

ITLEO

Advanced JavaScript course

Online

Intermediate / Advanced

26 lessons, 2 lessons per week

We study the following technologies:



Jenkins



Selenium



Rest



Git



Continuous Integration



JavaScript

More details about the course:

This course is designed for those who already have basic JavaScript knowledge and want to deepen their expertise. We will look at complex language mechanisms, asynchrony, modern ECMAScript standards, and architectural approaches, which are the basis for professional web application development. The course provides not just new knowledge, but the ability to effectively and competently build complex projects in JavaScript.

Course program

Block 1: Modern JavaScript (ES6+)

- Key innovations of ES6+: let / const, template strings
- Destructuring arrays and objects
- Arrow functions, default parameters
- Classes, modules (import / export), scope

- Working with arrays: map, filter, reduce
- Control work by block

Block 2: In-depth understanding of JavaScript

- Execution context and scope
- this in different contexts
- Closures
- Prototype inheritance, prototype chain
- Creating constructors, object methods
- Memory structure, working with call stack

Block 3: Asynchrony and API

- Event Loop: how asynchronous code works
- Promise: creation, processing, errors
- async/await: use, errors, best practices
- Using fetch, working with API
- RESTful API: GET, POST, PUT, DELETE requests
- Error handling, authentication via tokens

Block 4: Architecture and design patterns

- SOLID principles for JS
- Basic patterns: Module, Singleton, Factory
- Structuring code in large applications
- Dividing the application into modules and components
- Application state and its management without frameworks

Block 5: Testing and team development

- Basics of JavaScript code testing
- Unit tests: Jest or Mocha (the choice depends on the group)
- Writing functionality tests
- Working with Git: Pull Requests, Code Review
- Practice of team interaction on GitHub

Block 6: Final project

- Development of SPA (single-page application) without using frameworks
- Working with API, local state storage

- Full implementation of the architecture in pure JavaScript
- Project defense before the teacher

Who is this course suitable for?

- Junior Front-end developers who want to move to the Middle level
- Professionals who want to structure and deepen their knowledge
- Developers who want to create scalable applications without frameworks

What will be the outcome?

- Implemented SPA project
- Deep understanding of JavaScript "under the hood"
- Portfolio for resume
- Interview preparation for the Middle level

Career prospects

After the course, you will be able to apply for the position:

- **Middle Front-end Developer (JavaScript)**
- Average salary in Ukraine: \$1500 – \$2500

This knowledge is the basis for further mastering React, Vue.js, Angular and creating complex interfaces

Course bonuses

- English for IT professionals
- Test technical interview
- HR consultation: resume writing and interview training
- Access to the ITLEO student and alumni community