

Six Sigma Green Belt for Project Managers

Six Sigma is a comprehensive yet flexible system for achieving, supporting, and maximizing business profits. It is a methodology driven by understanding customer needs, and the disciplined use of data, facts, and statistical analysis to improve and reinvent organizational processes. This course is a comprehensive, hands-on orientation to the Six Sigma Green Belt body of knowledge and customized to include specific relevance to participants' technology and business domains.

Participants will learn how to implement the Six Sigma methodology in their organization. Foundation theories of Six Sigma are thoroughly covered, supported by cases studies and exercises. Besides passing the course-end examination, participants are required to form groups and submit a Green Belt project per group to fulfil the certification requirement of International Six Sigma Council (www.isixsigmacouncil.org), a registration body for Six Sigma professionals. Support from Six Sigma Master Black Belt will be given to the participants during the course for selection of project and completion of project document.

Course Duration: 4 days

Course Format: Lectures (~65%); case studies and exercises (~ 35%)

Target Audience: Business managers, project managers/practitioners, IT managers, operation managers, process owners, key support personnel

PDU Credential: 30 PDU for PMP

Key Topics:

- Project Management and Six Sigma
 - Six Sigma as a quality system for managing projects
 - Defining Six Sigma - philosophy and objectives
 - Overview of Six Sigma project life cycle
- Initiating a Six Sigma Project
 - Project Selection through Quality Function Deployment
 - Using financial criteria to evaluate project benefits
 - Team selection and stages of team evolution
 - Creating project charter and project plan
- Planning a Six Sigma Project
 - Translating Customer needs into Specific Requirements
 - Developing project scope statement & project charter
 - High Level Process Map - SIPOC
- Measuring Six Sigma
 - Important Process Tools in Six Sigma
 - Different levels of Process Maps
 - Process Costs

- Cost of Poor Quality (COPQ) definition and categories
- Data Collection
 - Defining Metrics through Tree Analysis
 - Development of data collection plan
- Calculation of Baseline Sigma Level
- Introduction of Statistical Process Control
- Validating measurement system - Gauge R & R study
- Analyzing Data
 - Determining Process Capability
 - Hypothesis Testing (Correlation & Linear Regression, T-test & ANOVA)
 - Cause & Effect Diagram
- Breakthrough Improvements
 - Lean tools (Muda seven waste, value-added analysis, Poka Yoke)
 - New 7 Tools (including multi-voting, prioritization grid, affinity diagram, interrelation diagram, tree diagram, matrix diagram and activity network diagram)
 - Risk Analysis
- Sustaining the Result
 - Process Control Plan & Out of Control Identifications
 - Project Storyboard
 - Project Closure

Upon completion participants will be able to:

- Describe Six Sigma origins and its evolution to address the type of work and business focus in their work areas.
- Effectively lead a Six Sigma project team
- Forecast project value, schedule, and cost - updating estimates as appropriate
- Communicate project plans and status to leadership and stakeholders
Assess and manage project risk
- Verify delivery of business results

Contact Celina Cheng (celina@knowledgecentury.com) for course schedule and additional information.