

ISTQB-BCS Certified Tester Foundation Level (CTFL) Course

Course Introduction

The ISTQB-BCS Certified Tester Foundation Level (CTFL) Course is a course explaining the fundamentals in software testing. This course has been accredited by the BCS and it addresses the ISTQB Foundation Syllabus. It normally runs in a 3.5 day format but is available over 3 days on request.

The course contains exercises, practice exams and games to highlight key aspects of the syllabus to assist the delegate in the understanding of the concepts and methods presented. The course material is used under license from Grove Consultants.

The Exam

The Foundation Certificate is awarded to those who pass a written one hour multiple-choice exam which is set, moderated, marked and invigilated by the BCS.

The ISTQB-BCS Foundation Exam usually takes place on the morning of the fourth day. It is on the third afternoon of the course for the three day version.

Who Will Benefit?

This course is appropriate for testers, test team leaders, developers, development managers, business analysts, and anyone wishing to gain the ISTQB-BCS Certified Tester Foundation Level (CTFL).

Prerequisites

None. However we suggest that delegates wishing to take the ISTQB-BCS Certified Tester Foundation Level (CTFL) exam should have at least 6 months experience in testing.

Course Objectives

To provide an understanding of the fundamental principles of testing and explain different testing terminology. The course also provides an overview of different techniques, both dynamic and static and how to apply them.

Skills Gained

- Learn about the differences between testing levels and targets
- Know how to apply both black and white box approaches to all levels of testing
- Understand the differences between various types of reviews and be aware of Static Analysis
- Learn aspects of test planning, estimation, monitoring and control
- Communicate better through understanding standard definition of terms
- Gain knowledge of the different types of tools and the best way of implementing those tools

Course Content

Fundamentals of Testing

This section looks at why testing is necessary, what testing is, and explains general testing principles, the fundamental test process, and psychological aspects of testing.

Testing throughout the lifecycle

Explains the relationship between testing and life cycle development models, including the V-model and iterative development. Outlines four levels of testing:

- Component testing
- Integration testing
- System testing
- Acceptance testing

Describes four test types, the targets of testing:

- functional
- non-functional characteristics
- structural
- change-related

Outlines the role of maintenance testing.

Static Testing

Explains the differences between various types of review and outlines the characteristics of a formal review. Describes how static analysis can find defects.

Test Design Techniques

This section explains how to identify test conditions (things to test) and how to design test cases and procedures. It also explains the difference between white and black box testing. The following techniques are described in some detail with practical exercises:

- Equivalence Partitioning
- Boundary Value Analysis
- Decision Tables
- State Transition testing
- Statement testing
- Statement and Decision testing

In addition, use case testing and experience-based testing (such as exploratory testing) are described, and advice is given on choosing techniques.

Test Management

This section looks at organisational implications for testing and describes test planning and estimation, test monitoring and control. The relationship of testing and risk is covered, and configuration and incident management.

Tool Support for Testing

Different types of tool support for testing are described throughout the course. This session summarises them, and discusses how to use them effectively and how best to introduce a new tool.