

Certified Software Quality Manager (CSQM)[™]

Course Outline



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What Modules are covered?

Module 1 – Managing Software Quality

- 1) Quick Overview on Testing
- 2) Software Quality Definition
- 3) SQA and Testing Defined and Distinguished
- 4) The difference between QA and QC
- 5) The software quality assurance
- 6) Role of software quality manager

Module 2 – Skillset of Software Quality Manager

- 1) Managing Software Quality
- 2) Requirement Management and Engineering
- 3) Change Control and Release Management
- 4) Assuring Quality during Development
- 5) Best Practices in Software Testing

Module 3 – Best Practices

- 1) Best Practices in Software Inspections and Reviews
- 2) Defect Tracking and Reporting
- 3) Defect Prevention
- 4) Process Improvement Models
- 5) Lean Software Process

Module 4 – Software Quality Assurance

- 1) Stakeholder Identification
- 2) Developing SQA Plan
- 3) Establishing Budget
- 4) Establishing Mission Objectives
- 5) Selling SQA to Management
- 6) Demonstrating ROI for SQA efforts
- 7) Base lining current software quality lines
- 8) Defining Standards and Methodologies
- 9) Instituting Metrics and Measurements
- 10) Deploying Processes
- 11) Evaluating Methodologies and Automated Tools
- 12) Implementing Defect Studies

Module 5 – Defect Management

- 1) Verification and Validation Method
- 2) Activities of User Acceptance Testing
- 3) Inspections and other forms of peer reviews
- 4) Forms of Inspections and Reviews
- 5) Effective and practical inspections practices
- 6) Code Analysis
- 7) Independent Verification and Validation

Module 6 – Configuration Management

- 1) Principles and activities of software quality management
- 2) Identifying configuration management
- 3) Establishes baselines
- 4) Controlling change
- 5) Lean Software Process
- 6) Establishing and maintaining repositories
- 7) Assuring the integrity of software work products

Module 7 – Risk Analysis

- 1) Risk Analysis and Methodologies
- 2) Risk Identification and Classification
- 3) Establishes baselines
- 4) Risk Prioritization and ranking
- 5) Calculating costs and probability
- 6) Risk reporting
- 7) Monitoring and controlling risks
- 8) Contingency planning and mitigation

Module 8 – Requirement Engineering and Management

- 1) Defining and Validating Requirements
- 2) Quality Vs Functional Requirements
- 3) Different Types of Quality Requirements
- 4) Managing and Maintaining Requirements
- 5) Building a Requirement-Management Process
- 6) Requirement Traceability
- 7) Requirement Change Control

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