

Test Automation Engineer

Course Title	Course Description	Hours
Java Programming	<ul style="list-style-type: none">▪ Flow charts & Intro to programming▪ Introduction to OOP▪ Java Programming	30
Testing Automation	<ul style="list-style-type: none">▪ Automation Framework▪ Selenium IDE / WebDriver▪ Logging Infrastructure▪ Cross-Browser Testing Using Selenium Grid 2.0	50
Total		80

Main syllabus subjects:

Course Introduction

Intro to programming

- Introduction
- Eclipse IDE
- Flow control with Java

OOP & Java Programming + Java Web & REST

- Concepts
- Class & Objects
- Inheritance
- Encapsulation
- Polymorphism
- Interfaces
- Advanced class features
- Java Identifiers
- Static, final, abstract & interfaces

Testing Automation:

- Set Up WebDriver with Eclipse
- Maven project & Dependencies
- Understanding the Selenium components
- Familiarity with web automation projects architecture
- WebDriver Commands
- Basic understanding of test automation framework (NGTest)
- Understanding the WebDriver API
- Understanding WebDriver locators (XPath and CSS) & Tools
- Alerts & Windows
 - Wait commands
 - Advanced Webdriver waits
 - Switch commands
 - Handling Iframes using Selenium WebDriver

- Actions & Robot Class
 - Drag and Drop action in Selenium
 - Mouse Hover action in Selenium

Selenium advanced:

- Object Repository
- Page Object Model
- Page Object Factory
- Log4j Logging
- TestNG Framework
- TestNG Reporters & Asserts
- ReportsNG

Selenium Grid:

The **Selenium Grid** is a testing tool which allows us to run our tests on different machines against different browsers

- Selenium Grid
- Selenium Grid – How to Easily Setup a Hub and Node