

#Empowering Minds

# Rooted | Recruited

ROOTED IN SKILLS, RECRUITED FOR SUCCESS.

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# Software Testing

TRANSFORMING POTENTIAL INTO PROFESSIONALS.

# About ITROOTS

At ITROOTS, we believe in transforming potential into professional excellence.

With over two years of proven success in Online training, ITROOTS now brings its industry-focused expertise OFFLINE , empowering learners across India to become job-ready professionals.

**Our mission** is to equip every learner with industry-ready skills, hands-on experience, and career confidence through AI-integrated, project-based learning.

## Why Choose ITROOTS?

Choosing the right training partner can define your career and at ITROOTS, we turn your goals into guaranteed outcomes.

### Why learners and employers trust us:



**100% Placement Guarantee:** We ensure every learner achieves their career goal.



**Refund Guarantee:** If we don't deliver as promised, your investment is safe.



**Post-Placement Support:** Continued guidance even after you're hired.



**Lifetime Career Assistance:** Ongoing mentorship and growth support



**Project-Oriented, AI-Integrated Training:** Learn through live, industry-level projects.



**Expert Mentorship:** Trainers with 10+ years of industry experience



**Daily 5-6 Hours of Practical Training:** Focused, hands-on sessions.



**Regular Assessments & Mock Interviews:** Build confidence before stepping into interviews.

*At ITROOTS, you don't just learn, you build, apply, and grow with every step.*

# Program Overview

The Java Full Stack Development (AI-Integrated) Program is a complete 6-month career transformation journey designed to make you an industry-ready developer.

You'll learn to build applications from scratch to mastering frontend, backend, and database development, while integrating AI tools that enhance productivity, debugging, and real-world problem-solving.

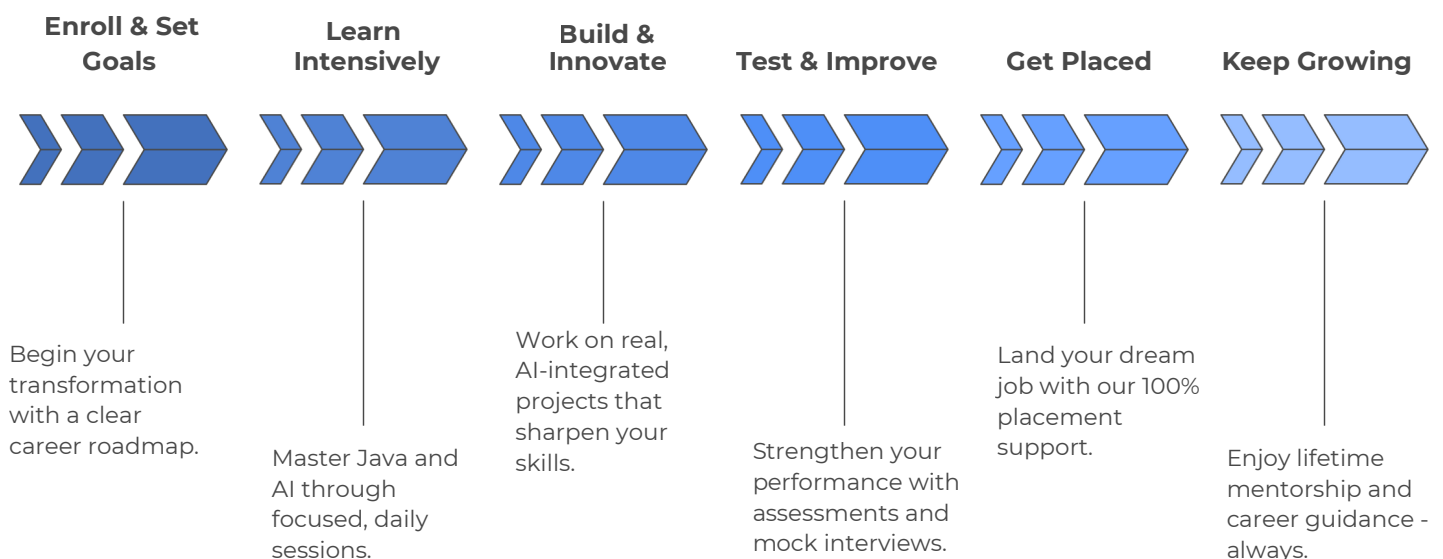
**Duration:** 6 Months

**Mode :** Online / Offline

**Ideal for:** Graduates, Job Seekers, and Working Professionals

## The Learning Journey

Every learner at ITROOTS follows a path that ensures real progress and measurable results:



# Software Testing Syllabus

## MODULE -1

### IT Basics

- What is SDLC?
- Types of SDLC Models
- Waterfall, Spiral, Prototype, V-model, Hybrid Derived Roles and responsibilities of IT resources
- JAVA BASICS
- Introduction to Java o Data Types, Variables, Strings, Operators Control & Looping statements o OOP's – Class, Object, Inheritance, Polymorphism, Abstraction, Encapsulation
- String class, Collection Framework o Exception Handling, Multithreading
- Data Types, Functions/methods, static/Non-static, Operators, Constructors, IIB/SIB

### Manual Testing

- Types of Testing
- Types of requirements
- TEST CASE AND SCENERIOS
- Test case design techniques
- STLC
- Test Management Tool
- Test Plan • Defect Tracking
- Projects • ISTQB Foundation
- Introduction to Mobile Application Testing
- Resume Building
- HR Classes

### Agile

- Understanding user stories
- How to give user story points
- What should be the format of user stories?
- How we do planning poker activity
- Explanation on product back log
- Explanation on Sprint backlog
- What is scrum?
- Explanation on Scrum team
- Purpose of standup meetings
- What we do in sprint planning
- Role of product owner
- Role of Scrum master
- Explanation on why team size should be between 6-9
- Explanation on why sprint duration should be 2 – 4weeks.
- Sprint retrospect meetings
- What are burn down and burn up charts?
- Why KANBAN charts are used.
- Advantages & Dis-Advantages

### SQL

- Syntax
- Datatypes, Operators
- DDL, DML, DCL
- CONSTRAINTS, FUNCTIONS

### SOFTSKILL

- Communication skills
- Group discussion
- Writing skills
- Interview skills
- Resume writing

## MODULE-2

### SELENIUM

- What is automation?
- Different automation tools available in market
- When do go for automation?
- How to configure selenium jars in eclipse.
- Architecture of selenium WebDriver
- Explanation on various HTML tags and attributes
- Different types of locators in Selenium
- Automating several fields of web application live online.
- Button
- Link
- Text field
- Radio button
- Checkbox
- Dropdown box
- Searchbox
- Launching and interacting different browsers in selenium WebDriver Different ways to perform navigation in selenium WebDriver.
- Difference between close and quit.
- Performing synchronization in selenium
- Handling multiple windows in selenium
- Taking screen shots in selenium
- Automating file upload
- Explanation on Robot class
- String selection class • Clipboard
- Synchronization practical usage while uploading file
- Automating select boxes using select class
- Navigating options in a browser
- Performing data driven testing in selenium by storing data on excel file using POI API



# Software Testing Syllabus

- Properties file
- What is Junit?
- Annotations of Junit
- Developing check points with Junit and Selenium
- Parameterizing test using Junit.
- Developing Build.xml
- Running test in batch
- Generating HTML based reports

## TestNG

- Annotations of TestNG
- Developing check points with TestNG and Selenium
- Verifying page tile
- Verifying page text
- Verifying edit box
- Verifying links
- Verifying buttons and many more
- Parameterizing test using Junit.
- Importance of xml file in TestNG configuration
- Data provider Annotation
- Parameterizing test cases
- Listeners interface in TestNG Framework
- Running tests in parallel and generating reports
- Include and exclude mechanism to control test cases.
- Selenium Grid
- Auto IT
- Log4j

## Maven

- Importance of Maven in FW development
- Understanding terminologies in Maven
- Creating Maven project and exporting in Eclipse
- Understanding POM.xml file and its dependencies
- Integration of TestNG with maven

## Aptitude

- Number system, percentages, profit & Loss, simple interest
- Time And Work, Time Speed and Distance, Permutation and Combination, Probability, Geometry
- Number Series, Coding Decoding, Directions, Blood Relations, Puzzle Based Problems, Cube & Dice, Set Theory etc.

## MODULE-3

### Jenkins

- Importance of Jenkins in Test Frameworks
- Install and configure Jenkins.
- Configuring Jenkins settings and workspace
- TestNG Reporting plugin into Jenkins jobs.
- POM xml file code

### Project

- Project execution work
- Write Test Plan
- Understanding requirement and identifying scenarios
- Write / review / excuse Testing Cases in Quality Centre
- Reporting defect in Bugzilla
- Performing smoke testing
- Performing functional, integration and system testing
- Performing adhoc testing, exploratory testing etc.
- Performing security testing
- Preparing STCM
- Preparing traceability matrix
- Preparing monthly status reports
- Validating data in the back-end database using SQL
- Attending daily stand-up meetings.
- Analyzing burn down chart

## MODULE-4

### API And Performance Testing

- POSTMAN
- RESTASSURED
- JMETER
- LOADRUNNER

## MODULE-5

### 2 Projects

- Student Management System
- Product Inventory Management System

# Our Role in Your Success

At ITROOTS, our commitment goes beyond teaching. We partner with you throughout your career journey. From learning the latest technologies to securing your dream job, we make sure you're guided, supported, and ready for real-world success.

## 1. Skill Advancement & Technology Mastery

We train you in the most in-demand tools and technologies used by leading IT companies.

You'll master:

- Frontend: HTML, CSS, JavaScript, Bootstrap, React / Angular
- Backend: Core Java, Spring Boot, Hibernate
- Database: MySQL, Oracle
- Tools & AI: Git, JIRA, Jenkins, AI-powered coding tools
- Practices: Agile, SDLC, MVC Architecture



Each session combines concepts with hands-on practice, ensuring you graduate with industry-ready skills and real project experience.

## 2. Continuous Career Support

We don't just train you; we prepare you to thrive.

Our dedicated career team provides:

- Resume & LinkedIn optimization
- Technical & HR mock interviews
- Personalized career counselling
- Access to exclusive job networks and hiring partners
- Lifetime mentorship for continuous growth and upskilling



## 3. Guaranteed Placement Assistance

Your success is our goal.

Through our Hire → Train → Deploy model, we ensure every learner is:

- Trained with AI-integrated, project-based sessions
- Evaluated through tests and mock interviews
- Deployed into top IT companies with complete career readiness

With our 100% Placement Guarantee and Refund Assurance, your journey with ITROOTS is result-driven, transparent, and focused on success.



# Alumni Success Stories



ITROOTS is one of the best institutes for training and placement. The trainers are experienced, supportive, and always approachable. I completed my Full Stack Java Certification from ITROOTS and got placed as a Software Developer. Grateful to the entire ITROOTS team for their constant guidance.

~ Priya Wagh

Joining ITROOTS was the best decision for my IT career. In just six months, I learned Frontend, Backend, and Database technologies and got placed within a week after completing the course. The placement team is truly dedicated and helpful throughout the process.

~ Harsh Patil



ITROOTS is an excellent place for learning and placement. The team is very supportive and helps you build knowledge from the basics, even if you come from a non-IT background. Thank you, ITROOTS, for helping me start my career with confidence.

- Mayur Aware

250+ Success stories so far and counting  
visit our website for more success stories and get inspired

## Our Client Partners



and many more....

# Our Commitment

***“Rooted in Skills. Recruited for Success.”***

At ITROOTS, we promise outcomes, not just education. With 100% Placement Guarantee, Refund Assurance, and Project-Oriented Training, every learner becomes a professional with confidence and clarity. We prepare you for industry success with real skills, real projects, and lifelong support.

***Your growth doesn't stop at placement, it starts there.***

## Contact Us

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