

SIX SIGMA PROBLEM SOLVING - ADVANCED

““Driving Process Excellence with Advanced Tools for Root Cause Analysis, Control, and Process Optimization””

Schedule

Date	Venue	Fees (Face-to-Face)
04 - 05 Mar 2026	Manama, Bahrain	USD 1995 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

Advanced problem solving is at the heart of Six Sigma success. As organizations strive for operational excellence, the need to resolve complex quality and process issues becomes critical. Six Sigma provides the structured methodology and advanced tools necessary to identify root causes, eliminate defects, and sustain performance gains.

This intensive 2-day course is designed for professionals with basic knowledge of Six Sigma or process improvement. It delves into advanced analytical tools, root cause analysis methods, and the use of statistical techniques to solve persistent process problems and optimize performance.

Objectives

- By the end of this course, participants will be able to:
- Apply the DMAIC methodology to solve advanced quality and process issues
 - Use statistical and graphical tools to validate root causes and solutions
 - Conduct failure mode and effect analysis (FMEA) and control plan design
 - Identify variation sources using hypothesis testing and process capability analysis
 - Implement sustainable corrective actions with control strategies

Why Attend

- Strengthen your ability to solve recurring and complex operational problems
- Move beyond basic tools to advanced analytical techniques in Six Sigma
- Drive measurable results in quality, cost, and cycle time reduction
- Support your organization's Lean Six Sigma deployment and maturity
- Enhance your role as a continuous improvement leader

Target Audience

This program is designed for:

- Six Sigma Green Belts, Yellow Belts, or Lean Practitioners
- Quality, process improvement, and operational excellence professionals
- Engineers, analysts, and production supervisors
- Anyone involved in solving recurring issues and leading process change initiatives

Individual Benefits

Key competencies that will be developed include:

- Root cause analysis using advanced Six Sigma tools
- Statistical thinking and data-driven decision making
- Design of experiments (DOE) and variation analysis
- Control charts, capability indices, and performance metrics
- Process mapping, measurement, and verification techniques

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Reduced process variation and defect rates
- Faster resolution of critical quality and efficiency issues
- Improved product and service reliability
- Enhanced analytical capability within teams
- Stronger culture of continuous improvement and accountability

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – DMAIC deep dive, advanced tools, and data strategies
- Case Studies – Complex Six Sigma project challenges and outcomes
- Workshops – Root cause analysis, control charts, FMEA simulation
- Peer Exchange – Sharing process improvement experiences and pitfalls
- Tools – Templates for problem statements, cause-effect diagrams, and process capability

