

ISTQB Foundation in Software Testing Training

This Software Testing Foundation Training is based on the ISTQB syllabus. The Software Testing Foundation Training course prepares delegates for the multiple choice examination for the qualification. The Software Testing Foundation Training course has six main parts: Fundamentals of testing; Testing throughout the life cycle; Static test techniques; Test design techniques; Test management; and Test tools.

Objective

- Prepare candidates for the BCS Foundation Certificate in Software Testing based on the ISTQB syllabus;
- Improve understanding of software testing – its purpose and nature – and to raise awareness of issues and constraints around testing;
- Provide a professional qualification widely recognised by employers, customers and peers;
- Introduce test techniques (static, white box and black box) to delegates as well as providing practical experience of some key techniques;
- Learn standard terminology;
- Provide a complete picture of the test activities and processes from requirements review to system implementation; and to discover good sources of information.

The objectives for the Software Testing Foundation qualification are in the ISTQB syllabus and include:

- Enabling software suppliers to hire certified testers and thereby gain commercial advantage over their competitors by advertising their tester recruitment policy; and
- Enabling comparison of testing skills across different countries, testers to move across country borders more easily and multi-national/international projects to have a common understanding of testing issues.

Details

Duration: 3 Days

Who is this course for

The Foundation Level qualification is aimed at anyone involved in software testing. This includes people in roles such as testers, test analysts, test engineers, test consultants, test managers, user acceptance testers and software developers. This Foundation Level qualification 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

Course Content

The fundamentals of testing:

- Why testing is necessary; harm caused by defects in software; root causes; testing and quality assurance; what testing is; general testing principles; fundamental test process and the psychology of testing.

Testing throughout the software life cycle:

- Software development models; relationship between development, test activities and work products in the development life cycle, project and product characteristics and context; test levels, objectives, typical objects and targets of testing; functional, non-functional, structural and change-related testing; confirmation and regression testing; maintenance testing; regression testing and impact analysis in maintenance.

Static techniques:

- Reviews and the test process; software work products and the different static techniques; importance and value of static techniques; difference between static and dynamic techniques; typical formal review process; different types of review: informal review, technical review, walkthrough and inspection; explain the factors for successful performance of reviews; static analysis by tools; defects and errors identified by static analysis; typical benefits; typical code and design defects identified.

Test design techniques

- Identifying test conditions and designing test cases; categories of test design techniques; specification-based (black-box) and structure-based (white-box) approaches; equivalence partitioning; boundary value analysis; decision tables; state transition diagrams, use case testing; structure-based or white-box techniques; code coverage; statement and decision coverage; control flows using statement testing and decision testing; coverage; experience based techniques; choosing techniques.

Test management

- Test organization; independent testing; tasks of typical test leader and tester; test planning and estimation; 'Standard for Software Test Documentation' (IEEE 829); typical factors that influence the effort related to testing; estimation approaches (metrics-based and expert-based); test preparation and execution tasks; exit criteria; test progress monitoring and control; metrics and reporting; configuration management; risk and testing; incident reporting and management.

Tool support for testing

- Types of test tool; effective use of tools; potential benefits and risks; introducing a tool into an organization.