



simplilearn

Automation Test Engineer

Master's Program

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About Simplilearn



About the Course

This course will advance your career as an automation test engineer. You'll learn top skills demanded in the industry, including GIT, Selenium, Jenkins, and JMeter to apply engineering to software development processes and build quality products.

The automation test engineer training program is designed to provide you with complete knowledge of software testing technologies such as Selenium Web Driver, TestNG, Maven, AutoIT, Selenium Grid, Appium, and Docker to help you build a robust testing framework.



About Software Development Industry

The global software engineering market is expected to grow to approximately USD \$37.4 billion by 2022, at a CAGR of 11.72 percent. Corporate initiatives focused on digital transformation will help drive tremendous demand for skilled software developers, which is reflected in current and future hiring trends. According to NASSCOM and USA Today, one million software development jobs will be added to the workforce by 2020 in India and 1.4 million jobs in the USA.

Many companies prefer to hire multi-skilled technology professionals like Automation Test Engineers. The average annual salary for an Automation Test Engineer is USD \$94,270 (ZipRecruiter).

Some additional interesting aspects of the software development industry:

- ✓ Junior developers are getting massive starting salaries compared to the last 20 years
- ✓ Upskilling is one of the most important priorities for developers today (Stackoverflow 2019)
- ✓ The phenomenal rise of consumer applications in both web and mobile is driven by the availability of open-source projects/libraries
- ✓ Smaller, quicker releases – which results in better productivity – is becoming a key for software product success. Automation Engineers are well-positioned to empower this trend.

Key Features



Comprehensive Blended Learning program



190 hours of self-paced learning



1 industry-aligned capstone project



360 hours of in-depth training



15+ in-demand tools and skills



The job-assist program included (India only)



178 hours of instructor-led training



14 lesson-end & 4 phase-end hands-on projects

Top Skills and Tools covered

- | | | |
|-------------------|---------------------------|------------------------------------|
| ✓ Agile(skills) | ✓ JUnit (tools) | ✓ Maven (tools) |
| ✓ Git (tools) | ✓ JMeter 5.0 (tools) | ✓ Ant(tools) |
| ✓ Java (skills) | ✓ Appium(tools) | ✓ JDBC (skills) |
| ✓ SQL(tools) | ✓ Docker (tools) | ✓ API Testing with Postman(skills) |
| ✓ Selenium(tools) | ✓ TDD with TestNG(skills) | |
| ✓ Jenkins (tools) | ✓ AWS (skills) | |

Program Outcomes

By the end of the program, you will be able to accomplish the following:

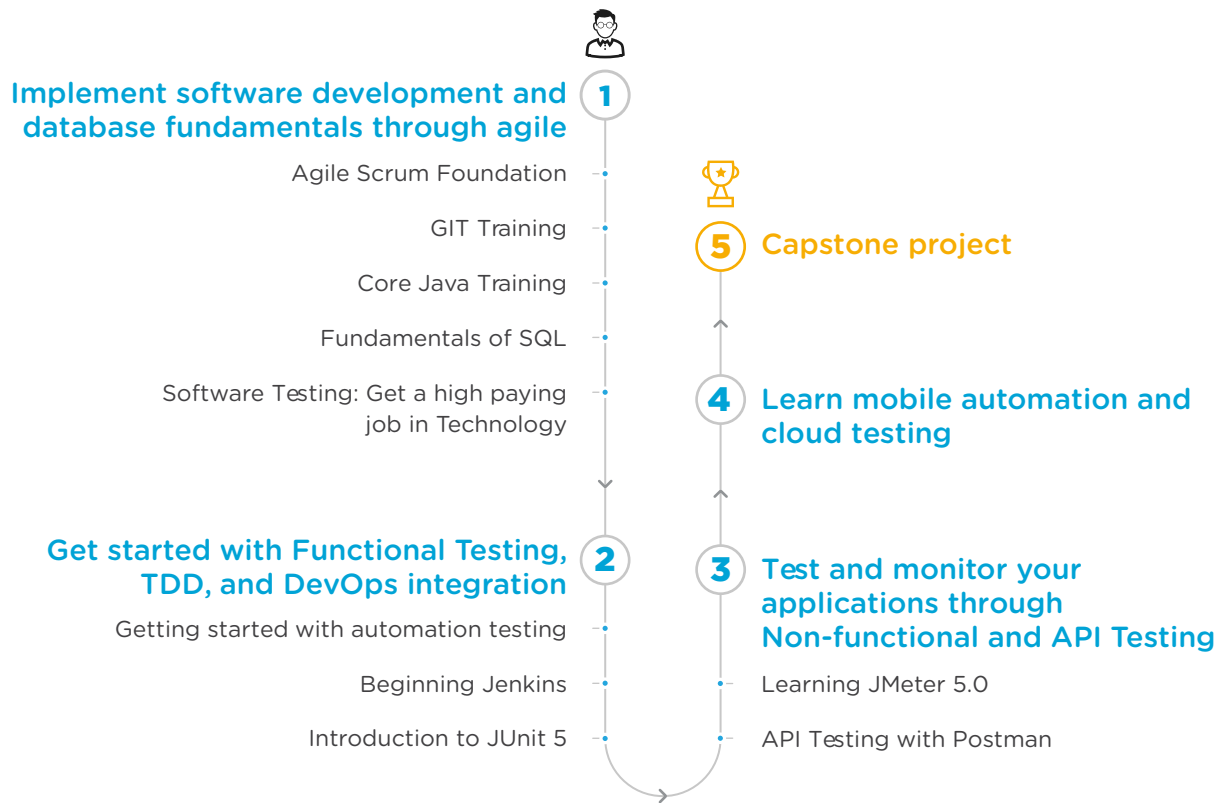
- ✔ Master software programming concepts and implement them in real-life
- ✔ Become an agile practitioner with the ability to quickly complete industry projects
- ✔ Build an end-to-end application from scratch and test it
- ✔ Test and deploy features seamlessly to production with minimal effort
- ✔ Build a running, industry-aligned project from scratch
- ✔ Complete 40+ topic-end, lesson-end, and phase-end projects

Who Should Enroll in this Program?

This Automation Test Engineer Course is designed for:

Freshers, software developers, IT professionals, engineers, test engineers, technical consultants, and analysts

Learning Path



STEP

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Implement software development and database fundamentals through agile

Course Learning Objectives:

After completing this phase you will:

- ✓ Understand the basics of agile methodologies and GIT
- ✓ Become familiar with Java fundamentals—variables, loops, data types, operators
- ✓ Make of SQL queries to maintain and analyze data in the database
- ✓ Comprehend software testing fundamentals and use cases

Skills and Tools Covered:

- ✓ Agile and Scrum
- ✓ Java
- ✓ Selenium
- ✓ Git
- ✓ SQL

Get started with Functional Testing, TDD, and DevOps integration

Course Learning Objectives:

After completing this phase you will:

- ✔ Understand what automation testing is and evaluate test cases using TestNG
- ✔ Work with reports using XML and Selenium Grid
- ✔ Execute CI/CD pipelines with Jenkins
- ✔ Get familiar with JUnit 5

Skills and Tools Covered:

- ✔ Selenium Grid
- ✔ TestNG
- ✔ JUnit 5
- ✔ Jenkins
- ✔ JSON

STEP

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Test and monitor your applications through Non-functional and API Testing

Course Learning Objectives:

After completing this phase you will:

- ✓ Execute and analyze test cases and understand non-functional testing with JMeter
- ✓ Perform hands-on API testing with Postman

Skills and Tools Covered:

- ✓ JMeter
- ✓ Postman

STEP

1

2

3

4

Learn mobile automation and cloud testing

Course Learning Objectives:

After completing this phase you will :

- ✓ Learn about Appium and how to automate mobile tests using Appium
- ✓ Deploy test cases in the cloud using DevOps

Skills and Tools Covered:

- ✓ Appium
- ✓ Docker
- ✓ AWS

Industry Project

The Full Stack Java Developer Capstone project will allow you to implement the skills you've learned in this program across domains such as e-commerce, food delivery, entertainment, and healthcare. With dedicated mentoring sessions, you'll know how to solve a real industry-aligned problem. You will receive hands-on experience developing an entire application from scratch and deploying into a pseudo-production environment. The Capstone project is the final step in the learning path and will help you showcase your expertise to employers.

E-commerce

Create a dynamic and responsive Java-based e-commerce web application and test it using technologies such as Java, Hibernate, MYSQL, Docker, Selenium, TestNG, and JMeter.

Certificates



About Simplilearn

Simplilearn is a leader in digital skills training, focused on the emerging technologies that are transforming our world. Our blended learning approach drives learner engagement and backed by the industry's highest completion rates. Partnering with professionals and companies, we identify their unique needs and provide outcome-centric solutions to help them achieve their professional goals.



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