# Welcome to the Full-Stack Engineer Path

See what you'll learn in the Full-Stack Engineer Career Path.

Welcome to the Full-Stack Engineer Career Path! In this path, you will encounter all of the major technologies that a full-stack developer should know. You will gain a foundation in JavaScript programming, be able to use front-end technologies like HTML, CSS, React, and build secure back-ends with Node/Express and PostgreSQL. We'll also make sure to prepare you for the infamous technical interviews you'll encounter once you begin your job hunt.

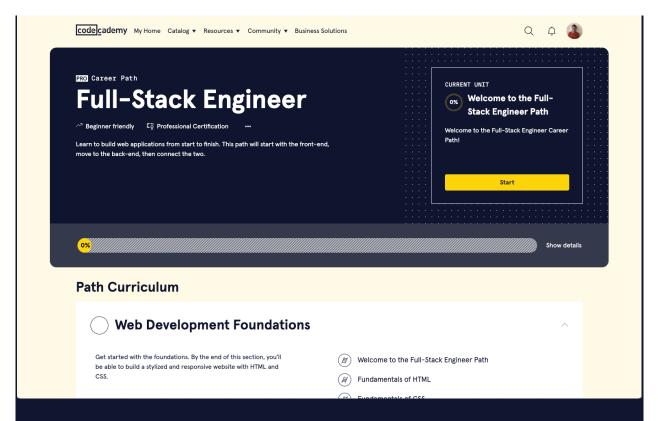
### **Learning Objectives**

After this Path, you will be able to:

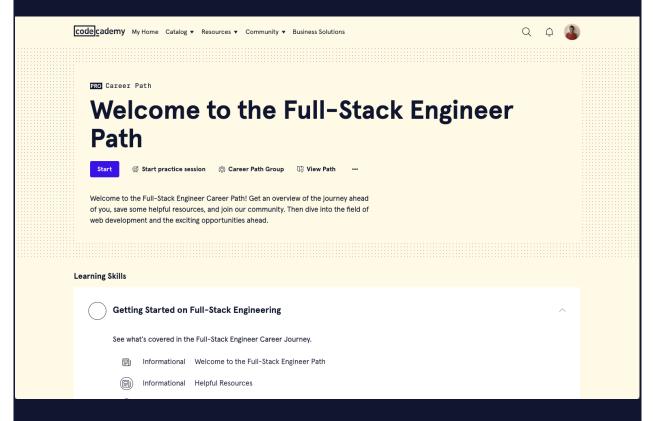
- Set up your own dev environment and version control your work with Git/GitHub
- Write client-side and server-side JavaScript code
- Create static, responsive websites with HTML/CSS
- Use the popular React front-end framework, along with Redux
- Build Node/Express back-ends
- Design and build PostgreSQL databases
- Connect a front-end to a back-end for a full-stack PERN application
- Implement best security practices to prevent attacks
- Pass a JavaScript whiteboard interview

## Syllabus Pages

We've created two types of syllabus pages to help guide you through this journey. You've already navigated to this article from the first type: The Career Path Syllabus.



You can use this Career Path Syllabus to see all the topics you'll need to know to become a full-stack engineer — or as a tracker for what you've learned and will continue to learn. And from there, you can click on one of the topics listed on the right to access the second type of syllabus: the Unit Syllabus!



The Unit Syllabus is your go-to guide to your current *Unit*. Each Unit is a major topic that we teach using smaller chunks of content, and each Unit Syllabus

contains expandable/collapsible lists of all of those lessons, projects, and other content. For example, in our Fundamentals of HTML Unit, we include a lesson on basic HTML syntax, and practice content via a quiz and a project. We recommend looking at your current Unit Syllabus before you start coding for the day.

Pro tip: Click here to visit the syllabus for the Unit you're in right now, and then click the "Welcome to the Full-Stack Engineer Path" button to get back to this page.

#### **Projects**

You will demonstrate your knowledge in several Portfolio Projects that exist throughout the Path. Portfolio Projects are projects that you build on your own computer, following a set of requirements. Each one will be unique to your personal vision and set of interests. You can complete the Portfolio Projects either in parallel with or after taking the prerequisite content—it's up to you!

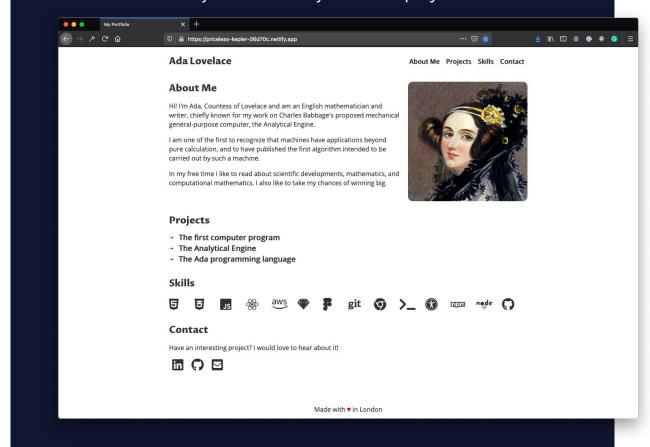
Here's a preview of the projects featured in this Path:

Mixed Messages

• Build a Node.js console app that generates random messages each time a user runs the program and version your project with Git/GitHub

Personal Portfolio Project

 Use HTML, CSS, and GitHub Pages to build a personal portfolio site, a static website where you can share your other projects



Reddit Client

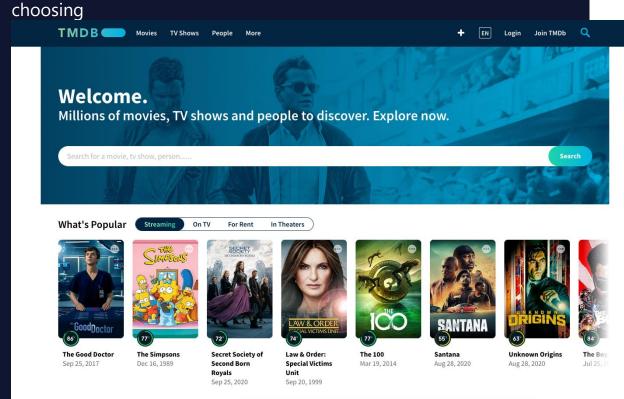
• Use JavaScript, React, Redux, and the Reddit API, build an online for	ım
containing real-life data	

#### E-Commerce Site (two parts)

 Over the course of two parts, build a full-stack web app where users can purchase products using the PERN stack (PostgreSQL, Express, React, Node)

#### Open-Ended Project

Use everything you've learned in the path to build an app of your choosing



#### **Certification Exams**

We've added exams to help you assess your proficiency as you build toward job-ready skills. Here's how they work:

- You'll find exams on your Full-Stack career path syllabus page, at the end of each section.
- Each exam assesses your knowledge of the concepts and technologies learned in that section. Exams help verify your proficiency — so you can feel confident in your abilities as you build toward a new career.
- Each exam is 2 parts. The first is multiple choice and fill in the blank, and the second is coding questions, when applicable to the material.
  Otherwise, you will encounter additional multiple choice and fill in the blank questions.

- Score at least 70% on both parts of the exam to pass.
- If you don't pass, no worries! You can retake exams once every 24 hours.
- Taking or passing exams is not required to complete the path and exams do not factor into your progress percentage. However, exams must be completed and passed to earn your Codecademy Professional Certification. That means, you can now skip past content you are already familiar with and still earn a Codecademy Professional Certification.

#### **Curated Content**

Throughout this path you may see some items that aren't made by the Codecademy team. We've included these to ensure that you learn all the topics you need to get your career started. Though we didn't write them, we've vetted them ourselves for technical accuracy and good teaching practices. When possible, we've written relevant assessments so that you can check your understanding back on our platform.

#### **Updates**

Since we strive to bring you the best and most up-to-date content, we will be periodically updating the materials in this path. For smaller updates we'll be communicating changes via the <a href="Web Development Change Log">Web Development Change Log</a>, which features updates and bug fixes across all Web Development content. For larger changes, we'll write a <a href="blog post">blog post</a> detailing the extent of those changes and how they impact the syllabi. If you are enrolled in this path, we'll send a notification each time there's been an update, so you know exactly what has changed.

We're excited for you to begin this journey!