

ady.
ADYAPAN

Adyapan School

Selenium Testing with Java



Duration - 2 months

**Industry
Certification**



Skill India Certified

**250+
Partner Companies**

Master end-to-end web testing with Java.

From scripts to scalable test automation - become industry-ready.

This immersive Selenium Testing with Java program takes you beyond foundational concepts into real-world automation frameworks. Learn Selenium WebDriver, Java programming for test automation, TestNG/JUnit integration, and framework design (POM, data-driven, hybrid) through hands-on projects and guided labs. With a strong focus on practical implementation and QA best practices, you'll graduate with the ability to build robust automation suites, execute reliable tests, and streamline software quality processes with confidence.

8

MODULES

30+

PROGRAM OFFERINGS

20,000+

STUDENTS

250+ PARTNERED COMPANIES



ABOUT ADYAPAN SCHOOLS

Where education meets real-world impact

Not just a course - a platform to launch
your career.

Adyapan Schools was built with a single conviction:
learning works best when it happens in the real world.
We partner with top companies, mentors, and industry
platforms to ensure every student graduates with a
portfolio of work that speaks louder than a certificate.

Our programs combine rigorous coursework with live
client projects, giving you the skills and proof-of-work
that employers actually want.

MISSION

To equip ambitious learners with
practitioner-level digital
marketing skills through mentor-
led, project-based education that
bridges the gap between learning
and earning.



VISION

To be India's most trusted
launchpad for the next generation
of marketing leaders – defined
not by degrees but by the real
work.



Everything you need to grow fast

PROGRAM HIGHLIGHTS

Live Industry Projects

Work on campaigns for real brands alongside your coursework. Build portfolio projects that prove your expertise to employers.

1-on-1 Mentorship

Dedicated mentors from Google, Microsoft, Mastercard and more. Get personalized guidance and industry connections.



AI-Powered Marketing

Learn cutting-edge AI tools alongside evergreen fundamentals. Stay ahead of the curve in a rapidly evolving landscape.



Dual Certification

Earn both a Course Completion and Internship Certificate – accredited by Skill India Digital Hub and NSDC.



Internship Guarantee

Graduate with an internship completion certificate from a live brand project. Concrete, resume-ready proof of work.



Industry Network

Join a network of alumni at Amazon, Google, Adobe, Microsoft. Access exclusive hiring events and referral opportunities.

CURRICULUM

8 weeks. 8 modules. Infinite impact.

WEEK 1

Java Basics

- Discussion of curriculum
- Introduction to programming concepts, Java setup, and Eclipse IDE configuration
- Variables, data types, operators, and control statements (if, switch)
- Loops in Java: for, while, and do-while with practical exercises
- Arrays and Strings with common manipulation methods
- Writing and running your first Java program



WEEK 2

Core Java

- Classes, objects, constructors, and access modifiers
- Inheritance and polymorphism with real-world examples
- Exception handling using try-catch-finally blocks
- File handling – reading and writing files in Java
- Introduction to Java Collections (ArrayList, HashMap)



WEEK 3

Selenium Basics

- Introduction to automation testing and Selenium architecture overview
- Setting up a Java project with Selenium
- WebDriver installation and configuration for browser automation
- Invoking and maximizing the Chrome browser, navigating to URLs, and closing the browser
- Locators in Selenium



8 weeks. 8 modules. Infinite impact.

WEEK 4

Selenium Elements

- Advanced locators — XPath (absolute vs relative) and CSS selectors
- Interacting with web application elements like text fields, forms, and buttons
- Handling radio buttons, checkboxes, and hyperlinks on web pages
- Working with dropdowns using the Select class
- Interacting with web tables: reading rows, columns, and dynamic table data



WEEK 5

Advanced Selenium

- Handling alerts, popups, and browser frames (iframes)
- Wait commands: Implicit, Explicit, and Fluent waits for synchronization
- Actions class for mouse hover, drag-and-drop, and keyboard interactions
- Handling multiple browser windows and tabs using window handles
- Screenshot capture and JavaScript Executor for advanced browser interactions



WEEK 6

Test Frameworks

- TestNG introduction — annotations (@Test, @BeforeMethod, @AfterMethod)
- Writing structured test cases with assertions (assertEquals, assertTrue)
- Data-driven testing using @DataProvider and Excel/CSV integration
- Page Object Model (POM) design pattern for maintainable test scripts
- Maven integration: managing project dependencies



8 weeks. 8 modules. Infinite impact.

WEEK 7

CI/CD & Reporting

- Git basics: version control, branching, committing, and pushing code
- Jenkins introduction: setting up a CI pipeline and triggering test runs
- Generating and interpreting TestNG HTML reports and Extent Reports
- Automation framework design: folder structure and coding best practices
- Cross-browser testing configuration



WEEK 8

Advanced Topics

- Parallel test execution with TestNG XML suite configuration
- Handling dynamic web elements and flaky test scenarios
- API testing basics and how it complements UI automation



WHO THIS IS FOR

This course is perfect for

Students & Career Switchers

Manual Testers

Automation Test Engineers

DevOps Engineers

Full Stack Developers

Technical Support Engineers

CERTIFICATIONS



ALUMNI NETWORK

Our alumni work at world-class companies

Amazon

Adobe

Google

Autodesk

Microsoft

Deloitte

Your career switch is one click away.

Ready to begin? Apply at adyapanschool.com or email us at support@adyapan.com

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