition
 - Project selection process
 - Define the Voice of Customer (VOC) and 'CTQ'
 - Kano model analysis
 - Team development phases
 - Communication plan
 - Project planning and management
- **Measure phase: introduction and tools**
 - Types of data
 - Computing 'DPMO' and sigma levels
 - Process mapping
 - 'FMEAs' and cause and effect
 - Graphical analysis
 - Analysis of Variance (ANOVA) and multi plot diagrams
 - Chi square analysis
 - Histograms
 - Measurement systems analysis: gauge R&R
 - Sampling techniques
 - Introduction to Minitab and 'QIMacro' software
- **Analyze phase: introduction and tools**
 - Probability and basic statistics
 - Control charts and stability
 - Data normality
 - Process capability, 'Cp' and 'CpK'
- **Improve phase: introduction and tools**
 - Piloting and implementation
 - Introduction to lean enterprise
 - Types of waste
 - Lean tools
 - '5S' program
 - Value stream mapping
 - Lean and Kaizen
- **Control phase: introduction and tools**
 - Statistical process control
 - Standardization and documentation
 - Control plans
 - Mistake proofing
- **Green belt project and tollgate review**

- Project charter submission
- Tollgate questions
- Tips and tricks to get your project started