
Quality Management

Credits 1.4 CEUs / 14 PDUs

2 Days

Course description

This course focuses on both the management of product quality and the management of the process quality for creating project deliverables. It provides exposure to the tools, techniques, and metrics used to ensure that sufficient product and process quality is achieved. It includes exercises which allow attendees to learn how to plan quality into a project and determine key metrics to manage project and process quality.

Who should attend

This course is primarily designed for project managers or individuals who have had project management training or experience, including exposure to basic project management techniques such as scope, activity, and resource planning. Individuals taking this course should have experience working on project teams.

What you will achieve

- An understanding of the relationship between quality planning, quality assurance, and quality control
- An understanding of numerous tools and techniques which can be used to monitor and improve quality
- The ability to develop and track key quality metrics to satisfy customer needs
- The ability to determine process metrics to maintain quality standards
- An understanding of the responsibilities of senior management, the project manager, and project team members to ensure the existence of an adequate quality management process

What you will learn

- Project Quality Management Principles - the language and practice of quality management as it applies to the project management life-cycle
- Product Quality vs. Process Quality - the understanding of how quality management applies to both the deliverables from the project and the processes used to produce those deliverables
- Tools for Project Quality Management - the ability to use a variety of tools to assess, monitor, and resolve product and process quality issues
- Models for Continuous Quality Improvement of the Project Management Process - the understanding of the relationship between project management processes and the critical success factors of the enterprise, and the ability to construct continuous quality initiatives to assure success

Course Content

Day 1

1. Introduction to Project Quality Management
 - Session Overview
 - Introductions
 - Course Objectives
 - Exercise – Product on a Page**
2. Project Quality Core Concepts
 - What is Quality?
 - Exercise – Develop a definition for Quality**
 - Quality Core Concepts
 - The Plan-Do-Check-Act cycle
 - The Quality Gurus and their theories
 - What is Project Quality Management?
 - Quality Management and Project Management Disciplines
 - Quality terms and definitions
 - Product and Process Quality
 - Cost of Quality
 - Project objectives
 - The Triple Constraint
 - Exercise – Case Study - Determine the project's Quality objectives**
 - PMBOK® Guide Processes
3. Plan Quality
 - Planning processes
 - Project Quality Management processes
 - Project Quality Management processes key outputs
 - Plan Quality process
 - Plan Quality Inputs, Tools & Techniques, and Outputs
 - Requirements Traceability Matrix
 - Sample Requirements Traceability Matrix
 - Exercise – Fill in a Requirements Traceability Matrix**
 - Plan Quality Tools and Techniques
 - Benchmarking
 - Flowcharting
 - Design of Experiments
 - Exercise – Document a Process**
 - Project Subsidiary Management Plans
 - Project Quality Management Plan
 - Quality Metrics
 - Quality Checklists
 - Exercise – Complete a Project Quality Management Plan template**

Day 2

- Process Improvement Plan
 - Exercise – Create a Process Improvement Plan**
 - Setting the Performance Measurement Baselines
- 4. Perform Quality Assurance
 - The Perform Quality Assurance process
 - Perform Quality Assurance – Tools and Techniques
 - Quality Audits
 - Process Analysis
 - Exercise – Plan a Quality Audit**
 - Plan Quality Assurance Outputs
- 5. Perform Quality Control
 - Monitoring & Controlling Processes
 - The Perform Quality Control process
 - Product Quality vs. Process Quality
 - Using Statistics to Forecast
 - Probability Distributions
 - Standard Deviation
 - Perform Quality Control Inputs
 - Quality Tools
 - Cause and Effect Diagrams
 - Exercise – Create a Fishbone Diagram**
 - Control Charts
 - Histogram
 - Pareto Chart
 - Exercise – Create a Pareto Chart**
 - Run Chart
 - Scatter Diagram
 - Statistical Sampling
 - Inspection
 - Verify Scope vs Perform Quality Control
 - Change Requests
 - Corrective action
 - Preventive action
 - Defect repair
 - Perform Integrated Change Control
 - Calculating Variance
- 6. Class Closeout
 - Maintenance/Support Activities
 - Maintenance/Support Concerns
 - Discussion – What typically happens during project closeout?**
 - Organizational Process Assets Updates
 - Lessons Learned
 - Exercise – Final Scenario**
 - Class Closure