



Web Development Bootcamp

The Full Stack Web Development Bootcamp at Northeastern Illinois University is a part-time i.e. 20 hours a week or less, Web Development program that jumpstarts your career to becoming a successful Web Developer in 16 weeks. You will gain complete knowledge and skills from scratch to build end-to-end dynamic websites, even if you have no prior practical experience as a developer.

Bootcamp Curriculum Overview

The Bootcamp program is rigorous and packed with challenges covering concepts, theories and projects; but you will have all the help needed to navigate through the process in the form of academic counselling, mentor office hours and assessments.

The Web Development Bootcamp will provide fully immersive learning through lecture videos, workshops & weekly projects, code-a-thons and a Capstone Final project. You will learn front-end to back-end web development programming, deep dive into databases for web and become expert at various tools within the development environment. Finally, you will receive career support to build your employer facing portfolio and possible internship opportunities.

Learning Outcomes

Web Development Fundamentals

- Learn the core programming concepts
- Build static webpages using HTML & CSS

Interactive websites

- Bring interactivity to websites by leveraging JavaScript and jQuery
- Build client-side web-app that is interactive and provides purpose to webpages

Website Aesthetics

- Learn Responsive Web Design to develop multi-device experience
- Use open-source front-end framework for better web design

Application Deployment

- Leverage the power of cloud for application deployments
- Use the power of Git (version control system) to manage code over time

Databases, Advanced Front-end & Server-side Development

- Learn how to store, access and remove data for your apps & website
- Use data driven languages to build real-time event-based apps
- Leverage powerful server-side programming to automate and run applications
- Use popular front-end advanced frameworks to build complex applications



Skills Gained

When you successfully complete the bootcamp, you will have learned the following skills:

- Programming Concepts
- HTML
- CSS
- JavaScript
- jQuery
- Responsive Design
- Bootstrap & WordPress
- React.js
- Git
- Python
- MySQL
- MongoDB
- Node.js
- Express.js

Real World Jobs

Here is a list of real-world jobs that you can apply this bootcamp to:

- Front-end Developer
- Back-end Developer
- Full-stack Developer
- Junior Web Developer

Course Structure

Throughout the 16 weeks of this program you will go through lecture videos and a variety of individual exercises and group discussions, both in online self-paced format as well as weekly live instructor hours. Weekly workshops or mini-projects will give you an immersive learning experience by applying what you learn as you go. Self-paced learning through online course modules within our platform allows you the flexibility with the hours you choose to study within the week.

See “Course Outline” section and follow as your guide to completing courses in order.



Discussions by Instructors

Instructor-led discussions throughout your self-paced course cover the background, history and use of a new technology or concept. To take this a step further, we offer a live mentoring and discussions section of the bootcamp that allows you to interact with instructors and ask questions.

See “Mentoring & Discussions” section for how to connect with your mentor.

Projects & Capstone Project

With every critical milestone you achieve throughout the Bootcamp, you will complete mini-projects that will test your ability to apply learnings in a practical way. These mini-projects will be reviewed and receive feedback during Office Hours.

As part of market-ready portfolio building, you will direct all your learnings to a capstone Final Project that will demonstrate your skills and expertise across all the necessary tools and technologies to become a Full Stack Web Developer.

See “Course Outline” section on project assignments and capstone project.

Mentoring & Discussions

You’ll have access to a dedicated **bootcamp discussion forum** to collaborate and seek help from industry experts and other students. This discussion forum can be found when you launch the course. The Bootcamp also includes access to real LIVE mentoring and discussion group sessions* that happen twice a week. Here is a tentative schedule

Q&A Session - Bring all your questions you may have and get the answers you're looking for.

Review Session - During this session, we will review the previous weeks work, what is expected the following week, and any other questions you may have that need answers.

Please read important information below on connecting with mentor.

Zoom Sessions - In the introduction bootcamp email, we will provide you a specific link issued to your class for attending the weekly sessions. Use this link to connect to zoom and interact with instructors. You can also use the link below to join by placing in the Meeting ID we have assigned to you.

<https://www.zoom.us/join>

How Will We Help You Succeed?

As you learn new things to get on your way to become a Web Developer, we will make sure that you have all the support throughout the entire journey to answer all your questions and get you fully prepared for the next stage in your career. Following are some of the support services that will ensure you're successful.

- Academic Counsellor for on-boarding (**Customer Success Manager**)
- Access to Mentors
- Guest Speaker sessions
- Career Counselling
- Portfolio Building
- Possible Internship Opportunities

Course Outline

When starting the bootcamp, make sure you take the courses in order. Follow this course outline.

Module Course 1: Professional Orientation: Front End Web Developer | 1 Week

1	Introducing Front-End Web Development
2	Introducing Web Front-End Frameworks
3	HTML, CSS, and JavaScript Editors

Course 1 Labs

Labs are available directly in each module of the course.



Module Course 2: Introduction to Python: Absolute Beginners | 1 Week

1	Basics - Jupyter, Types & Variables, Print Formatting, Etc.
2	Functions - Simple Functions, Sequence
3	Conditionals - Boolean Strings, Math Operators
4	Nesting & Loops
5	Final Evaluation and final coding assignment

Course 2 Labs

Labs are available directly in each module of the course.

Module Course 3: Designing a Technical Solution | 1 Week

1	Designing A Technical Solution
2	Intro to Web Development
3	Building Webpages with HTML
4	Styling Webpages with CSS
5	Final Assessment and Evaluation

Course 3 Labs

Labs are available directly in each module of the course.

Module Course 4: Introduction to HTML, CSS and JavaScript | 2 Weeks

1	Creating Web Pages using Hypertext Markup Language (HTML)
2	Creating Sophisticated Document Structures using HTML
3	Design Web Page Elements using Cascading Style Sheets (CSS)
4	Implementing Program Flow using JavaScript
5	Adding External Libraries to Enhance HTML Applications

Course 4 Labs

Labs are available directly in each module of the course.

Project 1 | 1 Week

Basic Business or Personal Website - Reach out to your Customer Success Manager when you are needing to start this project or ask your mentor the details of this project in your live sessions.

Module Course 5: Advanced CSS | 2 Weeks

1	Responsive Layout Using Media Queries
2	CSS Modules and High-Fidelity Designs
3	Sass/Less and Preprocessing
4	Web App Testing and Support for Browsers and Devices

Course 5 Labs

Labs are available directly in each module of the course.



Module Course 6: Introduction to Python: Fundamentals | 1 Week

- 1 Sequencing Index
- 2 Sequencing Manipulation
- 3 Sequencing Iteration
- 4 Files
- 5 Final Evaluation

Course 6 Labs

Labs are available directly in each module of the course.

Module Course 7: Introduction to Bootstrap | 1 Week

- 1 Getting started with Bootstrap
- 2 Page Layout
- 3 Forms & Validation

Course 7 Labs

Labs are available directly in each module of the course.

Module Course 8: Introduction to jQuery | 1 Week

- 1 Adding jQuery to web pages
- 2 Managing content, events and effects
- 3 Asynchronous programming and Ajax

Course 8 Labs

Labs are available directly in each module of the course.

Project 2 | 1 Week

Website with Search Engine - Reach out to your Student counselor when you need to start this project or ask your mentor the details of this project in your live sessions.

Module Course 9: Angular Fundamentals | 1 Week

- 1 Setting Up Your Angular App
- 2 Modules & Services
- 3 Components and Directives
- 4 Routing

Course 9 Labs

Labs are available directly in each module of the course.

Module Course 10: Introduction to ReactJS | 1 Week

- 1 JSX and React Components
- 2 State, Life Cycle, and Event Handlers
- 3 Lists and Forms
- 4 Final Assessment



Course 10 Labs

Labs are available directly in each module of the course.

Module Course 11: React Router and Redux | 1 Week

1	React Router
2	Redux
3	React Redux

Course 11 Labs

Labs are available directly in each module of the course.

Project 3 | 1 Week

Web App for Task Management - Reach out to your Customer Success Manager when you are needing to start this project or ask your mentor the details of this project in your live sessions.

Module Course 12: MySQL | 1 Week

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Module Course 13: React Router and Redux | 2-3 Days

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Module Course 14: Python Web Programming | 2-3 Days

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Module Course 15 Learn Python Django from Scratch | 1 Week

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Module Course 16 Data Analysis with Python | 1 Week

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Module Course 17 Data Visualization with Python | 1 Week

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Project 4 | 1 Week

Build Your Portfolio - Reach out to your Customer Success Manager when you are needing to start this project or ask your mentor the details of this project in your live sessions.

Module Course 18 Building Functional Prototypes using Node.js | 1 Week

1	Specific modules can be found within the course. Labs are available directly in each module of the course.
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Capstone Project

Capstone projects are your final projects that also act as a portfolio piece. When you reach this point, discuss the capstone project with your Mentor during a weekly session to get the details associated with your responsibilities.

Your mentor can provide you the capstone project during the live sessions.

Who Should Attend?

- Working professionals who are looking to transition into the exciting and fast-growing career of web development
- College graduates or soon to graduate looking to jump-start their career as Web Developer
- Freelancers who want to polish their Web Development skills with the most current tools and technologies
- Junior Front-End developers with basic web development skills looking to expand their knowledge further within the career

