

CSQA

CERTIFIED SOFTWARE QUALITY ANALYST



As the IT industry becomes more competitive, the ability for management to distinguish professional and skilled individuals in the field becomes mandatory. Certification demonstrates a level of understanding in carrying out quality assurance principles and practices.

Acquiring the designation of Certified Software Quality Analyst (CSQA) indicates a professional level of competence in the principles and practices of quality assurance in the IT profession. CSQAs become members of an acclaimed professional group, receiving recognition of their competence by business and professional associates, are afforded potentially more rapid career advancement and greater acceptance as a management advisor.

Program History Quality Assurance Institute (QAI) was established in 1980 as a professional association formed to represent the software quality assurance industry. The first certification began development in 1985 and the first formal examination process was launched in 1990. Today, Software Certifications, administered by QAI, is global. Since its inception, Software Certifications has certified over 35,000 IT professionals in 43 countries on 6 of the 7 continents in the world.

Objectives and Benefits of Certification

The Certified Software Quality Analyst program is intended to establish standards for initial qualification and continuing improvement of professional competence. This certification program helps to:

1. Define the tasks (skill categories) associated with software quality duties in order to evaluate skill mastery.
2. Demonstrate an individual's willingness to improve professionally.
3. Acknowledge attainment of an acceptable standard of professional competency.
4. Aid organizations in selecting and promoting qualified individuals.
5. Motivate personnel having software quality responsibilities to maintain their professional competency.
6. Assist individuals in improving and enhancing their organization's software quality programs.

Code of Ethics A distinguishing mark of a profession is the acceptance of responsibility by its members to the interests of those it serves. Those certified must maintain high standards of conduct in order to effectively discharge their responsibility.

An applicant for certification must subscribe to the Software Certifications Code of Ethics that outlines the ethical behaviors expected of all certified professionals. Software Certifications programs include processes and procedures for monitoring certificant adherence to these policies. Failure to adhere to the requirements of this code is grounds for decertification.

Mission Statement

To support the needs of information technology quality practitioners by providing certification of their professional development as they evolve over the course of their careers from entry-level novice to recognized and mature masters of their respective disciplines.

Software
CERTIFICATIONS



The Software Certifications Program is Proudly Administered by the Quality Assurance Institute.

SOFTWARE CERTIFICATIONS

Prerequisites

To qualify for candidacy, each applicant must meet one of these four prerequisites:

1. A 4 year degree from an accredited college-level institution and 2 years experience in the information services field
2. A 3 year degree from an accredited college-level institution and 3 years experience in the information services field
3. A 2 year degree from an accredited college-level institution and 4 years experience in the information services field
4. Six years of experience in the information services field

AND

Are working, or have worked at any time within the prior 18 months, in the field covered by the certification designation

Depending upon a compliance sample selected according to program criteria, the applicant may be required to provide detailed education and/or employment documentation supporting the prerequisite option selected on the application. If selected for verification, the applicant must supply the documentation to the program. Applicants who fail to provide the requested documentation will not be allowed to sit for the exam or, if the exam has been taken and passed, may be subject to de-certification.

Certification Candidacy/Application Process

Individuals applying for CSQA Certification candidacy must submit:

1. A completed on-line Certification Candidacy Application via the Customer Portal on the Software Certifications web site, www.softwarecertifications.org.
2. A \$350 (USD) non-refundable, non-transferable fee (payable by check or credit card).

A completed Certification Candidacy Application must be submitted via the Customer Portal on the Software Certifications web site for entrance as a candidate for any particular certification. This application should only be submitted by individuals who:

- Are working, or have worked at any time within the prior 18 months, in the field covered by the certification designation
- Have significant experience and breadth of knowledge to have mastered the basics of the entire Software Quality Assurance Common Body of Knowledge
- Have reviewed the Software Quality Assurance Common Body of Knowledge

Application Fee:

\$350.00 USD

Examination

In 2008, Software Certifications selected Prometric, a world leader in assessment testing services, as its partner for the administration of certification examinations. Prometric's international network of testing centers provides the framework needed to support Software Certifications' global needs. This partnering will allow candidates to easily schedule their exam via the Internet and take it at a Prometric Testing Center in or outside of the United States. However, some global locations will remain paper-based (Sponsored Exams) and delivered on a quarterly basis – please refer to the Software Certifications web site for specific location details.

NOTE: All candidates must first register to take the certification examination through the Software Certifications Customer Portal (www.softwarecertifications.org). Once registered, those in the areas serviced by Prometric will, after a mandatory 72 hour waiting period, receive a Prometric Exam Code. Only then can candidates schedule their exam with Prometric. Candidates can not schedule their exam at Prometric without first registering with Software Certifications.

Candidates for certification must pass a four-part examination which includes multiple-choice, essay, and short answer items in order to obtain certification. The four hour examination tests the candidate's knowledge and practice of the skill areas defined in the Software Quality Assurance Common Body of Knowledge. Candidates must attempt the exam at least once in the first twelve months after applying. Those who do not successfully pass the examination may retake the examination up to two times by submitting the on-line retake application and paying all required fees. Subsequent additional examination efforts require reinitiating the entire application process.

Technical knowledge becomes obsolete quickly; therefore, the board has established these eligibility guidelines. The goal is to test on a consistent and comparable knowledge base worldwide. The eligibility requirements have been developed to encourage candidates to prepare and pass all portions of the examination in the shortest time possible.



Software Quality Assurance Common Body of Knowledge

Skill Categories

1. **Quality Principles and Concepts** - Before an organization can begin to assess the quality of its products and services, and identify opportunities for improvement, it first must have a working knowledge of quality principles and basic concepts. This category will test the CSQA candidate's ability to understand and apply these principles.
2. **Quality Leadership** - The most important prerequisites for successful implementation of any major quality initiative are leadership and commitment from executive management. Management must create a work environment supportive of quality initiatives. It is management's responsibility to establish strategic objectives and build an infrastructure that is aligned to those objectives. This category will cover the management processes used to establish the foundation of a quality-managed environment, as well as commitment, new behaviors, building the infrastructure, techniques, approaches and communications.
3. **Quality Baselines (Assessments and Models)** - Organizations need to establish baselines of performance for quality, productivity and customer satisfaction. These baselines are used to document improvements by showing changes from a baseline. In order to establish a baseline, a model and/or goal must be established for use in measuring against to determine the baseline.
4. **Quality Assurance** - Quality Assurance is a professional competency whose focus is directed at critical processes used to build products and services. The profession is charged with the responsibility for tactical process improvement initiatives that are strategically aligned to the goals of the organization. This category will address the understanding and application of quality assurance practices in support of the strategic quality direction of the organization.
5. **Quality Planning** - Executive management establishes the vision and strategic goals. Planning is the process that describes how those strategic goals will be accomplished. Quality planning should be integrated into the IT plan so that they become a single plan. In simplistic terms, the IT plan represents the producer and the quality plan represents the customer.
6. **Define, Build, Implement, and Improve Work Processes** - This category will test the candidate's understanding of process components, how to define a process, and how to continuously improve process capability.
7. **Quality Control Practices** - Quality control practices should occur during product development, product acquisition, product construction at the end of development/acquisition and throughout product change and operation. During development, the quality control process is frequently called verification and at the conclusion of development, it is called validation. This category will address the various types of controls and when they are best used in the process.
8. **Metrics and Measurement** - This category addresses measurement concepts, the use of measurement in a software development environment, variation, process capability, risk management, the ways measurement can be used, and how to implement an effective measurement program.
9. **Internal Control and Security** - Privacy laws and increased accessibility to data have necessitated increased security. Accounting scandals and governmental regulation such as the Sarbanes-Oxley Act have placed increased importance on building and maintaining adequate systems of internal control. The quality assurance function can contribute to meeting those objectives by assuring that IT has adequate processes governing internal control and security.
10. **Outsourcing, COTS and Contracting Quality** - Organizations can assign software development work responsibilities to outside organizations through purchasing software or contracting services; but they cannot assign the responsibility for quality. Quality of software remains an internal IT responsibility regardless of who builds the software. The quality professionals need to assure that those quality

For a more detailed explanation of each category, visit the Software Certifications web site at www.softwarecertifications.org.



Recertification

The Software Certifications Board strives to maintain the highest degree of integrity within Software Certifications. To maintain this integrity, a certificant must maintain a current knowledge base of quality principles, practices, and technical knowledge as the information technology industry advances and technologies become obsolete. By requiring that the certificant maintain and increase their level of competency through various avenues of education and activity, the board is assured that the certification standards of integrity are being met and the value of the certification designation is being maintained.

To assure that the certificant is maintaining knowledge and skills that are state-of-the-art in the field, the certificant must demonstrate continuing professional education (CPE) activities. This may be done by:

- Submitting a Recertification Journal of qualified Continuing Professional Education activities
- or
- Taking an Examination for Recertification to demonstrate your competence and skill in the certification competency domains.

Other Certifications

Certified Associate in Software Quality (CASQ)
Certified Associate in Software Testing (CAST)
Certified Software Tester (CSTE)
Certified Software Project Manager (CSPM)
Certified Software Business Analyst (CSBA)
Certified Manager of Software Quality (CMSQ)
Certified Manager of Software Testing (CMST)

Please visit:

www.softwarecertifications.org

for more information regarding other certifications.

Frequently Asked Questions

What is the fee for certification?

The initial fee for CSQA certification is \$350 USD. This includes the application processing fee, administration fee, and your initial sitting fee. The fee also includes a downloadable version of the Software Quality Assurance Common Body of Knowledge via the Customer Portal on the Software Certifications web site. If you sit for the exam the first time within twelve months of applying and do not receive passing marks, there is an additional fee of \$100 USD for each retake exam (limit two).

What is the exam format?

The four hour exam is made up of four sections; two parts multiple-choice and two parts essay and short answer. You will have forty-five minutes to complete each of the multiple-choice sections and one hour and fifteen minutes to complete each of the essay and short answer sections. There is a ten-minute break between each section.

How do I study for the exam?

There is no specific outline of study curriculum established by Software Certifications. Candidates are responsible for their own study and preparation. The Quality Assurance Institute, as administrator of Software Certifications, does not infer that attending specific courses or programs will significantly enhance the candidate's chances of passing the examination. Bibliographic references are included in the Software Quality Assurance Common Body of Knowledge description for information purposes, however, candidates are expected to know and pursue other resources.

Professional certification is a significant undertaking. Sufficient time and energy should be allocated by the candidate toward preparation. Most of the needed preparation involves reviewing and brushing up on the various skill categories in the certification's respective Common Body of Knowledge. If candidates have extensive experience in the quality practices described in the skill categories of the Common Body of Knowledge, the examination should not be difficult. Candidates should avoid last minute cramming, as it is rarely beneficial in the long term.

Software Certifications

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