

CERTIFICATION TRAINING PROGRAM IN SOFTWARE QUALITY



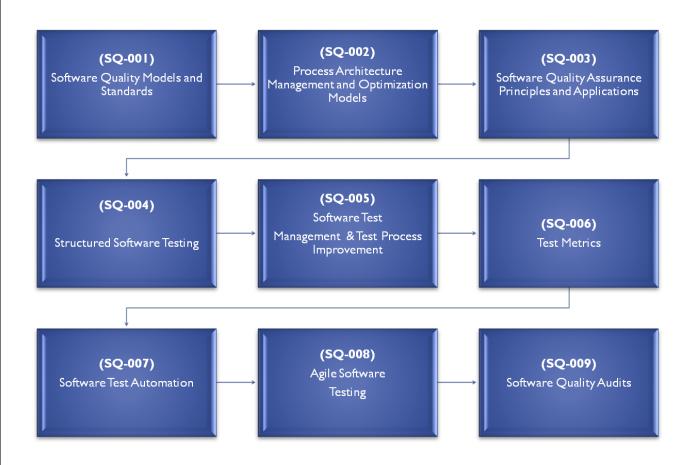
IAQP and DigiLEAF advocate that the value of a certification program is in direct proportion with the ability to meet individuals' various needs and interests for both breadth and depth of content so that it helps them improve the way they perform their roles and responsibilities in their respective organizations.

This education-based certification program is designed by industry and academic practitioners to professionalize the software quality practices in the country. It has been seen that competence levels of those in the field of software quality have to grow to meet the growing demands of the industry to produce quality products and services.

The Certification Program in Software Quality is designed to cater to practitioners specializing in the areas of Software Quality Assurance and Software Testing (Quality Control). After taking the program, an individual shall demonstrate high competence levels both in concepts and practical applications that are required for a professional software quality practitioner.

The knowledge areas used in the curriculum are aligned with the bodies of knowledge used in other international certifications like those offered by ISTQB, IIST, AST, ASQ, QAI.

Curriculum Flowchart for Certified Software Quality Professional Level 1





Course Description for Certified Software Quality Professional Level 1



COURSE CODE	INSTRUCTOR-LED TRAINING DURATION (day)	OFFLINE WORKSHOP DURATION (day)	COURSE TITLE
SQ-001	2	1	Software Quality Models and Standards

This course is an introduction to software quality models & standards. It presents best practice guidance on how to apply an international quality standard to the acquisition, supply, development, operation and maintenance of computer software. The course discussion is independent of the technology, life cycle models, development processes, sequence of activities and organizational structure used by an organization.

SQ-002 2 1 Process Architecture Management and Optimization Models

This course sets the baseline of process-orientation and opens up the world of process management and process optimization. This course will cover major process management approaches to provide wide knowledge on what particular approach/methodology best fits an organization. This course will also present and examine the challenges, benefits and risks of each approach. A strategic framework for developing a business transformation roadmap and planning process change will help the attendees be prepared to manage change efforts in their businesses.

SQ-003 1 1 Software Quality Assurance Principles and Applications

This course is focused on Software Quality Assurance as a discipline. It presents what a SQA group should do in an Information Technology (IT) organization. It depicts the body of knowledge of SQA and presents its distinction with Software Testing. It presents practical knowledge and skills that could be used as a career path for software quality professionals. It provides a mapping of SQA activities in parallel with various software development process models

SQ-004 2 1 Structured Software Testing

This course presents how to test software based on requirements in a risk-driven approach regardless of project type. It discusses all necessary documents to be used as inputs to software testing and the documents to be developed within the testing processes. Techniques and approaches to test case development are discussed in detail. Test results captured in test status reporting is presented in a structured manner. This course includes practical skills necessary to effectively comprehend requirements documented in a systems requirements specification to be used as one of the inputs in writing test plans and test cases.

SQ-005 2 1 Software Test Management & Test Process Improvement

This course presents the management of the testing process in the context of software engineering. It covers the application of quality risks and how to apply a risk-driven test development. The participants would be able to understand the value of testing in making a "go/no-go" decisions in software deployment.

This course covers a modern approach in test process improvement. This includes the roles and responsibilities associated for test process improvement project. Gap analysis and next steps to undergo to proceed to the next level of process maturity is presented.

SQ-006 1 1 Test Metrics

This course discusses in detail how to setup and manage test metrics. Writing of test measurement plan and tracking process is covered in detail. Identifying critical test metrics would enable the test team to provide objective decisions in the evaluation of the system under test.

SQ-007 2 1 Software Test Automation

This course will discuss a step-by-step process to determine if an organization is prepared for test automation. It encompasses the principles used for automated test effort preparation, tool selection, and formation of an automated test team with workable applications and examples in scripting methods, test implementation, assessment and measurement for automated test efforts. It stresses on acquiring the most out of automated testing tools, error handling and logging methods, and developing an efficient automated testing architecture.

SQ-008 1 1 Agile Software Testing

This course covers the concepts, practices and implementation of agile software testing. After knowing the standard artifacts needed in testing software projects, participants will learn how to strategize, plan, design and execute tests in short development iterations and with incomplete specifications.

SQ-009 1 1 Software Quality Audits

This course is intended to audit software related processes and procedures, software products, and the people who perform the software processes and procedures. General audit practices will be discussed. The audit will now depend on what standard will be used as a requirement of the audit. Therefore, the course is not concentrated on specific standards like ISO or CMMI, etc. The auditing techniques that will be learned from this course are standard audit practices. Specific auditing techniques will be covered to be used as a value-added information when software/IT standards are used as requirements.



CERTIFICATION LEVELS



Level	Title
Level 1: Competences Assessed	Certified Software Quality Professional [CSqP]
Level 2: Principles Applied in a Project	Certified Software Quality Professional [CSQP]
Level 3: Managed Software Quality (QA or Test) Professionals in an organization	Certified Software Quality Professional, Fellow [CSQP, Fellow]

CSqP

- 1. Graduate of any four-year degree course or Minimum of three years experience in the software quality field for non-degree holders.
- 2. Proficient in written and oral English.

CSOP

- The candidate should demonstrate the required competences and aptitude as described within the Certified Software Quality Professional (CSqP) Level 1 or any other international certification body offering certifications in software quality (e.g. ISTQB, IIST, AST, ASQ, QAI). The said certification shall be submitted to the steering committee for approval and endorsement for level II.
- 2. Upon endorsement and assessment, the candidate shall submit a letter of intent to apply for CSQP with the intended project case. The project case must demonstrate practical application of the body of knowledge. The candidate shall have 6 months to accomplish the project case and request for assessment. A reviewing board shall then be formed to assess the completion of the project through document reviews and face-to-face interviews.
- 3. Upon successful completion and justification, the reviewing board shall certify that the candidate has attained level II certification.

CSQP, Fellow

- 1. The candidate should demonstrate the required competences and aptitude as described within the Certified Software Quality Professional (CSqP) Level 1 or any other international certification body offering certifications in software quality (e.g. ISTQB, IIST, AST, ASQ, QAI). The said certification shall be submitted to the steering committee for approval and endorsement for assessment to level III.
- 2. The candidate should demonstrate the practical application of the body of knowledge through a project case as certified by a reviewing committee as endorsed by Digileaf Inc.
- 3. The candidate should demonstrate the required competences and aptitude as indicated in the ASQ Certified Manager of Quality/Organizational Excellence.

TARGET AUDIENCE: Anyone working within the roles of quality assurance, software testing, quality management.

For more details and registration, please contact: 864-0403 or 864-0596, look for our training coordinators; or you can email us at info@digileaf.com