

QAI - Certified Associate in Software Quality

Overview

This foundation-level certification ensures that the fundamental principles, concepts, and practices of software quality assurance is understood as demonstrated by successful completion of an examination. This certification requires a combined education and/or work experience totaling three years. Acquiring the designation of Certified Associate in Software Quality (CASQ) indicates a professional level of competence in the principles and practices of quality assurance in the IT profession. CASQs become members of an acclaimed professional group, receiving recognition of their competence by business and professional associates, and are afforded potentially more rapid career advancement.

Who Should Attend?

This course is for individuals appearing for the CASQ examination. The individuals can include:

- Anyone interested in understanding and delivering quality in the software industry
- Anyone having basic experience in the information services field
- Project Leads
- Project Managers
- Software Quality Analysts
- Software Consultants

Course Outcome

After the completion of the course, the participants would be able to:

- Understand the Quality principles and concepts of Software quality
- Learn the Verification and Validation Life Cycle
- Gain skills about the Review and Testing Techniques
- Know the Quality Assurance Activities
- Learn the QA Planning
- Know the Process Improvement Models
- Identify the Metrics and Measurement procedures
- Learn the Outsourcing and Subcontracting Processes

Duration

5 days

Certificate

Certified Associate in Software Quality

Certification Body

Quality Assurance Institute, US

Course Outline

Lesson 1: Introduction to Quality Assurance

This lesson introduces the basics of Quality Assurance (QA). QA ensures that any organization delivers products as per the customer requirements and on time as agreed with the client. Quality Assurance focuses on the improvements of processes that are used to build the products and services.

- Introduction to Quality Assurance
- About Software Quality Assurance
- Criteria of Quality Assurance

Lesson 2: Quality Principles and Concepts

This session teaches you the procedure to understand the quality concepts and implement the quality principles. Cost of Quality consists of two main components namely Cost of Conformance and Cost of Non-Conformance. Baseline refers to the current level of performance, and Benchmarking refers to the comparison between the tasks of two different organizations.

- Quality Cycle
- Cost of Quality
- About Baseline and Benchmarking

Lesson 3: Quality Leadership

The leadership and commitment from the management team serve as an essential requirement for successful implementation of any quality initiative. This chapter covers the management processes used to establish the foundation of a quality-managed environment, commitment, and communications.

- About commitment and leadership
- Roles and responsibilities of management
- Techniques and approaches for successful quality implementation

Lesson 4: Quality Models

All organizations must define baselines of performance and customer satisfaction to ensure quality delivery. These baselines serve as a reference document to identify the improvements or changes made from the baseline.

- Requirements Baseline
- Performance monitoring for ensuring Quality
- Creating and deploying Quality Models

Lesson 5: Quality Planning

Planning is the process of identifying methods to implement or accomplish the strategic goals. Using Quality Planning, you can define the project and process requirements and plan to fulfill those requirements.

- Concepts of Quality Planning
- Understanding the process of Quality Planning
- Developing and implementing Quality Plan

Lesson 6: Improving work process

This session helps you understand and the method of defining, building, developing and implementing the workspace.

- Understanding of Process components
- Defining a Process
- Improving Process capabilities

Lesson 7: Metrics and Measurements

This chapter emphasizes the quality metrics and measurements that include the measurement concepts, the use of measurement in a software development environment, variation, process capability, risk management, and methods to implement an effective measurement program.

Quality Metrics refers to building a system of scales and procedures for measuring the quality.

- Definition of Quality Metrics
- Methods to measure Quality metrics

Lesson 8: Quality Control and Security

This chapter explains the quality control which measures the conformance to the quality of both products and processes. Quality control ensures that the delivered product is error free and satisfactory.

- About Quality Control
- Measures for Quality Control
- About Security

Lesson 9: Outsourcing, COTS and Contracting Quality

This lesson describes how your organization can outsource software development work responsibilities to outside organizations through purchasing software or contracting services. Quality of software always remains as an internal IT responsibility irrespective of who builds the software.

- Overview of Outsourcing
- About COTS software
- Contracting with outside organization