Certified Software Quality Manager (CSQM)

Course Outline

Module 1 – Managing Software Quality

- Quick Overview on Testing
- Software Quality Definition
- SQA and Testing Defined and Distinguished
- The difference between QA and QC
- The software quality assurance
- Role of software quality manager

Module 2 – Skillset of Software Quality Manager

- Managing Software Quality
- Requirement Management and Engineering
- Change Control and Release Management
- Assuring Quality during Development
- Best Practices in Software Testing

Module 3 – Best Practices

- Best Practices in Software Inspections and Reviews
- Defect Tracking and Reporting
- Defect Prevention
- Process Improvement Models
- Lean Software Process

Module 4 – Software Quality Assurance

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

Module 5 – Defect Management

- Verification and Validation Method
- Activities of User Acceptance Testing
- Inspections and other forms of peer reviews
- Forms of Inspections and Reviews
- Effective and practical inspections practices
- Code Analysis
- Independent Verification and Validation

Module 6 – Configuration Management

- Principles and activities of software quality management
- Identifying configuration management
- Establishes baselines
- Controlling change
- Lean Software Process
- Establishing and maintaining repositories
- Assuring the integrity of software work products

Module 7 – Risk Analysis

- Risk Analysis and Methodologies
- Risk Identification and Classification
- Establishes baselines
- Risk Prioritization and ranking
- Calculating costs and probability
- Risk reporting
- Monitoring and controlling risks
- Contingency planning and mitigation

Module 8 – Requirement Engineering and Management

- Defining and Validating Requirements
- Quality Vs Functional Requirements
- Different Types of Quality Requirements
- Managing and Maintaining Requirements
- Building a Requirement-Management Process
- Requirement Traceability
- Requirement Change Control