

HACK REACTOR™
BY GALVANIZE

Software Engineering
Immersive Bootcamp

2022-2023 SYLLABUS

HACK REACTOR™
BY GALVANIZE



Hack Reactor, above all else, fosters software engineers ready to succeed in today's tech industry.

Our program does this in the context of learning full stack JavaScript through pair programming and then developing several full stack applications in teams. Our curriculum is living and evolving. We constantly improve on it based on the ever changing needs of the technology industry, and feedback from our students and alumni. Future programs may differ in small or big ways from this document.

Getting Prepared

By completing the pre-course work, you will have a strong foundation, and be able to begin the Hack Reactor learning experience.

JavaScript

- Recursive Functions
- Higher Order Functions

HTML, CSS, and JQuery

- The foundations of web development
- Build an interactive messaging site

A Systematic Problem Solving Process

- Step-by-step framework to get from a prompt to code
- A polished debugging skillset

The Modern web dev work enviornment

- GitHub
- The command line

HACK REACTOR™
BY GALVANIZE

12-Week Immersive:
Creating world class software engineers



During the 12-week immersive, you'll be primarily working in pairs and groups over 2-day sprints, putting in 11-hour days at a minimum, 6 days a week. Our instructional content gives you just enough scaffolding so you can get to the real work of solving coding problems in the context of actual applications.

Week 1: CS and Software Engineering Fundamentals - Lay the Foundation

In the first week, you'll be immersed in learning the fundamental concepts and strategies that make one a competent software engineer.

Mental Skills

- Thinking like an engineer
- Understanding what it means to write good code

Communication Skills

- Precise technical communication
- Empathetic communication in teams

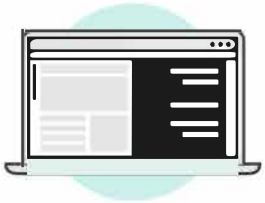
Writing Data Structures

- Basic and advanced structures
- Using JS instantiation patterns

HACK REACTOR™
BY GALVANIZE

Week 2-5:
Full Stack JavaScript

What it takes to build real web apps. Learn Full Stack JavaScript in 4 weeks in the context of working on realistic code bases



Client Side Concepts and Technologies

- MVC & React
- AJAX



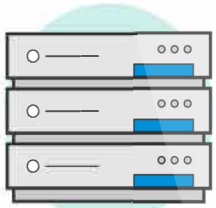
Deployment Concepts and Technologies

- Environment configuration
- Running code remotely
- Heroku



Mastering JavaScript

- ES6
- Asynchronous Patterns
- Promises
- Modularization



Server Side Concepts and Technologies

- npm
- NodeJS
- ExpressJS
- Authentication



Database Concepts and Technologies

- SQL
- MongoDB
- ORMs



Apply Now: https://www.galvanize.com/online-coding-bootcamp



Weeks 6-12:
Application Design and Development - Build incredible applications

Work in teams to develop real workig applications. Work with new applicaitons, test new technologies, annd put your bug testing to good use.

Work on several projects

- Building applications from scratch
- Working on legacy code bases
- Using new languages

Bolster your code

- Using new technologies
- Testing
- Continuous Development

Practice Advanced Team Dynamics

- Agile Workflow
- Iterative development
- Advanced git techniques



Job Search

At **Hack Reactor**, you are constantly developing your professional persona as a Software Engineer. In week 12, we heavily emphasize developing and continuing to improve the skills you nened to be successful in your job search.

Job Search Prep

- Developing an effective study plan
- Developing a robust daily schedule

Materials Review

- Resume and Cover letter tear down
- Creating your online presence (Linkedln, Angellist)

Applications and negotiations

- Choosing the right companies
- Understanding the application lifecycle
- Presenting your best self
- Advice and guidance based on available opportunities

Apply Now: https://www.galvanize.com/online-coding-bootcamp