CAREERFOUNDRY

Full-Stack Web

Development Program

Program details overview

	Full-time program	Part-time program
Program duration	30-40 hours per week for 5 months	15-20 hours per week for 10 months
Hours	885	885
Program language	English (minimum required level B2)	English (minimum required level B2)
Program location	Online only	Online only
Start dates	The program will start once every two weeks . Start dates here.	The program will start once every two weeks . Start dates here.
Total number of projects	8	8
Mentor model	1-1 Mentor (up to 100 calls) and Tutor (unlimited messaging)	1-1 Mentor (up to 100 calls) and Tutor (unlimited messaging)
Job Support	Job Preparation Course 1-1 Career Services Job Guarantee	Job Preparation Course 1-1 Career Services Job Guarantee



1.

Who is the program for and what are the requirements?



This program is for complete beginners who'd like to learn the skills needed to become a job-ready full-stack web developer—no prior knowledge or experience is required!



The program is also suitable for complete career changers, as well as upskillers who need web development skills in their current role, or if they're hoping to go freelance.



You'll need a computer (macOS, Windows, or Linux) with a webcam, microphone, and an internet connection (see below for more on system requirements).

Which tools will you use in the program?

Text editor

You'll use this tool to write and edit your code. We suggest using text editing programs such as VSCode and Sublime Text

Node.js

You'll use this runtime environment tool to write JavaScript code that interacts with a server

React

You'll use this JavaScript library for building user interfaces

Javascript

You'll use this programming language on the client-side and server-side to build your projects into interactive and engaging products

For further tool requirements related to specialization courses, please view their respective courses:

Python for Web Developers Cloud Computing for Web Developers

These are the main tools you'll use in the program, but you'll explore plenty of other tools along the way.

What are the costs associated for tools?

All the tools and software you'll need are free to use—with no additional cost to you.

Note: You will be required to invest some independent study time (approximately 1-2 hours per week) towards familiarizing yourself with the tools you'll use throughout the program, and learning how to use them.

System requirements:

- Operating system: Windows 11, macOS versions 10.13 and later, Ubuntu, Debian, CentOS, or Fedora (Linux)
- We recommend a minimum of 8 GB of RAM on your device, but 16 GB would be preferable
- Contact us for more information on requirements for your specific operating system

How does the program work?



The program provides a **100% online**, **asynchronous** learning experience—so while there is an overall completion deadline, you get to decide how to fit your study hours around other obligations. You'll be working through the program material in your own personal account on the CareerFoundry platform.



The program is broken into several larger modules called "Achievements," which are made up of smaller lessons. Each lesson is made up of reading material, videos, tutorials, a quiz, and a task—where you'll put your learning directly into practice. Each task will contribute to the **final projects** and deliverables that you'll finish the program with.



While there is **no final exam**, you'll have a dedicated **tutor** and a professional **mentor** (assigned based on your timezone) who will assess your submissions against our internal rubric. They'll let you know exactly how to improve your work to get it approved.



The program is counted as complete once all the Achievements have been reviewed and approved by your mentor. You will be able to download your **certificate** of completion directly from your dashboard. Take a look at a video of CareerFoundry's learning experience or read more on our <u>How it</u> Works Page.

You'll get free read-only access to our other career-change programs (data analytics, digital marketing, UI, and UX design) and after completing this program, will have lifetime access.

What kind of support is available?



Tutor

Your tutor is a course expert who actively works in the field and provides individual feedback on your course assignments as you work through an Achievement. You'll communicate with them through the messaging tool in your account.



Mentor

Mentors are seasoned professionals who review the final task in your Achievements and provide detailed video reviews of each project you complete during the course. You'll have up to 100 video calls with your mentor over the span of the program. You can schedule these calls via our learning platform's built-in calendar tool. Learn more about our mentors and our dual-mentorship model on our Mentors page.



Student Advisor

Student advisors ensure you have the best possible experience throughout the program. You can message them from your dashboard (within the platform)—they're always happy to answer any questions you have about the administration of your program.



Career Specialist

If you opt into the Job Preparation course, you'll also have a dedicated career specialist who will provide individualized feedback for your job search strategy and application package. Your career specialist will answer all your questions throughout the Job Prep course, and be there to support and advise you on how to get the most out of your job search, both as you work through the program, and beyond as you progress in your career.



Fellow students

As a CareerFoundry student, you'll be part of an extensive community of fellow students, both during the program and after graduation. You can reach out to this community on Slack to discuss your coursework, organize meetups, or find a study buddy.

Program Outline

The Full-Stack Web Development Program is divided into three parts: Intro to Frontend Development, Full-Stack Immersion, and a specialization course of your choice out of Python for Web Developers and Cloud Computing for Web Developers.

Intro to Frontend Development

You'll learn HTML and CSS, the building blocks of the web, as you work on creating your own responsive portfolio website from scratch.

- The Intro course will cover the following topics:
- 1. Getting Started with Web Development
- 2. HTML and the Web
- 3. HTML Semantics
- 4. Advanced HTML & Web Accessibility
- 5. CSS & the Look of Your Website

- 6. Advanced CSS Layout
- 7. Advanced Topics in CSS
- 8. CSS Preprocessors & CSS Variables
- 9. Git & Version Control
- 10. Code Quality, Testing, and Web Hosting

See a more detailed course outline here.

Full-Stack Immersion

Immerse yourself into the mindset of a web developer through hands-on application of the processes and tools that web developers use every day.

Achievement 1 - Introduction to Javacript

- Achievement 1 will cover the following topics:
- 1.1 What is JavaScript?
- 1.2 JavaScript Basics Part 1
- 1.3 JavaScript Basics Part 2
- 1.4 JavaScript Functions Part 1
- 1.5 Javascript Functions Part 2
- 1.6 **DOM Interaction**

- 1.7 APIs, Ajax & Asynchronous Behavior
- 1.8 Complex UI Patterns with JavaScript
- 1.9 Introduction to jQuery
- 1.10. Bootstrap & UI Libraries
- 1.11. Performance & Debugging

Achievement 2 - Server-Side Programming & Node.js

- Achievement 2 will cover the following topics:
- 2.1 Intro to Server-Side Programming
- 2.2 Node.js Modules
- 2.3 Packages & Package Managers
- 2.4 Web Server Frameworks & Express
- 2.5 REST & API Endpoints
- 2.6 Relational Databases & SQL
- 2.7 Non-Relational Databases & MongoDB
- 2.8 The Business Logic Layer
- 2.9 Authentication & Authorization
- 2.10. Data Security, Validation, & Ethics

Achievement 3 - Javascript Frameworks

- Achievement 3 will cover the following topics:
- 3.1 Intro to Frameworks & Libraries
- 3.2 Building with JavaScript
- 3.3 React Components & the Virtual DOM
- 3.4 React Lifecycle Methods
- 3.5 React Forms
- 3.6 React Bootstrap
- 3.7 Client-Side App Routing
- 3.8 Introduction to Redux
- 3.9 Deploying & Hosting a React App

Achievement 4 - Testing in the Development Process

- Achievement 4 will cover the following topics:
- 4.1 Test-Driven Development & Test Scenarios
- 4.2 Intro to Serverless Functions & Authentication
- 4.3 Writing & Testing Serverless Functions
- 4.4 Unit Testing
- 4.5 Integration Testing

- 4.6 User Acceptance & End-to-End Testing
- 4.7 Continuous Delivery
- 4.8 **Object-Oriented Programming**
- 4.9 Progressive Web Applications
- 4.10 Data Visualization

Achievement 5 - Native App Development & React Native

- Achievement 5 will cover the following topics:
- 5.1 Building Native Applications with JavaScript
- 5.2 Chat UIs & Accessibility
- 5.3 Real-Time Applications & Data Storage
- 5.4 Storing Data on the Client Side
- 5.5 Communication Features

Achievement 6 - Collaboration & Documentation

- Achievement 6 will cover the following topics:
- 6.1 Collaboration & Project Management
- 6.2 Introduction to Angular
- 6.3 Advanced Angular Part 1
- 6.4 Advanced Angular Part 2
- 6.5 **Documentation & Handoffs**
- 6.6 Providing Constructive Feedback
- 6.7 Contributing to the Tech Community & Beyond

See a more detailed course outline here.

Specialization courses

<u>Python for Web Developers</u>: Learn Python programming and gain a basic to intermediate competency level with the Python-based Django web framework

<u>Cloud Computing for Web Developers</u>: Learn Cloud Computing and gain a basic to intermediate level with deploying web applications using cloud services

What kind of projects will you be working on?

Intro to Frontend Development

Project 1: You'll build a portfolio site using HTML and CSS.

Full-Stack Immersion

Project 2: You'll build a JavaScript app that communicates with an external API.

Project 3: You'll build a complete full-stack application with a Node.js and Express backend for your REST API.

Project 4: You'll build a client-side REACT API on the frontend for your RESTful API, built with React.

Project 5: You'll build a serverless, progressive web app that fetches data from the Google Calendar API using React.

Project 6: You'll build a JavaScript chat app built with React Native, featuring advanced functionality such as offline storage or geolocation.

Project 7: You'll build a version of your React app with Angular.

Specialization courses (Project 8)

Python for Web Developers: You'll build a command-line version of a recipe app where users can create and modify and search for recipes. You'll then build a web version of the app using the Django framework.

Cloud Computing for Web Developers: You'll deploy a three-tier web application (with a MongoDB database, Node.js backend/server, and React frontend/client) to the cloud.

Take a look at some examples of projects created by Full-Stack Web Development Program graduates <u>on our</u> website.

Will you receive a certificate?



You'll finish the program with a certificate of completion and several projects and skills to showcase in your job applications. The certification is in place as an indication of the quality of the program, but in the end, it's the projects and skills that you develop throughout the program that are going to display the quality of your work to future employers and ensure that you find a job.



While the program is not university-accredited, it does undergo a rigorous quality assurance and certification process with the ZFU (Staatliche Zentralstelle für Fernunterricht)—the state body for distance learning in Germany. This process ensures that the program meets a high standard for an excellent and effective learning experience. On successful completion of this certification process, the program is assigned a unique approval number which can be checked against a public register.

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Finding a job with CareerFoundry

At CareerFoundry, we offer stellar career services for our students which include 1-1 career coaching as you search for your first job (and beyond), an exclusive Job Preparation Course, and a job guarantee.

Check out our <u>Career Services</u> and <u>Job Guarantee</u> pages for more information on Career Services, and to learn more about the terms of our job guarantee.

You can also check our latest <u>Outcomes Report</u> for job outcomes, which features our over 90% job placement rate

Job Preparation Course

Our Job Preparation Course is included in the Full-Stack Web Development Program and has been designed to help you with all aspects of finding a job in the field. You'll work with your dedicated career specialist alongside your studies for the second half of the course.

The Job Preparation Course consists of two Achievements, each made up of several tasks.

Achievement 1 - Curation of Your Application Package

- Achievement 1 will cover the following topics:
- 1.1 Crafting Your Mission Statement
- 1.2 Developing Your Career Change Strategy
- 1.3 Defining Your Elevator Pitch
- 1.4 Showcasing Your Process and Skills
- 1.5 Creating Your Professional Resume
- 1.6 Building a Professional Portfolio
- 1.7 Establishing Your Professional Brand

Achievement 2 - Applying for Jobs and Beyond

- Achievement 2 will cover the following topics:
- 2.1 Building Your Network
- 2.2 Searching for New Jobs
- 2.3 Applying for Jobs

- 2.4 Preparing for Interviews
- 2.5 Planning Your Professional Development

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What kinds of roles will you be qualified for?

Based on our comprehensive curriculum, you'll be qualified for junior full-stack web development jobs. If you have transferable skills from your past career, you can potentially get a more senior role—your assigned career specialist will help you to craft the right story with your previous experience to be able to find such a role. Learn more about our graduate outcomes on our <u>Graduate Outcomes page</u>.