SOFTWARE TEST AUTOMATION ENGINEER PROGRAM

Ramaq Chools
Consulting &Training

Email: info@ramaqchools.com **Phone:** +966536834733 **Website:** ramaqchools.com

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INTRODUCTION TO SOFTWARE TEST AUTOMATION

Hello, future software test automation expert! The Software Test Automation Engineer course teaches you how to use specialized tools and techniques to automate the testing process of software applications. You will learn to design, implement, and execute automated tests for various software types, including web, mobile, desktop, and embedded systems. You will also use testing frameworks such as Selenium, Appium, TestNG, and Cucumber to perform functional, performance, security, and usability testing. By the end of this course, you will be able to create and maintain effective test automation solutions that can enhance software development quality, reliability, and efficiency.

Why Choose Chools?

Numbers That Speak for Themselves:

- 10,000+ Successful Alumni: Join a network of impactful professionals.
- 95% Job Placement Rate: Secure your future with Chools' proven track record.
- 20+ Years of Excellence: Trust in a legacy of education and industry expertise.
- 200+ Industry Partnerships: Leverage our connections for real-world insights and opportunities.

What Sets Us Apart?

- **Expert Instructors:** Learn from industry veterans with hands-on experience.
- **Hybrid Learning Model:** Balance online flexibility with in-person engagement.
- **Comprehensive Curriculum:** Stay ahead with courses designed meet market demands.
- **Community and Networking:** Be part of an active community of learners and professionals.

Who Can Apply?

Eligibility Criteria:

- A bachelor's degree or equivalent in computer science, engineering, mathematics, or a related field.

- A solid understanding of software testing concepts, methodologies, and techniques.
- A working knowledge of programming languages, such as Python, Java, C#, etc.
- Familiarity with test automation tools, such as Selenium, TestNG, Cucumber, et

Program Overview

The Software Test Automation Engineer Program at Chools provides an extensive education in test automation. Our curriculum covers a wide range of topics to ensure a thorough understanding, combining theoretical knowledge with practical, hands-on experience.

Learning Mode:

- **Hybrid Learning Model:** Combines online learning with in-person sessions for flexibility and interactive engagement.
- **Interactive Sessions:** Includes live webinars, workshops, and Q&A forums with expert instructors and peers.
- **Self-paced Learning:** Access course materials anytime, allowing you to learn at your own pace.

Skills Learned

- **Software Testing Fundamentals:** Understanding core testing concepts and methodologies.
- **Test Automation Tools:** Selenium, Appium, TestNG, Cucumber for automated testing.
- **Programming Languages:** Python, Java, C#, etc., for writing test scripts.
- **Functional Testing:** Ensuring software features work as intended.
- **Performance Testing:** Evaluating software performance under various conditions.
- **Security Testing:** Identifying and addressing security vulnerabilities.
- **Usability Testing:** Assessing the user experience of software applications.

Job Positions and Opportunities

- **Career Paths:** Test Automation Engineer, Software Tester, QA Engineer, Test Engineer, Automation Architect, Performance Tester.
- **Industry Demand:** High demand across various sectors, competitive salaries, and strong growth potential.

Key Industry Verticals

- **Skill Application Areas:** Technology, Finance, Healthcare, Retail, Manufacturing, Marketing, Telecommunications, Education, Logistics and Supply Chain, Government and Public Services.

Curriculum Highlights:

- **Fundamental Knowledge:** Core principles of software testing.
- **Advanced Techniques:** In-depth understanding of test automation tools and techniques.
- **Real-World Applications:** Practical projects and case studies.
- **Capstone Project:** Integrating all your skills and knowledge.

Professional Development:

- **Continuous Learning:** Stay updated with the latest trends.
- **Networking Opportunities:** Connect with industry experts, peers, and alumni.
- **Ethical Considerations:** Learn best practices and industry standards.

By completing the **Software Test Automation Engineer Program** at Chools, you'll gain the skills, knowledge, and certification needed to excel in software test automation, positioning yourself as a valuable asset to any organization.

Program Objectives

- Master technical skills in software test automation.
- Implement advanced testing techniques and frameworks.
- Explore functional, performance, security, and usability testing.
- Address real-world testing challenges.
- Understand best practices in test automation.
- Foster continuous learning.
- Encourage teamwork and collaboration.
- Prepare for advanced roles in software testing.

Expected Outcomes

- Proficiency in test automation tools and techniques.
- Practical experience through hands-on projects.
- Strong analytical and problem-solving skills.
- Application of best practices in test automation.
- Innovation in software testing solutions.

PROGRAM OUTLINE

Stage 1: Fundamentals of Software Testing

1. Introduction to Software Testing
- Core principles, concepts, and methodologies.

2. Manual Testing Techniques
- Basics of manual testing processes and techniques.

Stage 2: Test Automation Tools and Techniques

3. Selenium Framework
- Designing, implementing, and executing automated tests.

4. Appium for Mobile Testing
- Automating tests for mobile applications.

5. TestNG Framework
- Advanced testing techniques and test management.

6. Cucumber for Behavior-Driven Development (BDD)
- Writing and executing BDD test scenarios.

Stage 3: Practical Applications

7. Functional Testing
- Ensuring software features work as intended.

8. Performance Testing
- Evaluating software performance under various conditions.

9. Security Testing
- Identifying and addressing security vulnerabilities.

10. Usability Testing
- Assessing the user experience of software applications.

Stage 4: Capstone Project

11. Integration of Learned Skills
- Apply tools and techniques to real-world test automation projects.

12. Advanced Test Automation Techniques
- Deepening knowledge and exploring advanced testing capabilities.

Elective Modules

13. Data Ethics and Privacy
- Ethical considerations, privacy laws, compliance strategies.

14. Predictive Analytics in Testing
- Leveraging predictive analytics for test automation.

PROGRAM OUTLINE

15. AI for Test Automation
- Implementing AI solutions in testing processes.

16. Cloud Testing Solutions
- Deploying test automation solutions on cloud platforms.

17. Test Automation Project Management
- Leading test automation projects, ensuring successful delivery.

18. Big Data Testing
- Testing big data applications and ensuring data integrity.

Enrollment Now Open!

Take the first step towards becoming a certified Software Test Automation Engineer. Enroll in our **Software Test Automation Engineer Program** and enhance your career with Chools.

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