



## Front-end development

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## Course overview

### Intensity

**3 times/week**

lessons every week

**8 hours**

of practice with the  
teacher every week

**20 hours/week**

to read the theory  
and complete  
home assignments

### In total

**50 lessons**

**4 months**

**132 hours**

of intensive studying

of practice with teacher

**~70+ hours**

completing homework

**~90+ hours**

studying theory

**Bonus: 4 hours**

Career counseling —  
after the course is finished

# Requirements

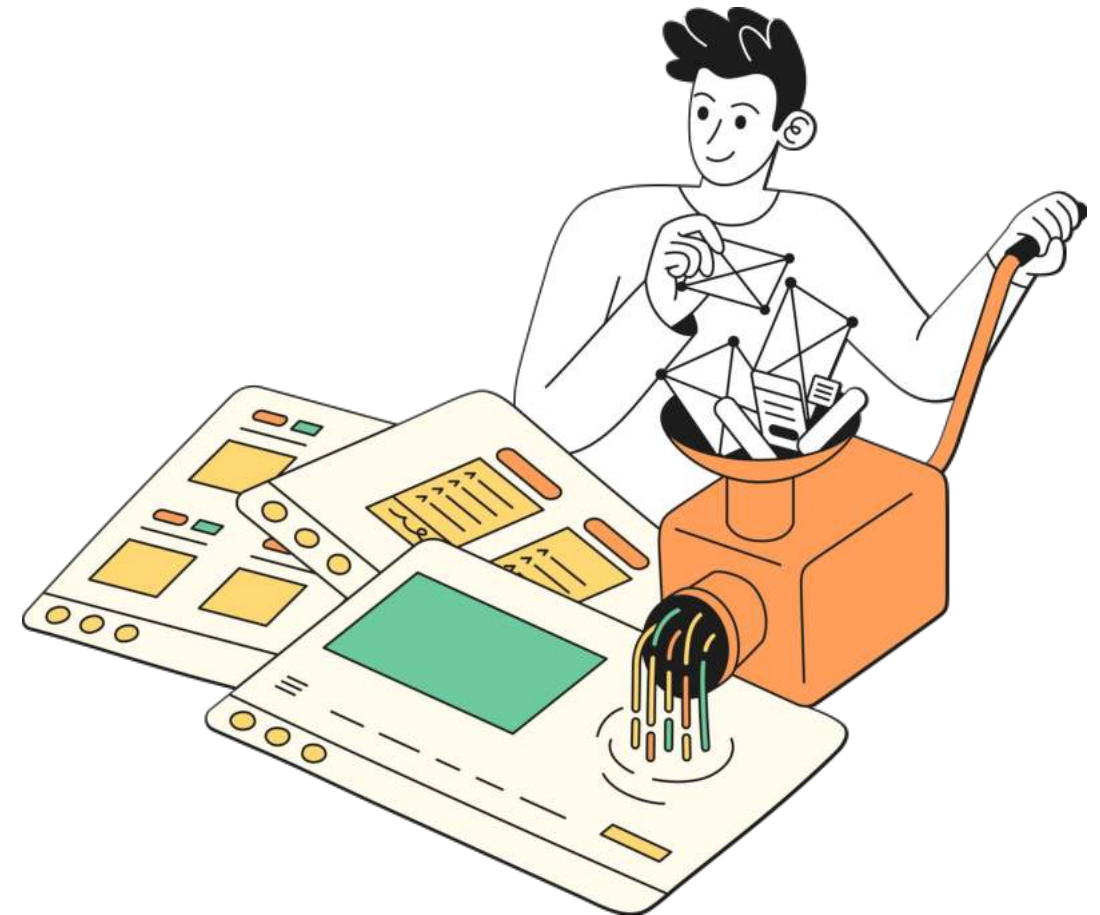
## Requirements for students:

- You know your goals and motivation for completing the course.
- You can allocate ~20 hours per week for studies.
- Your level of English allows you to read theory resources, understand the teacher's explanation and be able to communicate.
- You can find the information you need online and get the most out of it.
- You know how to check the accuracy and relevance of information.
- You are on friendly terms with your computer, so you can find the task manager or install Zoom on your own.
- Knowing the basics of HTML and CSS will come as an advantage.

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## PC requirements:

2GHz Processor (min 2 core, 4 threads) 8 GB RAM; 256 GB disk SSD; webcam (720p) and microphone.



## Teachers. Practicing specialists who care about students

- All our teachers are Middle+ or Senior practicing specialists of their fields.
- Each teacher passes three stages of the interview: assessment of technical skills, presentation of teaching skills, and testing for compliance with our values.
- There are 70+ teachers in our community who help each other grow through in-house workshops, webinars, and knowledge sharing.



# This is the course for you if...

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## You're starting or switching a career

You'd like to enter the tech world, and front-end development suits your needs the best.

## You'd like to switch to development from another tech profession

You already know the field, have already tried to work in other tech specialties, and want to go into development. Your goal is to understand where to start, get some relevant knowledge, and understand the different branches of development.

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## You've run into a dead-end with self-education

You may have tried web layout, you're following trends in development and paying attention to new tendencies. You'd like to gather your knowledge and advance your skills, understand what is relevant, and where to head next.

## You're a PM, a BA or a product owner

You're already working in IT and aiming to understand developers better. You want to speak your colleagues' language, gain technical knowledge to back up your decisions, and comprehend the code.

## The studying process



1. Theory — on your own  
*Find useful links in our LMS  
and get ready for class*



2. Practice in group  
with the teacher



3. Do the home  
assignment

## Lesson flow

- Analyzing questions about theory which the students studied independently via LMS and Beetroot Academy materials
- Feedback on the homework from your teacher and an overview of typical questions
- Demonstration of practical cases and examples by the teacher
- A practical assignment for the group. The teacher gives personal feedback to everyone

## Your weekly schedule\*

Mon	Learning theory = ~ 1,5 hrs + practice lesson = 2 hrs
Tue	Home assignment = ~ 2-3 hrs
Wed	Learning theory = ~ 1,5 hrs + practice lesson = 2 hrs
Thu	Home assignment = ~ 2-3 hrs
Fri	Learning theory = ~ 1,5 hrs
Sat	Practice lesson = 4 hrs
Sun	Home assignment = ~ 2-3 hrs

An average  
of 20 studying  
hours a week\*

\*This is the average amount of time per week for successful course completion. Some weeks would require more time than others.

\*\*Please note that your schedule distribution may be different depending on what your group agrees on.






## Tools used in the course

Visual Studio Code is a source-code editor made by Microsoft for Windows, Linux and macOS. You can download a free version from [the official website](#).

Git is a version control system to manage the changes in code you will write.

Figma and Photoshop\* are graphic editing software for working with design files. There will be design templates in these apps for you to develop the web layout.

Core tools in the course: 

Supplementary tools:   

*\* Beetroot Academy recommends using free versions of all tools. Their trial versions are enough to complete the course successfully*



# Modules

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Module 1. HTML/CSS

25 topics. 66 hours

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Module 2. JavaScript

14 topics, 38 hours

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Module 3. Front-end

11 topics, 28 hours

# Course program in detail

## Module 1: HTML/CSS

25 topics, 66 hours

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1. Introductory lesson
2. What is a website. Work process setup. Introduction to HTML.
3. Git
4. HTML5 tags
5. Introduction to CSS
6. CSS Box Model
7. CSS selectors
8. Figma
9. Fonts in web, Font Face
10. Flexbox
11. BEM Methodology
12. CSS Position Transform
13. Form building
14. Scalable Vector Graphics (SVG)
15. Retrospection
16. CSS Animation
17. CSS Grid Layout
18. Practice
19. Cross-browser compatibility
20. Post- Pre- Processors
21. RWD
22. Adaptive Graphics
23. Responsive navigation
24. SEO
25. Project 1. A simple website for your portfolio

# Course program in detail

## Module 2: JavaScript

14 topics, 38 hours

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25. Introduction to JavaScript

26. Types of data and operators

27. Loops and conditions

28. Functions

29. Objects

30. Arrays

31. Document Object Model (DOM)

32. Events

33. Introduction to jQuery

34. Slick Slider

35. AJAX

36. Customized maps with an example of Google Maps API

37. Web storage

38. Project 2. Architecture - basic web-site + JS

# Course program in detail

## Module 3: Front-end

11 topics, 28 hours

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39. Gulp. Introduction to Webpack

40. Classes

41. Classes. Inheritance

42. Introduction to React

43. React state and props. Lifecycle methods

44. Lists and conditional rendering

45. Stateful vs stateless components. Forms, events. Popular libraries for React

46. React hooks

47. React routing

48. Project 3. Responsive website with JS

49. Graduation

Technologies that you'll learn in the course:



HTML



CSS



JavaScript



React

# Your future CV will include



Role:

Trainee/junior front-end  
developer

Education:

Front-end development course at  
Beetroot Academy

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## Experience:

- using JavaScript (primitives, objects, arrays, functions)
- working with Git and GitHub
- creating CSS animations, transformations and using other styles
- creating responsive websites
- using Figma
- manipulating the DOM tree
- working with web servers
- creating web applications with Vue.js

## Skills & knowledge:

- applying CSS-styles and visual effects to the layout
- using pre- and post-processors
- working with basic JavaScript tools
- using HTML and skills of semantic markup
- understanding the logic of client-server architecture when building applications
- working with console and DevTools, check the code for errors, perform debugging

## Information about the authors



Oleksii Kalyuzhny

10 years of professional working experience

### Skills and technologies:

HTML; CSS; WordPress; JavaScript; Joomla; AJAX;  
Git; Lamp; MySQL; PHP; Joomla;



Oleksandr Vasiliev

9 years of professional working experience

### Skills and technologies:

Git, Gulp, Webpack, TypeScript, WordPress

### Projects and companies:

Kinect application for McDonald's for the 2012 UEFA  
European Championship, Interactive Floor Platform

## Career counseling

Job search and interview preparation are your next steps in building a successful tech career after you master the hard skills of a specialization.



Completing the career counseling module at Beetroot Academy will help you:

- create a competitive CV and cover letter and receive feedback from our consultant on demand;
- fill out your LinkedIn profile to attract employers and discover the main possibilities of this social network;
- understand how to find a dream job posting and respond to it;
- learn about the best practices for preparing and passing an interview, and practice answering some tricky and unexpected questions from recruiters.



# Graduation

## Before completing the course

Before completing the course, students choose a topic to realize themselves as Front-End Specialists. One will decide to create a website for your portfolio; another will prefer to design an interface for a mobile application. Others will want to realize an SPA-application using the REST API, or not to waste time and show themselves as a novice freelancer and launch the first commercial project.

## After the course

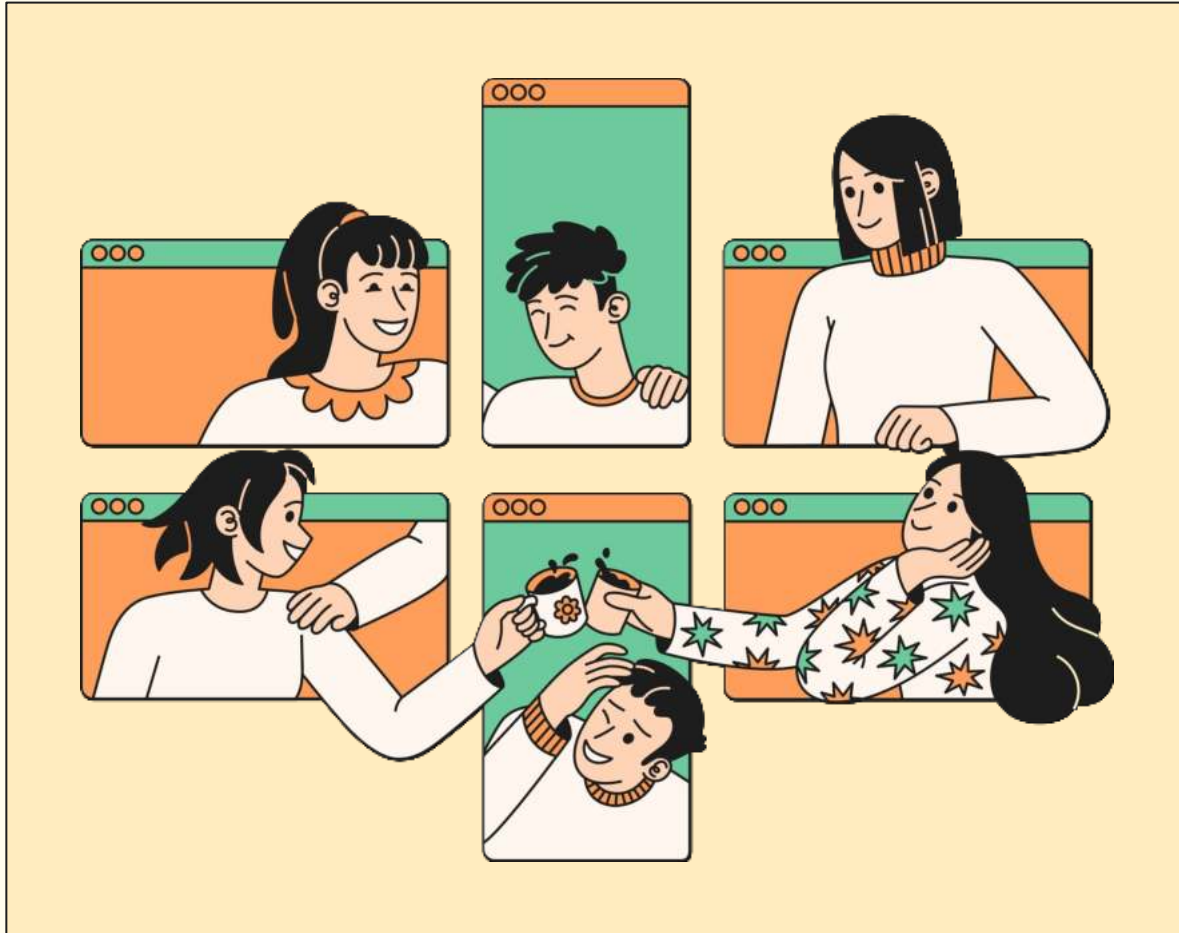
After the course, we share contacts of students and (if applicable) a video recording of final projects presentations with partner companies to promote employment. We take into account the students' consent for sharing personal data as well as their course results.

At the end of the course, you will receive an e-certificate of completion\*.



*\* given you do the homework and the final project*

## Graduates community



After graduation, we do not say goodbye, but invite you to join the community of graduates. This is a caring space for communication and mutual support with the career development in tech.

### What will you get?

- Vacancies from partners
- Tips for professional development
- Mentoring from experienced alumni
- Activities for the soft and hard skills development
- Communication with tech professionals

## Beetroot Academy's alumni



Yuliia Holub

“

Beetroot Academy is an excellent example of a new era of education where every teacher cares about students' development. Students' results and interests are a top priority. There's a friendly atmosphere and no hierarchy.



Anton Tymoshenko

“

Super cool courses. Lots of interesting practical tasks. Exceptional team and great atmosphere. I'm grateful for the knowledge, experience, and networking.



Artem Melnyk

“

Great school with individual approach to each student. If you want to learn something new or progress in a chosen field, this is the place for you. Highly recommend.



Olha Ivanytska

“

Four months of training flew by. It was so informative, friendly, and fun that I'm bound to want some more! Very grateful for a solid base and desire to never stop learning.

## About Beetroot Academy



Beetroot Academy is a Swedish-Ukrainian EdTech company on a mission to help people around the globe have great careers in the digital economy.

Providing affordable education with industry experts in live classes, we've trained over 7000 tech specialists and built a network of 200+ hiring partners since 2014.

Beetroot Academy is a social enterprise and a part of the impact-driven Beetroot Ecosystem that consists of a tech company, thousands of alumni, and a wide network of partners.

[beetrootacademy.com](https://beetrootacademy.com)

# Trusted by recognized companies and institutions



## Our advantages

### Teaching methodology

All course programs are developed by practicing specialists and meet the market requirements. We apply the flipped classroom method, where our students study theory at home, and then come to classes and practice with the teacher.

### Agile, student-centered approach

Beetroot Academy is a Swedish-Ukrainian school. There is no strict hierarchy within our team, and we make sure to keep the atmosphere friendly. We want you to feel relaxed in class – students and teachers are equal, and you can ask any questions.

### Social impact driver enterprise

Our goal is world-class high-quality tech education. Students are interviewed and tested – that's how we select the most motivated candidates. The course fees cover our expenses, and the income is invested in the Academy's further development.



[beetrootacademy.com](https://beetrootacademy.com)