# **ISTQB Advanced Technical Tester** 3 Days plus exam



#### **About the Course**

The ISTQB Advanced Agile Technical Tester course extends the broad understanding of testing acquired at Foundation Level to enable the role of Agile Technical Tester to be performed.

This three-day tutor-led course includes lectures, exercises and practical work, as well as exam preparation. The examination is held on the afternoon of the last day of the course, so allowing adequate time for revision. It is fully-accredited by UKTB on behalf of ISTQB and has been rated SFIAplus level 5 by the BCS.

# Syllabus – Key points

Pictorially, the syllabus concentrates on the key aspects of Agile that are important to be understood and practiced by the professional Agile Technical Tester:

| ISTQB® - ADVANCED LEVEL AGILE TECHNICAL TESTER |  |                               |                         |
|--|--|-------------------------------|-------------------------|
| Requirements Engineering                       | Testing in Agile                             | Test Automation               | Deployment and Delivery |
| Analyze User Stories and<br>Epics              | Test Driven Development<br>(TDD)             | Data Driven Testing           | Continuous Integration  |
| Identifying Acceptance<br>Criteria             | Behavior Driven<br>Development (BDD)         | Keyword Driven Testing        | Continuous Testing      |
|  | Acceptance Test Driven<br>Development (ATDD) | Test Automation<br>Approaches | Continuous Delivery     |
|  | Experience Based Testing                     | Levels of Test Automation     | Continuous Deployment   |
|  | Aspects of Code Quality                      |                               |                         |

## **Course Objectives**

After successfully completing the course and passing the exam, delegates should be able to demonstrate the following business-based outcomes:

- Apply Agile techniques to ensure tests that provide adequate coverage
- Define testable requirements within Agile Team
- Create and implement various Agile Test approaches using appropriate techniques
- Support and contribute to test automation activities in an Agile project
- Support continuous integration in an Agile Team
- Support Agile Team in continuous delivery and deployment
- Learn the service virtualization concepts







 Work with, and share information with, other team members using effective communication styles and channels

In addition, Advanced Agile Technical Testers should be able to demonstrate their skills in the following areas once they have completed the course and passed the exam:

- Analyse user stories and epics using requirements engineering techniques
- Describe the requirements engineering techniques and how they can help testers
- Create and evaluate testable acceptance criteria for a given user story using requirements engineering and test techniques
- Describe the elicitation techniques
- Apply test-driven development (TDD) in the context of a given example in an Agile project
- Understand the characteristics of a Unit test
- Understand the meaning of the mnemonic word FIRST Apply behaviour-driven development (BDD) in the context of a given user story in an Agile project
- Understand how to manage guidelines for a formulation of a scenario
- Analyse a product backlog in an Agile project to determine a way to introduce acceptance test-driven development
- Analyse the creation of a test approach using test automation, experience-based tests and back-box tests created using other approaches (including risk-based testing) for a given scenario in an Agile project
- Explain differences between Mission critical and non-critical
- Analyse user stories and epics to create test charters, and interpret their results
- Understand the use Experienced-based techniques
- Understand the importance of refactoring test cases in Agile projects
- Understand practical task-list for Refactoring Test cases
- Analyse code as part of a code review to identify defects and technical debt
- Understand Static code Analysis
- Apply data-driven and keyword-driven test techniques to develop automated test scripts
- Understand how to apply test automation to a given test approach in an Agile environment
- Understand the test automation
- Understand differences between various test approaches
- Understand the factors to consider when determining the level of test automation needed to keep up with the speed of deployment
- Understand the challenges of test automation in agile settings
- Apply continuous integration (CI) and summarize its impact on testing activities
- · Understand the role of continuous testing in continuous delivery and continuous deployment
- Understand the concept of service virtualization and its role in Agile projects
- Understand the benefits of service virtualization

## Who is it for?

The ISTQB Certified Agile Technical Tester Advanced Level 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 agile teams and technical testing, including requirements engineering, test automation and deployment and delivery, and who want to increase their knowledge and skills beyond the levels covered by the Foundation and Intermediate qualifications. This includes people in roles such as testers, test analysts, test engineers, test consultants, test managers, user acceptance testers and software developers. This Advanced Level qualification is also appropriate for anyone who wants a deeper understanding of software testing, such as project managers, quality managers, software development managers, business analysts and management consultants.

## **Entry Requirements**

The entry requirements for the Certified Tester Advanced Level Agile Technical Tester qualification are that the candidate must hold the ISTQB Foundation Agile Extension certificate and it is also suggested that candidates have a minimum of 2 years testing experience.







Note that it is recommended that you attend an accredited training course run by an accredited training provider, as the overall exam pass rates are notably higher for candidates attending such courses.

#### The Exam

To receive Advanced Level certification in the module "Agile Technical Test Analyst", candidates must hold a valid Certified Tester Foundation Level certificate:

- 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)
- A candidate must score at least 65% to pass (26/40)

## **Next steps**

The Advanced Level establishes a platform from which further skills and knowledge may be acquired at the Expert Level. Holders of the Advanced Agile Technical Tester qualification will be eligible to continue with other Advanced exams as well as progressing to Expert level qualifications, such as Test Automation and Security Testing. More details to follow when available.

Holders of the Certified Tester Advanced Level Agile Technical Tester qualification may also wish to consider the other Advanced Level qualifications, Test Manager, Agile Technical Tester, Test Analyst, Test Automation Engineer and Security Tester

## How to buy

Call TSG 0800 0199 337, Visit our website at: www.tsg-training.co.uk or call your preferred training provider

#### About ISTQB and the 'Certified Tester' Scheme

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 world-wide standard for software testing qualifications.

The 'Certified Tester' scheme:

- provides a set of professional qualifications widely-recognised by employers, customers and peers;
- enables software suppliers to hire and train certified testers and thereby gain commercial advantage over their competitors by advertising their tester recruitment and development policies; and
- enables 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.



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