Project Risk Management

Introduction:
All projects involve risk. To quantify and manage risks, you need to thoroughly analyze risk before and during a project. Aligned with the PMI Risk Management Professional (PMI-RMP)® certification, this course provides the skills to identify and measure risks in project development and implementation. You learn to quantify risks and create risk response strategies to deliver projects that meet stakeholder expectations.

Benefits:
You perform risk management tasks including:
• Creating your RMP from a proven model
• Developing and updating a Risk Register through a systematic incremental process
• Quantifying risks according to EMV, Utility and impact on estimates
• Designing a risk response strategy
• Detecting and responding to risk events using EVA
• Justifying budget and time contingencies
• Updating your risk database and determining process improvements

Course Outline:
Day One
Overview of Project Risk Management
• Recognizing risk in all projects
• Using risk management best practices, tools and techniques to achieve project success
Designing Critical Platforms for Success
Creating a Risk Management Plan (RMP)
• Analyzing contents of a model RMP
• Applying a standard template to create your RMP
Identifying project risk
• Common sources of project risk
• Creating Ishikawa diagrams to analyze cause and effect relationships
• Utilizing checklists
• Assessing high-level risks to the organization
Developing a Risk Register
• Analyzing contents of a model Risk Register
• Applying a proven template to create your Risk Register
• Communicating risks to stakeholders
• Documenting risks for future assessment

Day Two
Improving Project Performance through Qualitative Analysis
Analyzing risks through qualitative measures
• Performing probability and impact analyses of identified risk
• Applying the probability and impact matrix
• Advanced applications of qualitative analysis
Prioritizing analysis results
• Ranking project risks
• Differentiating between acceptable and unacceptable risks
Analyzing Risks Using Quantitative Methods
Quantifying effects of risk events on the project
• Determining probability of achieving cost and time objectives
• Calculating contingency reserves
• Identifying trends in quantitative analysis
• Ranking risks by actuarial cost

**Tools for analysis**
• Expected Monetary Value (EMV)
• Three-point estimates
• Probability distributions
• Delphi Technique
• Simulation

**Day Three**
**Risk Response Planning**
**Implementing risk response strategies**
• Accept
• Avoid
• Transfer
• Mitigate
• Exploit
• Share
• Enhance
• Quantifying residual risks and secondary responses

**Creating contingency plans**
• Determining the worst-case scenario
• Recalculating confidence levels
• Finalizing risk budget
• Applying a 7-step process to risk response planning

**Day Four**
**Making Decisions under Uncertainty**
**Psychological factors in decision making**
• Practical applications of Prospect Theory
• Recognizing bias with Utility Theory

**Tools to enhance objectivity**
• Maximizing returns through the use of payoff tables
• Applying decision trees with Precision Tree software
• Dealing with unknown risks using workarounds

**Day Five**
**Monitoring and Controlling Risk**
**Identifying emerging project risks**
• Matching identified project risk with controls including Risk Audit, Variance Reports, Reserve Analysis
• Anticipating risk events through risk triggers
• Measuring risk using earned value analysis (EVA)

**Ensuring effective change control**
• Developing a reliable change request process
• Recommending corrective action

**Leveraging Project Experience**
• Creating an end-of-project risk report
• Compiling lessons learned in a risk database
• Recognizing the value of mistakes
• Ensuring continual process improvement
• Received a Mention for his research in Project Management Expert Seminar in Spain 2004.
• Headed High Strength Concrete Session in Confined Concrete Conference in China 2004.