

# Mastering Automation Testing with Selenium in Python Course

**Course Duration : 40 Hours**

**Course code : SEL-PY-943**

## 1. Course Overview

The Mastering Automation Testing with Selenium in Python Course is designed to provide in-depth knowledge of automation testing using Selenium with Python. This course focuses on building robust, scalable, and maintainable automated test scripts for web applications.

## 2. What you'll learn?

- Fundamentals of automation testing
- Selenium WebDriver with Python
- Writing and executing test scripts
- Handling web elements and dynamic content
- Test frameworks (PyTest/Unittest basics)
- Reporting and debugging techniques

## 3. Target Audience

- Manual testers transitioning to automation
- QA engineers and test analysts
- Software developers
- Students and fresh graduates
- IT professionals interested in testing

## 4. Pre-Requisites

- Basic knowledge of Python programming
- Understanding of software testing concepts
- Familiarity with web applications
- Interest in automation testing

## 5. Course Content (Modules)

### **Module 1: Introduction to Automation Testing**

- Basics of automation testing
- Selenium overview
- Setting up environment

### **Module 2: Selenium WebDriver with Python**

- WebDriver architecture
- Locators and web elements
- Browser automation

### **Module 3: Advanced Selenium Concepts**

- Handling dynamic elements
- Waits and synchronization
- Alerts, frames, and windows

### **Module 4: Test Frameworks & Reporting**

- PyTest/Unittest basics
- Test case design
- Generating reports

### **Module 5: Real-World Projects & Best Practices**

- Automation framework design
- Cross-browser testing