

Web Developer track

Syllabus

10 months

Each sprint lasts 2-3 weeks and takes up approximately 20 hours of study per week.

Introductory course

This course will take you through the fundamentals of web development by covering the basics of HTML and CSS. You'll do this by working on a couple of mini-projects on the interactive platform, including a playlist cover and a landing page.

- Chapter 1: Introduction to HTML and CSS
- Chapter 2: Basic CSS Properties
- Chapter 3: More CSS
- Chapter 4: Your First Independent Project

Intro Course

1 week,
10 hours

0

How the Educational Process Works at Practicum

Learn how the Web Development program is structured. Find out about organizational aspects of the training process and setting up your computer to write code.

3 hours



1

Advanced HTML and CSS

In this course, you'll discover just how much HTML and CSS have to offer by working through topics such as flexbox, animations, forms, positioning elements, and embedding media content. You'll also learn how to organize your code and structure your projects using the BEM Methodology, as well as how to manage your project with Git.

+1 projects for
your portfolio
6 weeks, 80 hours

- Chapter 1: Flexbox
- Chapter 2: Advanced HTML and CSS Capabilities
- Chapter 3: BEM Methodology
- Chapter 5: Positioning Elements
- Chapter 6: File Structure and File Paths
- Chapter 7: Git for Beginners
- Soft Skills: How to Set Goals
- PROJECT 1
- Chapter 7: Useful Things to Know Before You Get Started
- Chapter 8: Embedding Content
- Chapter 9: Animation and Special Effects
- Chapter 10: Forms
- Chapter 11: File Organization with BEM
- Chapter 12: Advanced Git
- Bonus Lesson: Debugging in Web Development
- Soft Skills: How to Think Like a Developer
- Soft Skills: Growing From Your Mistakes
- PROJECT 2

2

Adaptive Web Design and Working with Layouts

Here, you'll get to see what kind of design specs professional web developers work with and how to turn them into websites. You'll also build interfaces using Grid Layout technology while ensuring that your site looks good on all devices, from desktop computers to smartphones.

+1 project for
your portfolio
3 weeks, 40 hours

- Chapter 1: Working with Design and Specifications
- Chapter 2: Design in a World of Ever-Changing Devices
- Chapter 3: Grid Layout
- Chapter 4: Developing and Interface for Different Devices
- Chapter 5: Expert Git
- Soft Skills: Sketchy Briefs and Incomplete Design Specs
- Soft Skills: How to Incorporate the Learning Process in Your Life
- PROJECT 3

1-week break

3

Basic JavaScript and Working with the Browser

6 weeks,
120 hours

This is where programming truly begins. Fully immerse yourself in JavaScript as you learn about the different data types you can work with and how to use them with statements, loops, and functions. Then, put theory into practice to create a fully functioning interactive website.

- Chapter 1: JavaScript Crash Course
- Chapter 2: Under the Hood of a Browser: DOM
- Chapter 3: Debugging
- Chapter 4: Perfecting Git Skills
- Soft Skills: How to Manage Your Time and Resources
- PROJECT 4
- Chapter 5: Primitive, Conditions, and Loops
- Chapter 6: Arrays
- Chapter 7: Functions
- Chapter 8: Manipulating the DOM
- Chapter 9: Git Tools
- Soft Skills: How to Work with Documentation
- Soft Skills: How to Become a Valuable Contributor to the Tech Community
- PROJECT 5
- Chapter 10: Objects
- Chapter 11: Event Handling
- Chapter 12: Working with Forms
- Chapter 13: Form Validation
- Bonus Lesson: Debugging in JavaScript
- PROJECT 6

4

Applied JavaScript

At this stage in the program, we dive even deeper into JavaScript and tackle the key concepts you need to master to become a web developer. You'll learn about Object-Oriented Programming, asynchronous code, and how to interact with servers. You'll also be introduced to different programs used to bundle project files together, add third-party dependencies, and upload your project to the internet.

- Chapter 1: Object-Oriented Programming
- Chapter 2: Interfaces in OOP – Part 1
- Chapter 3: Modular JavaScript
- Soft Skills: Personal Branding for the Tech Industry
- Soft Skills: Teamwork
- PROJECT 7
- Chapter 4: Destructuring Syntax
- Chapter 5: Interfaces in OOP – Part 2
- Chapter 6: Project Building with Webpack
- PROJECT 8
- Chapter 7: Advanced Javascript: Asynchronous Programming
- Chapter 8: Working with APIs
- Chapter 9: Object Prototypes – Preparing for an Interview
- Bonus Chapter: Open Source Projects
- Soft Skills: Online Presence and Networking
- PROJECT 9

+1 projects for
your portfolio
6 weeks, 120 hours

1-week break

5

Creating an Interface with React

Get acquainted with the React library and its ecosystem. You'll start off by creating websites made up of components that can be reused in different places. You'll then be able to build on this to create more complex interfaces much faster and write code that's much easier to maintain.

+1 projects for
your portfolio
4 weeks, 80 hours

- Chapter 1: Introducing React
- Chapter 2: React Tools
- Chapter 3: React Hooks
- Chapter 4: Advanced Javascript: this — Preparing for an Interview
- PROJECT 10
- Chapter 5: React Router
- Chapter 6: React and Data
- Chapter 7: Advanced React
- Chapter 8: Whiteboard Coding — Preparing for an Interview
- PROJECT 11

1-week break

6

Back-end Basics for Web Developers

Building a web app requires working with a server. You'll learn how to use Node.js, a JavaScript runtime environment, to write server-side applications. You'll use this knowledge to set up a server and create a server-side API for the website you made in the previous course.

+1 projects for
your portfolio
6 weeks, 160 hours

- Chapter 1: Server-Side Development with Node.js
- Chapter 2: Express.js 101
- Chapter 3: Complexity Analysis of Algorithms — Preparing for an Interview
- PROJECT 12
- Chapter 4: Building a REST API
- Chapter 5: Databases
- Chapter 6: Error Handling: From Theory to Practice
- Chapter 6: Regular Expressions
- Chapter 7: Functions Under a Microscope — Preparing for an Interview
- PROJECT 13
- Chapter 8: Authentication and Authorization — Part 1
- Chapter 9: Front-End Authentication with React
- Chapter 10: Web Application Security
- PROJECT 14
- Chapter 11: Authentication and Authorization — Part 2
- Chapter 12: Automated Testing
- Chapter 13: Back-End Preparation and Deployment
- PROJECT 15

1-week break

Final Project

This is where you put everything you've learned throughout the program into practice and prove that you have what it takes to be a web developer. You won't have to complete any other assignments or work through any lessons on the interactive platform. It's just like real life, where you have a task and a deadline, armed with nothing but your skills, knowledge, and a search engine.

+1 project for
your portfolio
7 weeks, 120 hours

Career Track

Welcome to a Career Center of Practicum! Who are we? **We are a bridge** between quality education institute and leading IT employers, helping you to increase **employability** and implementing innovative solutions for employers.

What will be waiting for you?

Part 1. Career Track - Self Paced Course

20 hours

- Introduction to Israeli job market
- How to present myself:
 - Self-presentation
 - Storytelling through CV
 - Online presence through LinkedIn and Github
 - Cover letter and it's main goal
- Looking for a job is a job:
 - How to pass a job interview
 - Networking skills
 - Job interview negotiations
 - What could go wrong?
 - How to hack HR?
 - Hunting for jobs

Part 2. Let's practice - Career with a human touch

20 hours

- Attend mock interviews
- Receive 1:1 career coaching
- Attend professional meetups and networking events
- Get our support even when you graduate till you find a job