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 [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