



PYTHON TRAINING

Mastering Automation Testing Selenium Python Course

Master Selenium WebDriver with Python for robust automation testing. Build efficient, scalable test frameworks to accelerate software delivery.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

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- Globally Recognized Certification
 - Expert-Led Hands-On Training
 - Flexible Scheduling

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COURSE OVERVIEW

The "Mastering Automation Testing Selenium Python Course" is designed for intermediate learners aiming to elevate their web automation skills to an expert level. This intensive 2-hour course dives deep into advanced Selenium WebDriver functionalities, coupled with Python's robust programming capabilities, to build resilient and scalable automation frameworks. You will gain hands-on experience in tackling complex automation challenges, from handling dynamic web elements and asynchronous operations to implementing industry-standard design patterns like the Page Object Model (POM). This course focuses on practical application, ensuring you can immediately apply learned techniques to real-world projects.

Upon completion, participants will be proficient in crafting sophisticated, data-driven test scripts and integrating them into efficient testing workflows. The professional benefits are immense: you'll enhance your ability to deliver high-quality software faster, significantly reduce manual testing efforts, and minimize post-release defects. This specialized knowledge positions you as a critical asset in any development or quality assurance team, opening doors to advanced roles and leadership opportunities in the ever-evolving field of software automation.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Advanced Element Interaction & Waits

- Review of Advanced Locators (Complex XPath, CSS Selectors, Relative Locators)
- Strategies for Handling Dynamic Web Elements and AJAX Calls
- Deep Dive into Explicit Waits with ExpectedConditions
- Implementing Fluent Waits for Polling Mechanisms

02 Module 2: Building Scalable Test Architecture with POM

- Principles and Benefits of the Page Object Model (POM)
- Structuring Page Objects for Reusability and Maintainability
- Designing Test Cases with Page Object Interactions
- Introduction to Python's unittest and pytest for Test Organization

03 Module 3: Data-Driven Testing & Enhanced Reporting

- Implementing Data-Driven Tests using External Data Sources (CSV, JSON)
- Leveraging Pytest Fixtures for Test Data Management
- Generating Detailed HTML Test Reports (e.g., pytest-html)
- Automated Screenshot Capture on Test Failures for Debugging

04 Module 4: Integration & Best Practices for Automation

- Strategies for Cross-Browser Testing (brief overview with WebDriverManager)
- Integrating Test Scripts with Version Control Systems (Git workflow)
- Conceptual Understanding of CI/CD for Test Automation
- Code Refactoring and Best Practices for Maintainable Automation Suites

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior Automation Test Engineer (Python/Selenium Specialist)**
- > **Lead Quality Assurance Automation Architect**
- > **Software Development Engineer in Test (SDET) specializing in Python**

FREQUENTLY ASKED QUESTIONS

Q: What specific automation challenges will I be able to solve after completing this course?

This course focuses on equipping you with the skills to handle complex web elements, dynamic content, and asynchronous page loads effectively using advanced Selenium and Python techniques. You will learn to design robust, maintainable, and scalable automation frameworks capable of significantly reducing manual testing efforts and improving software quality. You'll be able to build automation solutions that stand up to real-world application complexities.

Q: What foundational knowledge of Python and Selenium WebDriver is recommended before enrolling?

While this course is designed for 'mastering' advanced topics, a solid intermediate understanding of Python syntax (variables, functions, control flow, basic data structures) and fundamental Selenium WebDriver commands (like locating elements by ID/Name, basic clicks/send_keys, browser navigation) is highly recommended. This ensures you can fully benefit from the advanced concepts and framework design covered within the condensed course duration.

Q: How does this course directly enhance my career prospects as an Automation Test Engineer or SDET?

By mastering advanced Selenium with Python, including sophisticated Page Object Model implementation, data-driven testing, and effective reporting, you will acquire the practical expertise highly sought after by leading tech companies. This certification demonstrates your ability to architect and implement sophisticated, maintainable automation solutions, making you an exceptionally valuable asset for roles requiring efficient and reliable software quality assurance and development in test.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

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50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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