



CertifiedAT - Version: 1  
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# ISTQB® Certified Agile Tester Foundation Level Extension



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 3 days Course

## Description:

We are facing today an increase demand from test engineers and test managers to know how to deal with testing in an Agile environment. The Agile manifesto guides Agile development teams into concepts and areas we have (many times) avoided in testing when using the V model, waterfall and other development models, and by that actually require us to re-invent our profession.

- What is the role of a tester in an Agile team?
- How will we regression test from now on?
- What are agile testers required to do in their day to day work?
- What part does Test Automation play in Agile tester's role?
- Should we document test cases and defects?
- How can testers bring high business value over and over again?
- Should we measure and report the same now?

These questions (and more) are a part of the challenges we face in Agile on a daily basis, and which require us to be more productive, more efficient and more relevant.

The course emphasizes the day to day challenges-solving and "know-how" knowledge in the "life of an Agile tester", and answers the above questions, while introducing an Agile testing approach, strategy and day to day operation.

Through presentation, discussion, debate, brainstorming, questioning and games (testing should be fun as well...), we shall go through terminology, methodology, concepts and thinking tools to learn what is required to plan, design and run tests in short iterations, how to measure and track what we do and improve over time. We shall discuss how to function as testers within Agile teams, how to be productive and efficient, and how to produce a working software. The course is based on a workshop by Alon Linetzki, who is one of the authors of the ISTQB® syllabus of the Agile Tester Certification. Relevant exercises and simulations are integrated into

the workshop in order to close the gap between methodology and actual field implementation and enable participants realize what they need to be doing in their designated Agile teams, as testers, from now on.

## **Intended audience:**

Testers, testing team leaders and test managers, developers, development leaders and development managers that were recently introduced to the Agile methodology and are implementing or are about to start implementing Agile in their projects in the near future, and would like to know how to better cope with the new challenges that Agile testing brings up today. Through presentation, discussion, debate, brainstorming, questioning and games (testing should be fun as well...), we shall go through terminology, methodology, concepts and thinking tools to learn what is required to plan, design and run tests in short iterations, how to measure and track what we do and improve over time. We shall discuss how to function as testers within Agile teams, how to be productive and efficient, and how to produce a working software. The course is based on a workshop by Alon Linetzki, who is one of the authors of the ISTQB® syllabus of the Agile Tester Certification.

Relevant exercises and simulations are integrated into the workshop in order to close the gap between methodology and actual field implementation and enable

## **Prerequisites:**

Participants should have testing knowledge: processes, life cycle, and have practical experience in testing.

Participants should have some basic knowledge about Agile, its practices and its ceremonies. Nevertheless, an introduction to Agile scrum will be briefly done, stressing out the tester role in each phase.

Note: Participants who want to go to the ISTQB® Agile Tester Extension certification exam after this course, will be able to do so. But, are not obliged to. You can join the course without going to the exam afterwards. If you chose to sit the exam, you should have a valid ISTQB® Foundation level certification available.

## **Objectives:**

## **Topics:**



## Chapter 1 - Agile Software Development

- Workshop Introduction
- The Fundamentals of Agile Software Development
  - Agile Software Development and the Agile Manifesto
  - Whole-Team Approach
  - Early and 1 Frequent Feedback
- Aspects of Agile Approaches
  - Agile Software Development Approaches
    - Extreme Programming
    - XP
    - Scrum
    - Kanban
  - Collaborative User Story Creation
  - Retrospectives
  - Continuous Integration
  - Release and 1 Iteration Planning

## Chapter 2 – Fundamental Agile Testing Principles, Practices, and Processes

- The Differences between Testing in Traditional and Agile Approaches
  - Testing and Development Activities
  - Project Work Products
  - Test Levels
  - Test and Configuration Management Tools
  - Organizational Options for Independent Testing
- Status of Testing in Agile Projects
  - Communicating Test Status, Progress, and Product Quality
  - Managing Regression Risk with Evolving Manual and Automated Test Cases
- Role and Skills of a Tester in an Agile Team
  - Agile Tester Skills
  - The Role of a Tester in an Agile Team

## Chapter 3 – Agile Testing Methods, Techniques and Tools

- Agile Testing Methods
  - Test-Driven Development, Acceptance Test-Driven Development, and Behavior-Driven Development
    - Test-Driven Development
    - Acceptance Test-Driven Development
    - Behavior-Driven Development
  - The Test Pyramid
  - Testing Quadrants, Test Levels, and Testing Types
  - The Role of a Tester
    - Teamwork
    - Iteration Zero
    - Integration
    - Test Planning
    - Rolling Wave Planning
    - Agile Testing Practices
- Assessing Quality Risks and Estimating Test Effort
  - Assessing Product Quality Risks on Agile Projects
  - Estimating Testing Effort Based on Content and Risk
- Techniques in Agile Projects
  - Acceptance Criteria, Adequate Coverage, and Other Information for Testing
    - Test Levels
    - User Story
    - Feature
    - Iteration
    - Release
  - Applying Acceptance Test-Driven Development
  - Functional 1 and Non-Functional Black Box Test Design
  - Exploratory Testing and Agile Testing
- Tools in Agile Projects
  - Task Management and Tracking Tools
  - Communication and Information Sharing Tools
  - Software Build and Distribution Tools
  - Configuration Management Tools
  - Test Design, Implementation, and Execution Tools
  - Cloud Computing and Virtualization Tools