

# Introduction to Test Automation - TT3511

Learn to Write and Implement Appropriate Integrated Test Plans, Define Future Roadmaps & Architecture, Use Templates & More

**Duration:** 1 Day

**Skill Level:** Introductory

**Available Format:** Instructor-Led Online; Instructor-Led, Onsite In Person ; Blended; On Public Schedule

Introduction to Test Automation is a one-day, hands-on event designed to equip participants with the essential skills required to develop a custom test automation plan and architecture tailored to their organization.

## What You'll Learn

### Overview

Introduction to Test Automation is a one-day, hands-on event designed to equip participants with the essential skills required to develop a custom test automation plan and architecture tailored to their organization. Throughout this course, participants will work through various practical examples, gaining hands-on experience in creating an integrated test automation plan and developing a robust test automation architecture.

Participants will delve into the real-world challenges they may encounter, exploring the benefits of engaging their technical team and understanding the potential frustrations of isolation between test automators and test designers. This course aims to bridge these gaps by fostering collaboration and communication within the team.

While several test automation frameworks will be presented and discussed, the primary focus of this course is to help participants assess their current automation state, identify gaps, and develop a comprehensive automation plan and integrated tool architecture. Attendees will explore and receive templates and resources to kickstart their journey towards a more strategic and effective automation approach.

## Objectives

**Working in an interactive learning environment, led by our expert facilitator, attendees will learn to:**

- Learn the approaches that ensure your current test tools - and new test tools you acquire or develop - will work well with existing testing and application lifecycle software.
- Explore approaches qualitatively and quantitatively measuring the value of automation.
- Explore proven steps for assessing their current test automation state and defining a future test automation roadmap and architecture
- Get access to templates and examples they can use to draft their own test automation plan
- Leave with a draft plan and architecture that they can begin to implement

*If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.*

## Audience

The introductory-level course is geared for test automation engineering roles, test manager roles, test lead roles, test architect roles, as well as developer roles. **This course assumes you have a foundational understanding of testing and the purpose of automation.** This course will be beneficial to anyone who is accountable for assessing, planning, designing, and implementing an integrated set of technology (testing infrastructure) that supports development, testing, and deployment.

## Pre-Requisites

**To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:**

- A general awareness of how software is developed, including stages from requirements gathering to deployment, to appreciate the context of where BDD, TDD, and Unit Testing fit in.
- A basic understanding of what software testing entails, including the purpose and types of tests, to build upon with more specific methodologies.

## Agenda

### 1. Basics of Test Automation

- Understanding the basics of test automation
- Key components and types of test automation

- Benefits and limitations of automation

## **2. The Compelling Business Need for Automation**

- The role of automation in accelerating time-to-market
- Cost-efficiency and quality improvement through automation
- Strategic business advantages of implementing automation

## **3. Automation Challenges and Requirements**

- Common obstacles in test automation implementation
- Key requirements for successful test automation
- Balancing automation with manual testing efforts

## **4. Foundational Material for Your Automation Plan**

- Essential templates and examples for getting started
- Key questions to define your automation needs
- Resources for building a solid automation foundation

## **5. Automation Plan Vision and Strategy**

- Crafting a clear vision and strategic approach
- Defining objectives and key results (OKRs) for automation
- Engaging stakeholders and gaining buy-in

## **6. What to Automate**

- Identifying test cases suitable for automation
- Prioritizing automation efforts based on ROI
- Understanding the test automation pyramid

## **7. When to Start Automation**

- Indicators for the right time to automate
- Balancing early and late-stage automation
- Strategies for phased automation implementation

## **8. Test Automation Platforms and Tools**

- Overview of popular test automation tools and frameworks
- Criteria for selecting the right tools for your needs
- Integrating tools into your existing ecosystem

## **9. Test Automation in CI/CD**

- Role of automation in Continuous Integration and Continuous Deployment

- Setting up automated tests within CI/CD pipelines
- Best practices for maintaining automation in CI/CD

## **10. Test Automation Management**

- Managing test automation projects and teams
- Tracking progress and measuring success
- Addressing challenges in automation management

## **11. Deeper Dive: Tools & Frameworks**

- In-depth look at advanced tools and frameworks
- Comparing features and capabilities of various tools
- Integrating multiple tools for a comprehensive approach

## **12. Bonus Chapters: Testing for Mobile; Testing & APIs**

- Specific challenges and strategies for mobile test automation
- Tools and best practices for API testing
- Ensuring seamless integration and testing across platforms

## **Related Courses**

TTAI2140      Implementing AI in Software Testing | AI in Test Automation

## **Setup Made Simple! Learning Experience Platform (LXP)**

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels, CodeCoach.AI anytime tutor access, and rich extended learning and post training resources are provided for you in our “easy access, single source, no install required” online Learning Experience Platform (LXP), remote lab and content environment. Access periods vary by course. We’ll collaborate with you to ensure your team is set up and ready to go well in advance of the class. Please inquire about set up details and options for your specific course of interest.

## **For More Information**

Please [contact us](#) or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public

course enrollment or questions, partner programs, courseware licensing options and more.