

Web Development Immersive

FULL TIME COURSE CURRICULUM

MODULE 1

Intro to Programming and Frontend Development

You'll learn the fundamentals of JavaScript as well as programming fundamentals and basic algorithms. You'll learn to build web pages with HTML and style them with CSS, and you'll make web pages interactive with DOM manipulation and AJAX. You'll leave this module having built your own client-side app using an agile workflow.

- Command Line Interface
- Git and Github
- JavaScript Fundamentals
- JavaScript Functions
- JavaScript Arrays, Objects, Iteration
- HTML & CSS Fundamentals
- DOM Manipulation, Creation, Deletion, Events
- CSS Frameworks
- HTML Forms
- jQuery Fundamentals
- jQuery Events
- Writing Clean JavaScript with Linting
- HTTP
- AJAX
- Scope, Hoisting, Higher Order Functions, Closures, IIFEs
- Project Management with Agile and Git workflows
- **Module 1 Project**

MODULE 2

Server-Side Programming

You will learn how to build and deploy dynamic server-side web apps using Node.js and Express as well as how to manage databases using SQL. At the end of this module you will be prepared to build a server-side application with teammates using agile and git workflows.

- Node.js Fundamentals
- HTTP Concepts
- Express.js Server-side Framework
- Node.js Modules
- SQL and PostgreSQL
- Entity Relationship Diagrams
- Knex.js
- Knex.js Migrations and Seeds
- User Authentication
- Heroku Deployment
- Automated JavaScript Testing
- Server-side Validation
- Git Workflows for teams
- **Module 2 Project**

MODULE 3

Single-Page Applications

In this module you will combine what you learned in the front-end and server-side modules and build on that foundation by learning client-side frameworks such as AngularJS and React. You will finish this module by building a complete single-page application as part of a team using agile and git workflows.

- Client Framework Fundamentals
- AngularJS Templates/Filters/Expressions
- Two-way Data Binding
- Events & Form Validation
- Digest Cycle
- HTTP Service, Dependency Injection, Routing
- Building Services
- Custom Directives
- Using Express with AngularJS
- Single-Page CRUD Application w/ Server
- Token-Based Authentication
- **Module 3 Project**

MODULE 4

Data Structures and Algorithms & Interview Prep

You will learn how to tackle more complex algorithms that such as sorting algorithms, searching algorithms and tree and graph traversal. You will also learn how to calculate the Big O notation of functions. Importantly, you will also learn how to demonstrate these skills live on a whiteboard - an essential skill for most technical interviews.

- Intro to Algorithms
- Big O
- Recursion
- Search Algorithms
- Sorting Algorithms
- Linked Lists
- Trees
- BFS and DFS
- Object-Oriented Programming
- Review of State and Behavior
- Single Responsibility Principal (SRP)
- Whiteboard Interview Prep
- Problem Solving Strategies

MODULE 5

Capstone Project

You will conclude the course by completing an independent capstone project that will demonstrate the full range of your skills to employers. Capstone projects combine the topics you learn in class plus additional technologies you will learn on your own to demonstrate your versatility and fitness for a position in an ever-changing tech landscape.

- Capstone Project
- Capstone Presentations

Contact

If you have any questions, please feel free to contact our admissions team at **admissions@galvanize.com**.

Disclaimer: The information contained in this syllabus is intended for directional use only. The Galvanize Web Development Immersive curriculum is updated on an ongoing basis to stay current with industry trends, and is adjusted slightly to fit the pace of the class in order to maximize student learning. Additionally, the program may differ slightly between each campus, as our curriculum is designed to be responsive to the needs of hiring partners in each market.