

## Course Overview

This course is a continuation of the ISTQB Foundation Level Certificate and leads to the ISTQB Advanced Technical Test Analyst certification. The course focuses specifically on technical test analyst issues such as producing test documentation in relation to technical testing, choosing, and applying appropriate specification-based, structure-based, defect based, and experience-based test design techniques and specifying test cases to evaluate software characteristics.

## Course Content

The course covers the following areas:

- **TEST TECHNIQUES: SPECIFICATION-BASED:** Explains and demonstrates how to use and apply the following test design techniques: equivalence partitioning, boundary value analysis, decision tables, and state transition testing.
- **TEST TECHNIQUES: STRUCTURAL-BASED:** Explains and demonstrates how to use and apply the following test design techniques: statement testing, decision testing, condition determination testing, and multiple condition testing.
- **TEST TECHNIQUES: DEFECT AND EXPERIENCE-BASED:** Describes the principles and reasons for defect-based techniques and differentiates their use from specification-based and structure-based techniques. Explains, using examples, the importance of defect taxonomies and their uses. The following defect and experience-based techniques will be described and used to generate tests: error guessing, checklist-based, exploratory testing, and attacks. Candidates will analyze various systems to determine which specification-based and defect-based techniques best fit the application being tested.
- **STATIC ANALYSIS:** Teaches understanding of and differentiation between control flow and data flow defects, and how static analysis tools can assist the tester in this task.
- **DYNAMIC ANALYSIS:** Explains dynamic analysis and its importance in determining various memory-related defects.
- **TEST OF SOFTWARE CHARACTERISTICS:** Testing the system's functionality is an important aspect for every tester, focusing on what the system does. Another vital area for every tester is to test how well it behaves. Analysis of suitable techniques is provided to ascertain what characteristics are tested by technical testers. Quality characteristics for technical testers include technical security, reliability, efficiency, performance, maintainability, and portability.
- **TEST AUTOMATION:** Provides valuable insight into the production of keyword-driven scripting for use in test execution tools and how performance tools work. This course provides the tester with information about the efficiency characteristics of the application. Specific tools will be described that will assist the technical tester.

## INTENDED AUDIENCE

This course is appropriate for technical testers, developers, performance testers, test Automator's, and anyone wishing to gain the ISTQB Advanced Level Technical Test Analyst qualification.

## COURSE DURATION

The course is presented by an experienced software testing practitioner. The course duration is four days with an exam.

## TRAINING STYLE

The course is conducted in a virtual classroom style. Candidates use practical tasks to layer theoretical concepts. Comprehensive and accredited course materials, certification and assessment. Comprehensive course notes are provided. Candidates will be given exercises, practice exams and learning aids to assist in preparation for the final exam.

## TRAINING VENUES

iLAB Training is virtually presented globally.

## The Exam

This course will provide the candidate with the necessary knowledge and skills to sit the ISTQB Advanced Technical Test Analyst Certificate multiple-choice exam. Candidates will be given the opportunity to sit the examination at the end of the course.

Information about the certification can be found on the International Software Testing Qualifications Board (ISTQB) website: <http://www.istqb.org/>

## Course Prerequisites

Candidates wishing to take the ISTQB Advanced Technical Test Analyst Certificate must hold the ISTQB Foundation Certificate or ISTQB Certified Tester Foundation Level Certificate.

Elevate your software testing skills at the iLAB Training Center.

As the leader in independent software quality assurance and testing for over two decades, our training has helped thousands of testers and managers launch their careers into the next level! We offer a wide variety of courses at initial, intermediate and advanced levels. Our courses range from one to five days in duration and, depending on the facilities and number of candidates, can be arranged at your location.