

# Fundamentals of Agile Test Automation—ICAgile Certification (ICP-ATA)



- Explore strategies for integrating automation within the agile lifecycle
- Understand how to collaborate with business analysts, developers, and customers to integrate automation into your team's workflow
- Work without the need of separate, independent test automation teams
- Explore how complex non-functional testing can be automated in a sprint

Most agile teams deliver shippable software at the end of each sprint, but some agile teams ship working software every day. Confidence at this speed can be achieved with the help of automated tests. Explore the many ways automation supports agile testing activities in this introductory course.

Learn about automation techniques to improve regression testing, story and feature testing, and continuous integration. Test automation purpose, theory, and principles are reviewed, as well as how test automation is implemented in diverse organizations.

This course provides real-world, vendor-neutral examples of agile test automation approaches and tools. Examples of automated tests for Test Driven Development (TDD), Acceptance Test Driven Development (ATDD), and Behavior Driven Development (BDD) will be given, in addition to example test descriptions, source code samples, and example test scripts.

## Who Should Attend

This course is for all agile team members and those involved in the process of building, testing, and deploying software. Product owners, managers, and other business leaders will gain important insights into the benefits and trade-offs related to agile test automation. No specific prerequisites are assumed, and any technical concepts will be explained; however, attendees are expected to have some agile knowledge or experience.

## ICAgile Certification

Successful attendees of this course are awarded the ICAgile Certified Professional in Agile Test Automation (ICP-ATA). Additionally, certified attendees will be listed on the ICAgile website, indicating their designation. Coveros recommends [Agile Fundamentals - ICAgile Certified Professional \(ICP\)](#)[1] and [Agile Tester Certification](#)[2] for those seeking the ICP-ATA designation. *The ICAgile certification fee is included with your registration for your convenience*

## About the ICAgile

The International Consortium for Agile's goal is to foster thinking and learning around agile methods, skills, and tools. The ICAgile, working with experts and organizations across agile development specialties, has captured specific learning objectives for the different agile development paths and put them on the learning roadmap. For more information visit [www.icagile.com](http://www.icagile.com) [3].

## Laptop Required

This class involves hands-on activities using sample software to better facilitate learning. Each student should bring a laptop with a remote desktop protocol (RDP) client preinstalled. Connection specifics and credentials will be supplied during class. Please verify permissions with your IT Admin before class. If you or your Admin have questions about the specific applications involved, contact our [Client Support team](#) [4].

## Course Outline

---

### Introduction to test automation

What it is

Risks

How testing creates value

How automated testing creates value

### Agile development and testing

Recap on agile manifesto

Agile testing quadrants

Team-based testing

### Test automation techniques

Frameworks overview

Unit testing

*Unit test exercise*

UI testing

*Kantu exercise*

*UI testing exercise*

API testing

*API exercise*

System and acceptance tests

*Exercises*

*Intro to Cucumber*

*Cucumber in action*

*A new scenario*

*Adding a feature*

Database testing and managing test data

*Database exercises*

Non-functional test automation

### Test automation strategy

What to automate

Best practices

Integration into CI

Continuous integration exercise

Static code analysis

*Static analysis exercise*

Dynamic code analysis

Successful code analysis implementation

Test orbits

*Test orbit exercise*

Planning for automation

Automation tool selection

Staffing strategies

Planning - illustrate the system

Why does automation fail?

**Price:** \$1545