



Practitioner Certificate in Software Testing

By Improve Quality Services BV
in co-operation with the Centre for Software Engineering



Background

The Information Systems Examinations Board (ISEB) is an internationally acknowledged certification body, which focuses on the certification of IT-professionals in a number of key areas including software testing. An ISEB certificate provides software testers with an internationally recognised qualification, which demonstrates a level of competence and professionalism.

There are two levels of ISEB qualification in software testing. The Foundation Certificate is the first and is for software developers, testers, managers, users and anyone with an interest in testing. The Practitioner Certificate is the second and more advanced testing qualification available for experienced testing practitioners.

This ten-day accredited course is a preparation for the exam "Practitioner Certificate in Software Testing" and satisfies all demands of ISEB. All participants will be invited to sit the examination on the tenth day.

The Exam

The examination will consist of:

- One mandatory double-length question (worth 40% of the marks);
- Five single-length questions from which three should be answered (worth 20% of the marks per question)

Candidates will be allowed 3 hours for the examination. The pass mark shall be 60%, and 80% for a distinction.

Who should attend?

This course is aimed at:

- Experienced testers, test managers and test consultants who wish to improve their depth of knowledge of testing topics and wish to obtain the ISEB Practitioner Certificate

The Event

This is a ten-day event, consisting of three training modules, each of which will run for three days and the exam which will take place on the tenth day.

Module 1

- Test Management (3 days)

Module 2

- Test Management Continued (½ day)
- Reviews and Inspections (1 day)
- Test Techniques (1 ½ days)

Module 3

- Test Techniques Continued (2 days)
- Test Improvement (1 day)

Entry Requirements

Candidates for the Practitioner Certificate course must hold the Foundation Certificate in Software Testing and:

- Either have at least 18 months experience in software testing
- Or, have completed an ISEB accredited Practitioner training course.

Course Objectives

On completion of the course delegates will be able to:

- Understand strategies for software testing of both new developments and the maintenance of existing systems.
- Plan the testing needed at any level from component to user acceptance testing and document it in compliance with IEEE standards.
- Analyse risks and use the results to prioritise the testing.
- Specify and design test cases.
- Define requirements for an appropriate test environment.
- Run tests using defined test procedures and log, analyse and report incidents.
- Interact effectively with others such as users, developers and managers.
- Participate in reviews.
- Select and implement tools to support testing activities.
- Assess testing and development activities for possible improvement.

Practitioner Course Syllabus

Test Management

- Test Process: Planning And Preparation, Specification, Execution and Completion
- Exit and Acceptance Criteria
- Test Management Documentation including Test Policy, Test Strategy, Master Test Plan, Detailed Test Plan
- Techniques for Test Strategy Planning
- Test Estimation and Test Metrics
- Test Progress Monitoring and Test Reports
- Test Management Tools (demo and discussion)
- Risk Management: Identification, Analysis, and Risk Mitigation, FMEA
- Risk Control and Checklists
- People Skills and Test Functions
- Test Organisation, Test Teams, Motivation

Reviews and Inspections

- Introduction to Review principals, Informal Reviews, Walkthroughs, Technical Reviews, and Inspections (IEEE 1028)
- Specify Review Strategy and compose Review Plan
- Perceptive Based Reading, Review of Test Plan
- Review and Inspection Tools

During this module, a functional specification will be inspected.

Test Techniques

- Structured Test Techniques
- Non-functional Techniques (usability, reliability, performance, etc.)
- Dynamic Analysis, Static Analysis, Coding Standards
- Informal Techniques (Exploratory Testing)
- Choosing the right Test Technique on the basis of the Test Strategy
- Problem Management, Introduction to IEEE 1044 for the classification of problems
- Tools for understanding the phase test specification and implementation
- Test Frame and Data Driven Testing

Test Improvement

- Improvement Models (TPI, Test Maturity Model)
- Relation to Software Process Improvement (CMM(-I) and ISO15504)
- Overview of the most important tools, selection and implementation
- Carrying out assessments and writing test improvement plans

Course Presenters

Erik Van Veenendaal and Rob Hendrix of Improve Quality Services will present this course. Both Erik and Rob have extensive experience in the software industry, specialising in the area of software testing and inspections.

Erik is the author of a number of books including "Structured Testing – an introduction to Tmap" and "Software Quality from a business perspective".

Rob has written a number of papers in software testing and software product quality.

Both have delivered many successful testing courses including the ISEB foundation certificate and the practitioner certificate.

Duration: 10 Days which consists of:

9 Training Course 9.15 a.m. - 5.00 p.m.
(Registration 9.00 a.m.) delivered over 3 modules each consisting of 3 training days and 1 day for exam.

Module 1: 12th – 14th October

Module 2: 9th – 11th November

Module 3: 30th November & 1st - 2nd December

Exam Date: 7th December

All participants who wish to sit the examination are advised to set aside some time each evening to study.

Fees: € 3,200, plus 350 Euro Examination Fee including attendance at the course, course material, a copy of the course presenters book entitled "The Testing Practitioner" and lunch.

Because of the requirement to make arrangements for the examination, **bookings will normally be required 6 weeks in advance of the course.** A non-refundable booking fee of € 350 Euro will be required to cover the examination fee. The balance will be invoiced in 2 parts, 50% at the start of the course and 50% on completion of the course.

Fees will become due in full if cancellations are received within 7 working days of this course.