



Tallinn Learning OÜ

Approved on 20.10.2025

Name of the Training Programme

QA Engineer for Automated Software Testing (TypeScript & Playwright)

Field of Study

153513 Software and application development and analysis

Purpose of Training

The goal of the course “QA Engineer for Automated Software Testing using TypeScript & Playwright” is to develop comprehensive knowledge and skills in test automation using Playwright and TypeScript.

Learning Outcomes

Upon completion of the course, the learner:

- Understands the principles and techniques of test design in the context of automated testing
- Uses modern tools for creating automated tests for APIs and web applications
- Plans the test automation process, including setting goals and preparing documentation
- Performs automated UI and API testing, ensuring software stability and quality

Target Group

The course is intended for manual testers and other IT specialists who wish to improve their qualifications and acquire skills in automated software testing.

Entry Requirements

Participation requires basic knowledge of manual testing and an understanding of client-server applications and API operating principles.

Language of Instruction

English

Training Volume

168 academic hours

- **Independent work:** 112 academic hours
- **Instructor-led (auditorium) work:** 56 hours (28 online sessions × 2 academic hours)

Duration of Training

5 months

Course Content

Module 1. Test Automation. TypeScript and Playwright

Block 1: Introduction to Test Automation

1. Principles of test automation and the testing pyramid
2. Introduction to JavaScript and TypeScript
3. Data types, variables, and constants
4. Classes and methods
5. Playwright — creating the first project

Block 2: Unit Testing and API Testing

6. Creating unit tests for a simple application
7. Test lifecycle annotations in Playwright
8. Principles of API testing
9. HTTP requests and responses
10. Creating API tests for an application with authentication

Block 3: Web Application Testing

16. Introduction to UI testing
17. Core working methods for UI tests
18. Page Object and Singleton patterns
19. Extending UI tests and increasing coverage
20. Component tests and server-side execution
21. Final test and course summary

Module 2. Preparation for Employment

Block 4: Career Development

1. Preparing a CV and creating a LinkedIn profile
2. Preparing soft skills for an interview
3. Mock interview
4. Motivation letter and job offer discussion

Learning Methods

- **Instructor-led work:** lectures and discussions online (Zoom platform)
- **Practical assignments:** independent work in GitHub and IntelliJ IDEA
- **Independent work:** reading materials and watching training videos

Learners can ask questions and receive feedback from the instructor.

Learning Environment

Lessons are conducted online via Zoom in smaller groups.

Study Materials

- Lecture materials
- Test documentation templates
- Training environments for UI and API testing

Completion Requirements and Issued Documents

To successfully complete the training, participants must attend at least 80% of the lessons and complete all assignments.

Issued documents:

- Certificate,
- Confirmation of participation, or
- Attendance record — depending on results.

Instructors

Daniil Borodin — practitioner, QA automation engineer, over 15 years of experience

Andrew Khranchenkov — QA automation engineer, over 5 years of experience