

This 5-day course covers an overview of Agile and then takes a deep dive into Agile Testing techniques and the role of the Agile Tester. The course can be customized to include intensive hands on sessions in TDD, ATDD and Mocks.

**Course Objectives:**

- Gain a basic understanding of Agile.
- Learn the Scrum Fundamentals, Artifacts and Roles.
- Understand the role of a tester on an Agile team.
- Learn the Agile Testing Pyramid.
- Get some exposure to Agile testing tools.
- Compare Test Driven Development (TDD), Acceptance Test Driven Development (ATDD) and Behavior Driven Development (BDD).

**Audience:** Software testers in agile projects.

**Prerequisites:** Prior experience with agile project execution is helpful.

**Number of Days:** 5 days

<p><b>1</b>     <b>Agile Overview</b>          The Agile Potential          The Agile Manifesto          Agile alone is NOT enough          Can Agile fail?          THE Best Agile</p>	<p><b>4</b></p>	<p>Code          Refactor          Sprint Review Meeting</p>
<p><b>2</b>     <b>SCRUM Overview</b>          Stories -Making It Manageable          Stories          Acceptance Criteria - where and when          Why Object Oriented Principles Are                Critical To Agile          Sprint Planning Meeting          Just Enough and no more          Controlling Chaos</p>	<p><b>5</b></p>	<p><b>Product Owner: Roles and Responsibilities</b>          Requirements and the Product Backlog          Building a Product Backlog          User Roles and Personas          Acceptance Criteria          Story Workshops          Story Aggregation and Decomposition          Spikes and Special Stories</p>
<p><b>3</b>     <b>Sprint</b>          Creating a Sense Of Urgency          Driving Your Project          Conducting the Daily Scrum          Chickens and Pigs          Life Is Daily!          Doing Iterative Development          Design          Test</p>	<p><b>6</b></p>	<p><b>Agile Tester Roles and Responsibilities</b>          Overlapping Roles          Testers should be on the Team          Test Plans          The End Game</p> <p><b>Whole Team Approach</b>          Team Commitment to Quality          Teams Test          Pairing Testers and Developers</p>

- 6 **The Agile Testing Pyramid**
    - Agile Testing Quadrants
    - Unit Test
    - Acceptance Test
    - GUI Test
    - Manual Test
  - 7 **Overview of Test Automation and Automation Tools**
    - Unit and Testing First (TDD)
    - Continuous Integration
    - Acceptance Testing (ATDD)
    - Behavior Driven Development (BDD)
    - Brief overview of tools
    - Cucumber, easyB
    - Selenium
    - Jenkins/Hudson
    - Sonar
  - 8 **Exploratory Testing**
    - Exploratory vs Scripting
    - Concurrent design and execution
    - Motivation for exploratory testing
  - 9 **Test Driven Development**
    - Definitions and Uses of Test Driven Development
    - Principles and Techniques of Test Driven Development
    - Test Driven Development Benefits
    - Best Practices in Test Driven Development
    - Test Driven Developments Anti-Patterns
  - 10 **Mock Objects**
    - Mock Objects - why?
    - Test Fakes, Stubs, Doubles
    - Collaborating Objects - testing the code in the middle
    - Suggested tools to help
  - 11 **Acceptance Test Driven Development (ATDD)**
    - Choose your story
    - Writing test(s) for your story
    - Consider automating the tests
    - Implementing the functionality
    - The ATTD micro-cycle
    - To Mock or not to Mock
    - What can go wrong
    - Iteration planning
- Epic planning  
Managing scope  
Knowing when you're done