Software Engineering Certificate

Learn front end development with HTML & CSS, JavaScript, and React, and back end development with Python, Django, and Node.js. Get 1-on-1 mentoring and a structured curriculum to become a skilled Software Engineer or Full Stack Developer.

Group classes in NYC and onsite training is available for this course. For more information, email corporate@nobledesktop.com or visit: https://www.nobledesktop.com/certificates/software-engineering-bootcamp

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Course Outline

This package includes these courses

- Web Development with HTML & CSS (18 Hours)
- Advanced HTML & CSS (18 Hours)
- Flexbox, Grid, & Bootstrap (12 Hours)
- JavaScript for Front-End (18 Hours)
- Front-End Tools & Portfolio (18 Hours)
- JavaScript Programming Bootcamp (120 Hours)
- JavaScript Development with Node, Express, & MongoDB (120 Hours)
- React Development Bootcamp (72 Hours)
- Web Development Industry & Portfolio (24 Hours)
- Python Programming Bootcamp (30 Hours)
- Python Web Development with Django (60 Hours)
- Web Development Labs (0 hours)

Attend the SQL Bootcamp or the WordPress Bootcamp for free as part of this certificate. Choose your date after you register for the program.

- SQL Bootcamp
- WordPress Bootcamp

Web Development with HTML & CSS

- Start building websites by hand-coding HTML & CSS
- Create multi-page websites with text, images, & more
- Learn how to style with CSS
- Upload your files using FTP to make the site live

Advanced HTML & CSS

- Master important CSS concepts such as positioning, advanced CSS selectors, relative type sizing (px, em, rem), calc(), and much more
- Learn sophisticated styling with multiple background images, transparent color using RGBA, CSS gradients, shadows, and more
- Create animated effects using CSS transitions & transforms

Flexbox, Grid, & Bootstrap

- CSS Flexbox for laying out and aligning webpage content.
- CSS Grid for an entirely new way to think about laying out entire webpages.
- Learn how to use Bootstrap (which is made with Flexbox) to build out layouts quickly.

JavaScript for Front-End

- Write JavaScript code to add animation and interactivity to webpages
- Learn the fundamentals of the JavaScript language (variables, loops, arrays, functions, etc.)
- Understand how to use free pre-made JavaScripts to quickly can add many different kinds of common functionality
- Create animated slideshows and build animated image enlargers
- Learn to animate any content within a webpage—including SVG—using GreenSock (GSAP)

Front-End Tools & Portfolio

- Go from design to coded website, with guidance from an expert developer
- What Git is and how it works
- Installing and setting up Git to track changes in your code
- Using GitHub for collaboration with other developers

JavaScript Programming Bootcamp

- Fundamentals of JavaScript programming from the ground up
- Variables, Conditional Logic (if-else), Arrays, Objects, and Loops
- Newest ES6 and ES7 features, including Arrow Functions, let and const
- Functions, parameters-arguments, and return values
- Higher Level Functions and Callbacks
- Array and String Methods
- Asynchronous JavaScript with Promises and async-await
- APIs (Application Programming Interfaces)
- Parsing and working with JSON (JavaScript Object Notation) data
- OOP (Object Oriented Programming) and Modules
- Coding Interview Challenge Prep
- Projects and Portfolio Development
- JS Libraries, including 3D in the browser with D3 and Three.js

JavaScript Development with Node, Express, & MongoDB

- Synchronous and Asynchronous JavaScript in Node.js

- The purpose of Node Package Manager (NPM)
- The fundamentals of starting an Express.js server
- The Integration of MongoDB (a NoSQL database)
- Authentication and server security
- API Development

React Development Bootcamp

- The fundamentals of React functionality: components, props, and state
- The lifecycle of React Hooks: useEffect, useState, useContext, and more
- Understand one way data binding and reusability of React Components
- The use of Higher Order Component (HOC) in React
- Front end web security
- Understand the complete cycle of full stack web development using the MERN stack

Web Development Industry & Portfolio

- Create and polish a portfolio of projects
- Get practice with solving algorithms
- Prepare for interviews with mock questions

Python Programming Bootcamp

- Learn the fundamentals of Python programming
- Navigate and analyze tech documentation to solve errors
- Complete independent coding projects

Python Web Development with Django

- Fundamentals of the Django framework to develop web applications
- URL dispatchers, querying models, and automating tasks with Django
- Django REST for working with images, authentication, and API endpoints

Web Development Labs

- Code-along to book (class-style)
- On-your-own coding challenges (but with kickstarter code/scaffolding)
- Job interview-style challenges (harder, no scaffolding, ok-better-best solutions)
- Debugging code (errors and/or flaws in logic that make it not work)
- Targeted drills: "reps" to build specific skills