PYTHON TRAINING

Certified Entry Level Tester Python

Become a certified Python tester. Learn to write, execute, and analyze tests for Python applications.

DURATION
2 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

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

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COURSE OVERVIEW

The "Certified Entry Level Tester Python" course at Computer Pride is meticulously designed to equip aspiring QA professionals and developers with the foundational Python skills essential for modern software testing. This program dives deep into leveraging Python's versatility to automate testing processes, enhancing efficiency and accuracy in identifying software defects. Participants will gain practical, hands-on experience with industry-standard Python testing frameworks, preparing them to tackle real-world challenges in quality assurance.

This intermediate-level course emphasizes practical application, moving beyond basic Python syntax to focus on its direct utility in testing. You will master core technologies such as the `unittest` and `pytest` frameworks, learn to write robust test scripts, manage test data, and generate comprehensive test reports. The curriculum is structured to build a strong understanding of test automation principles, error handling, and basic integration with development workflows, making you a valuable asset in any software development team.

Upon completion, you will not only possess a solid understanding of Python for testing but also the confidence to apply these skills immediately. This certification acts as a significant career accelerator, enabling you to contribute to higher software quality, faster release cycles, and more efficient development processes, thereby opening doors to specialized roles in the rapidly evolving field of test automation.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Foundations of Software Testing & Python Essentials

- Introduction to Software Testing Life Cycle (STLC)
- Understanding Different Types of Software Testing (Unit, Integration, System, Functional, Non-functional)
- Python Syntax Refresher for Testers (Variables, Data Types, Control Flow, Functions)
- Setting up Your Python Development Environment for Testing

02 Module 2: Python's Built-in Testing: The unittest Framework

- Principles of Unit Testing and Test-Driven Development (TDD)
- Introduction to the `unittest` Module
- Writing Test Cases and Assertions with `unittest`
- Using Test Fixtures (setUp, tearDown) for Test Isolation
- Organizing Tests into Test Suites and Running Tests

03 Module 3: Advanced Testing with Pytest

- Introduction to the Pytest Framework: Installation and Basic Usage
- Writing Flexible Test Functions and Classes in Pytest
- Mastering Pytest Fixtures for Efficient Test Setup and Teardown
- Parameterized Testing, Skipping Tests, and Test Markers
- Generating Detailed Test Reports with Pytest

04 Module 4: Practical Test Automation Concepts

- Fundamentals of Test Automation Strategy and Best Practices

- Developing Simple Automation Scripts using Python (e.g., file validation, basic data processing)
- Effective Error Handling and Debugging Techniques in Python Tests
- Introduction to Test Data Management and External Data Sources (CSV, JSON)

05 Module 5: Integrating Python Tests & Quality Assurance Practices

- Introduction to Continuous Integration (CI) and Continuous Delivery (CD) Concepts
- Basic Integration of Python Tests into CI Workflows (e.g., command-line execution)
- Version Control Basics for Testers (Introduction to Git)
- Best Practices for Writing Maintainable, Readable, and Scalable Test Code

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **Junior QA Automation Engineer (Python Focus)**

> **Entry-Level Software Tester (with Python Scripting)**

> **Test Analyst utilizing Python-based Frameworks**

FREQUENTLY ASKED QUESTIONS

Q: What specific Python libraries and testing frameworks will I master in this certification, and how do they apply to real-world testing scenarios?

This course focuses primarily on `unittest` for foundational unit testing and extensively covers `Pytest`, the industry-standard framework for writing scalable and readable tests. You will learn to apply these frameworks to create robust test suites, manage test data, and implement effective assertion strategies, directly transferable to automating tests for web applications, APIs, and backend services. The practical application of these tools will be emphasized through hands-on exercises.

Q: Is prior programming experience in Python a strict prerequisite, or is this course suitable for individuals new to coding in a testing context?

While this is an "Entry Level Tester" course, it is rated "Intermediate" in terms of Python application. A basic understanding of Python syntax (variables, loops, functions) is highly recommended. The course includes a concise refresher on Python essentials relevant to testing but quickly dives into practical application. Individuals completely new to programming might find it challenging without some self-study beforehand to grasp fundamental Python concepts.

Q: Beyond just running tests, what skills will I gain that help me contribute to a more efficient and quality-driven software development lifecycle?

You will gain critical skills in designing effective test cases, implementing strategic test automation, and generating clear, actionable test reports. This course emphasizes writing maintainable and scalable Python tests, integrating tests into development workflows, and understanding how automated testing reduces time-to-market while enhancing overall software quality. You'll learn not just to identify bugs, but to contribute proactively to a culture of quality assurance throughout the entire software development lifecycle.

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+	10,000+	50+
Years of Excellence	Professionals Trained	Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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