PYTHON TRAINING

Robot Framework Python Language Course

Master automated testing with Robot Framework using Python. Learn to build robust, scalable test automation solutions.

DURATION
2 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

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

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COURSE OVERVIEW

This intermediate-level "Robot Framework Python Language Course" is meticulously designed for professionals seeking to master robust and scalable test automation and Robotic Process Automation (RPA) solutions. Robot Framework, a powerful open-source automation framework, thrives on its extensibility through Python, enabling testers and developers to create sophisticated test suites and automation scripts with remarkable efficiency. This course dives deep into leveraging Python to build custom libraries, extend keyword functionalities, and integrate seamlessly with various systems, moving beyond basic test case creation to advanced automation paradigms.

Participants will gain hands-on experience in developing maintainable, keyword-driven, and data-driven tests. By the end of this 2-hour intensive program, you will not only understand the core architecture of Robot Framework but also possess the practical skills to develop custom Python libraries that enhance its capabilities, tackle complex testing scenarios, and significantly improve the automation coverage and reliability within your projects. This expertise will directly translate into accelerated development cycles, reduced manual effort, and a competitive edge in the rapidly evolving landscape of quality assurance and automation engineering.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Foundations of Robot Framework & Python Integration

- Robot Framework Architecture Overview
- Python's Role in Robot Framework Extensibility
- Setting Up Your Automation Environment (Python, pip, Robot Framework)
- Introduction to Robot Framework Test Case Syntax and Structure

02 Module 2: Core Robot Framework Features & Keyword Management

- Standard Libraries (BuiltIn, OperatingSystem, Collections)
- Creating Custom User Keywords
- Variable Management and Scopes
- Resource and Test Suite Files

03 Module 3: Developing Custom Python Libraries

- Structure of a Robot Framework Python Library
- Creating Keywords in Python (Functions, Classes)
- Handling Arguments and Return Values
- Error Handling and Logging within Python Libraries

04 Module 4: Advanced Test Automation Techniques

- Data-Driven Testing with Robot Framework
- External Data Sources (CSV, Excel, Database) Integration via Python
- Conditional Execution and Looping Structures
- Keyword-Driven Testing Best Practices

05 Module 5: Integration, Reporting & Best Practices

- Running Tests and Analyzing Logs/Reports
- Integrating with Version Control Systems (Git)
- Introduction to CI/CD Integration Concepts (e.g., Jenkins, GitHub Actions)
- Structuring Large Robot Framework Projects
- Debugging Techniques for Robot Framework and Python Libraries

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **Test Automation Engineer**

> **QA Automation Specialist**

> **RPA Developer (Python Focused)**

FREQUENTLY ASKED QUESTIONS

Q: What Python proficiency level is recommended before taking this Robot Framework course?

While this course provides a quick review of Python concepts as they apply to Robot Framework, an intermediate understanding of Python fundamentals, including data types, functions, control flow, and basic object-oriented programming concepts, is highly recommended to fully benefit from the custom library development modules.

Q: How will learning Robot Framework with Python specifically help me in my career as a Test Automation Engineer?

This course empowers you to build highly maintainable and flexible automation solutions. By mastering Python integration, you can develop custom functionalities for niche testing scenarios, extend existing libraries, and integrate with diverse systems (APIs, databases, UI frameworks), making you indispensable for creating robust, enterprise-level test automation frameworks.

Q: What specific types of automation projects can I confidently undertake after completing this course?

Upon completion, you will be equipped to design and implement end-to-end acceptance tests for web and desktop applications, develop sophisticated data-driven test suites, create custom RPA scripts for repetitive tasks, and contribute to building scalable automation frameworks that integrate with various development and deployment pipelines.

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+
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READY TO ENROL?

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