

# Comprehensive Automation and Manual Testing Course - Online

Learn Manual and Automation Testing to Ensure Quality and Reliability in Software Applications

## WHAT YOU'LL LEARN

- Understand software testing fundamentals, including SDLC, STLC, and various types of testing (functional, non-functional, etc.).
- Learn manual testing techniques, such as test case design, bug reporting, and test execution.
- Master automation testing using popular tools like Selenium, JUnit, and TestNG to automate test scripts.
- Gain practical experience in both manual and automated testing, and learn to integrate automated tests into a CI/CD pipeline for continuous delivery.

#### REQUIREMENTS

Basic understanding of software development and programming concepts (preferably in Java or Python).

A computer with an internet connection and tools for testing (e.g., Selenium, |Unit, TestNG, etc.).

No prior testing experience required; the course will start with basic testing concepts.

A willingness to learn about quality assurance and problem-solving in software applications.

## WHO'S THIS COURSE IS FOR

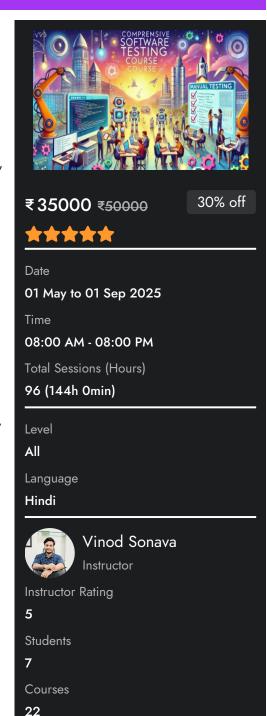
Beginners who want to start a career in software testing (both manual and automation).

Software developers and IT professionals looking to enhance their testing skills.

QA engineers and testers aiming to improve their expertise in both manual and automation testing methodologies.

#### **DESCRIPTION**

Complete Software Testing: Manual & Automation Online (4 months)



to teach you how to test both front-end and back-end components of web applications, ensuring high-quality, bug-free software. You will learn to work with a variety of testing tools and techniques, covering everything from unit tests to end-to-end testing.

You'll begin with **unit testing** for JavaScript, using frameworks like **Jest** or **Mocha** for testing individual functions and logic on the front-end. For the back-end, you will learn how to test **APIs** using tools like **Postman** and **Jest** for Node.js, ensuring that server-side logic is robust and secure. The course also covers **integration testing**, **UI/UX testing**, and **performance testing** to evaluate the user experience and optimize application speed and efficiency.

The course covers foundational concepts, hands-on exercises, and real-world projects to prepare students for a successful career in software quality assurance.

\_\_\_\_\_

\_

#### Course Schedule and Duration

• Duration: 4 Months

• Start Date: Option to start today also, instructor will adjust you to recently started batch. Enroll now

• Days: Mon-Tue-Wed-Thu-Fri- Sat, 6 days a week and 1.5 Hours/Session

• Timings: 8.00 am to 8.00 pm (Choose any 1.5 hours)

• Mode: Online

• Languages: English & Hindi

• Fees: INR 35,000/-

\_

### Manual Testing Syllabus

# 1. Fundamentals of Software Testing

- Introduction to Testing
- Verification vs. Validation
- Types of Applications

The Probabilities of Getting an Error in an Application
2. Software Development Life Cycle (SDLC)
• Phases of SDLC
Advantages and Disadvantages of Each Development Model
3. Principles of Testing
Importance of Software Testing
• Fundamental Test Processes
4. Software Testing Life Cycle (STLC)
• Test Planning
Test Case Design Techniques
Test Environment Setup
Test Execution and Reporting
5. Test Case and Bug Management
Writing Effective Test Cases
Difference Between Test Case, Use Case, and Scenario

• Bug Life Cycle

• How to Prepare Bug Templates

Bug Tracking Tools Overview	
6. Types of Testing	
• Black Box Testing (and Types)	
<ul> <li>White Box Testing (and Types)</li> </ul>	

- Functional vs. Non-Functional Testing
- Static vs. Dynamic Testing

## 7. Advanced Testing Concepts

- System Integration Testing vs. User Acceptance Testing
- Entry Criteria and Exit Criteria
- Flow Graph Notation
- Integration Testing
- Requirement Traceability Matrix

# **Automation Testing Syllabus**

# 1. Python Programming for Automation

- Installation and Setup
- Variables and Data Types
- Operators
- Keywords and Control Flow (If-Else, Loops)

Modules and Libraries (datetime, time, calendar)
• File Handling (CSV, Excel Files)
• Exception Handling
Object-Oriented Programming (OOP)
Database Interaction (Connecting Python to Databases)
2. Selenium WebDriver
Installation and Setup
Web Driver Commands
Navigational Commands
Conditional Commands
• Implicit and Explicit Waits
3. Web Element Interactions
Handling Input Boxes and Text Boxes
Working with Radio Buttons and Checkboxes
Drop-Down Menus
Handling Links and Alerts/Popups

• Functions

# 4. Advanced Selenium • Frames and Windows • Handling Scroll Bars • Mouse Hover and Drag-and-Drop Actions • Right-Click and Double-Click Actions • File Upload and Download 5. Database and API Testing • Basics of API Testing • Integration with Postman • Selenium and Database Interaction for Testing 6. Project and Frameworks • Designing a Test Automation Framework • Implementing Page Object Model (POM) • Real-World Test Automation Projects **Course Features:** 1. Hands-on Practice: Practical exercises after each module.

2. Real-World Projects: Industry-relevant projects for hands-on

learning.

- 3. 24/7 Support: Live support to resolve queries.
- 4. **Job Placement Assistance**: 100% placement support with mock interviews.
- 5. Certification: Certification upon successful completion.
- 6. Lifetime Access: Free lifetime course updates and materials.

By the end of the course, you'll be able to implement automated tests across the full stack of a web application, helping you deliver reliable, high-performance web applications. This course is ideal for developers looking to improve the quality and reliability of their applications through comprehensive testing practices.