

ISTQB Certified Tester: Foundation Level 4.0

Duration: 3.5 days LIVE Online or Face-to-Face

Course Overview

This course follows the new V4 ISTQB syllabus now focussed on a combination of testing concepts within an Agile context and can be run either LIVE online or as a face to face in-class event.

Expleo Academy's ISTQB Certified Tester: Foundation Level (CTFL 4.0) course provides the knowledge required to engage in testing roles.

The training is delivered by accredited trainers with testing and Agile experience. Attendees will learn industry terminology, concepts, and test techniques for use in the test process. Courseware supplied to attendees addresses the objectives required by the International Software Quality Testing Board in the 2023 CTFL syllabus v4.0. To prepare for the certification exam there are end-of-Module review question, end-of-day homework questions, and an end-of-course mock exam.

Who should attend?

This course is most relevant to anyone interested in career learning paths for roles such as Test Programme Managers, Test Managers, Test Analysts, Test Engineers, Requirements Engineers, Software Developers, Functional Testers, Agile Testers, User Acceptance Testers, Test Automation Specialists, Performance Test Specialists, Test Environments Specialists, Security Testing Specialists, and Test Consultants. The course is also appropriate for anyone who wants a basic understanding of software testing, such as Project Managers, Quality Managers, Software Development Managers, Business Analysts, IT Directors, and Management Consultants.

Prerequisites & pre-reading guidelines

This course is appropriate for everyone involved in, or interested in, software testing. There is no necessary pre-reading to be completed.

How certification is earned

This course supports preparation for a 1-hour MCQ examination that the candidate must pass to gain the ISTQB certificate. It is currently run as a separate e-proctored exam. This certification allows you to progress to the ISTQB Advanced Level and/or ISTQB Specialist track learning paths.

Course Objectives

On completion of ISTQB Certified Tester Foundation Level, attendees will be able to:

- Promote efficient and effective communication by using a common vocabulary for software testing
- Demonstrate understanding of fundamental software testing concepts and optimising test practices
- Use established techniques for designing tests at all test levels, and interpreting tests from test specifications
- Report on test results, including defect reports
- Understand test management principles, and project factors, for resources, strategies, and planning
- Understand the value that software testing brings to stakeholders, and contribute effectively in reviews
- Identify essential skills required for testing and understand the impact of risk on testing
- Know risks and benefits related to test automation

Context

The ISTQB Certified Tester: Foundation Level course introduces the delegates to the principles and challenges of software testing. It is required in order to progress to the Advanced level ISTQB certifications.

Related courses

The ISTQB has a supporting series of courses to take the tester further in their career:

- ISTQB® Certified Tester Advanced Level Test Analyst
- ISTQB® Certified Tester Advanced Level Test Manager
- ISTQB® Certified Tester Advanced Level Technical Test Analyst
- ICAgile Certified Agile Fundamentals

Course Outline

Items in italics embrace Agile contexts.

Fundamentals of Testing

- **What is testing?**
Test Objectives, Testing and Debugging
- **Why is testing necessary?**
Testing's Contributions to Success, Testing and Quality Assurance (QA), Errors, Defects, Failures, and Root Causes
- **Testing Principles**
Test Activities, Testware and Test Roles
Test Activities and Tasks, Test Process in Context, Testware, Traceability between the Test Basis and Testware, Roles in Testing
- **Essential Skills and Good Practices in Testing**
Generic Skills Required for Testing, *Whole Team Approach*, Independence of Testing

Testing throughout the Software Development Lifecycle

- **Testing in the Context of a Software Development Lifecycle**
Impact of the Software Development Lifecycle on Testing, Software Development Lifecycle and Good Testing Practices, *Testing as a Driver for Software Development, DevOps and Testing, Shift-Left Approach, Retrospectives and Process Improvement*
- **Test Levels and Test Types**
Test Levels, Test Types, Confirmation Testing and Regression Testing
- **Maintenance Testing**

Static Testing

- **Static Testing Basics**
Work Products Examinable by Static Testing, Value of Static Testing, Differences between Static Testing and Dynamic Testing
- **Feedback and Review Process**
Benefits of Early and Frequent Stakeholder Feedback, Review Process Activities, Roles and Responsibilities in Reviews, Review Types, Success Factors for Reviews

Exam

- Mock examination
- Formal ISTQB examination – while the course is delivered LIVE online rather than in-class, this exam will be run separately as an online e-proctored exam.

Test Analysis and Design

- **Test Techniques Overview**
- **Black-box Test Techniques**
Equivalence Partitioning, Boundary Value Analysis, Decision Table Testing, State Transition Testing
- **White-box Test Techniques**
Statement Testing and Coverage, Branch Testing and Coverage, The Value of White-box Testing
- **Experienced-based Test Techniques**
Error Guessing, Exploratory Testing, Checklist-Based Testing
- **Collaboration-based Test Approaches**
Collaborative User Story Writing, Acceptance Criteria, Acceptance Test-driven Development

Managing the Test Activities

- **Test Planning**
Tester's Contribution to Iteration and Release Planning, Entry Criteria and Exit Criteria, Estimation Techniques, Test Case Prioritization, *Test Pyramid, Testing Quadrants*
- **Risk Management**
Risk Definition and Risk Attributes, Project Risks and Product Risks, Product Risk Analysis, Product Risk Control
- **Test Monitoring, Test Control and Test Completion**
Metrics used in Testing, Purpose, Content and Audience for Test Reports, Communicating the Status of Testing
- **Configuration Management**
- **Defect Management**

Test Tools

- **Tool Support for Testing**
- **Benefits and Risks of Test Automation**

Contact

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