

Course Title: ISTQB® Advanced Technical Test Analyst	Course Duration: 3.0 Days
Exam: Included	Exam Type: Proctored Exam
Qualification: ISTQB Advanced Certificate for Technical Test Analysts	

# **Course Syllabus**

After our ISTQB® Advanced Technical Test Analyst training course, you should be able to use and put into practice the following learning objectives:

- Summarize the generic risk factors that the Technical Test Analyst typically needs to consider.
- Summarize the activities of the Technical Test Analyst within a risk-based approach for testing activities.
- Design test cases for a given test object by applying statement testing to achieve a defined level of coverage.
- Design test cases for a given test object by applying the Decision test technique to achieve a defined level of coverage.
- Design test cases for a given test object by applying the modified condition/decision test technique to achieve full modified condition/decision coverage (MC/DC).
- Design test cases for a given test object by applying the multiple condition test technique to achieve a defined level of coverage.
- Understand the applicability of API testing and the kinds of defects it finds.
- Select an appropriate white-box test technique according to a given project situation.
- Use control flow analysis to detect if code has any control flow anomalies and to measure cyclomatic complexity.
- Use data flow analysis to detect if code has any data flow anomalies.
- Propose ways to improve the maintainability of code by applying static analysis.
- Apply dynamic analysis to achieve a specified goal.
- For a particular scenario, analyze the non-functional requirements and write the respective sections of the test plan.
- Given a particular product risk, define the particular non-functional test type(s) which are most appropriate.
- Understand and explain the stages in an application's software development lifecycle where non-functional testing should typically be applied.
- For a given scenario, define the types of defects you would expect to find by using the different non-functional test types.
- Explain the reasons for including security testing in a test approach.
- Explain the principal aspects to be considered in planning and specifying security tests.
- Explain the reasons for including reliability testing in a test approach.
- Explain the principal aspects to be considered in planning and specifying reliability tests.
- Explain the reasons for including performance testing in a test approach.
- Explain the principal aspects to be considered in planning and specifying performance testing.
- Explain the reasons for including maintainability testing in a test approach.
- Explain the reasons for including portability testing in a test approach.
- Explain the reasons for including co-existence testing in a test approach.
- Explain why review preparation is important for the Technical Test Analyst.
- · Analyze an architectural design and identify problems according to a checklist provided in the syllabus.
- Analyze a section of code or pseudo-code and identify problems according to a checklist provided in the syllabus.
- Summarize the activities that the Technical Test Analyst performs when setting up a test automation project.
- Summarize the differences between data-driven and keyword-driven automation.
- Summarize common technical issues that cause automation projects to fail to achieve the planned return on investment.
- · Construct keywords based on a given business process.



- Summarize the purpose of tools for fault seeding and fault injection.
- Summarize the main characteristics and implementation issues for performance testing tools.
- Explain the general purpose of tools used for web-based testing.
- Explain how tools support the practice of model-based testing.
- Outline the purpose of tools used to support component testing and the build process.
- Outline the purpose of tools used to support mobile application testing.

### **Course Overview**

Our three-day ISTQB® Advanced Technical Test Analyst training course extends the broad understanding of testing acquired in our ISTQB® Foundation training course to enable the role of Technical Test Analyst to be performed.

Our ISTQB® Advanced Technical Test Analyst training course will teach you to recognise and classify the typical risks associated with the performance, security, reliability, portability and maintainability of software systems.

# **Course Learning Outcomes**

After our ISTQB® Advanced Technical Test Analyst training course, you should be able to accomplish the following objectives:

- Recognise and classify the typical risks associated with the performance, security, reliability, portability and maintainability of software systems
- Provide technical elements to the planning, design and execution of tests for mitigating performance, security, reliability, portability and maintainability risks
- Select and apply appropriate white-box test techniques to ensure that tests provide an adequate level of confidence, based on design coverage
- Effectively participate in reviews with developers and software architects applying knowledge of typical defects in the code and architecture
- Improve the quality characteristics of code and architecture by making use of different analysis techniques
- Outline the costs and benefits to be expected from introducing particular types of test automation
- Select appropriate tools to automate technical testing tasks
- Understand the technical issues and concepts in applying test automation

# **Audience**

Our ISTQB® Advanced Certificate For Technical Test Analysts training course is principally aimed at Test Practitioners who have achieved an advanced point in their careers in Software Testing and are expecting to be actively involved in the analysis, specification, design and execution aspects of Software Testing, and who want to increase their knowledge and skills.

Our ISTQB® Advanced Certificate For Technical Test Analysts training course is also aimed at:

- Testers
- Test Analysts
- Test Engineers
- Test Consultants
- Test Managers
- User Acceptance Testers
- Software Developers

It is also appropriate for anyone who wants a deeper understanding of Software Testing:

Project Managers



- Quality Managers
- Software Development Managers
- Business Analysts
- Management Consultants

# **Entry-Level Requirements**

The entry-level requirement for our ISTQB® Advanced Technical Test Analyst training course is that you must hold the <a href="ISTQB®">ISTQB®</a> Foundation certificate.

# **Recommended Reading**

There is no recommended reading associated with our ISTQB® Advanced Technical Test Analyst training course.

#### What's Included

Our ISTQB® Advanced Technical Test Analyst training course includes the following:

- Full Course Materials
- ISTQB® Advanced Technical Test Analyst Exam

## **Exam Information**

## ISTQB® Advanced Certificate For Technical Test Analysts Examination:

- 40 multiple choice questions, which contain a list of possible answers
- Duration of 90 minutes (or 113 minutes for candidates taking examinations that are not in their native language)
- You must score at least 65% to pass (26/40)

#### **What's Next**

Whenever you are ready for the next step in certification, here are the most common follow on courses after the ISTQB® Advanced Technical Test Analyst training course.

- ISTQB® Foundation
- ISTQB® Advanced Test Analyst
- ISTQB® Advanced Test Manager
- Combined ISTQB® Foundation & Agile Foundation Extension
- ISTQB® Foundation Agile Extension
- ISTQB® Advanced Test Automation Engineer
- ISTQB® Advanced Agile Technical Tester
- ISTQB® Acceptance Tester
- ISTQB® Advanced Security Tester
- ISTQB® Mobile App Tester
- ISTQB® Model Based Tester

## **Additional Information**



Founded in 2002, ISTQB® (International Software Testing Qualifications Board) is a not-for-profit association comprising 47 national boards (including the UKTB) covering 71 countries worldwide.

ISTQB® has defined the Advanced certification as part of their 'Certified Tester' scheme that, with over 240,000 certifications, has become the de-facto worldwide standard for software testing qualifications.

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