

Full Stack Web Development Bootcamp

Bootcamp Brochure



In partnership with
HyperionDev

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Overview

You're here to learn the skills needed to become a world-class web developer. Or maybe you're already coding and want to advance your career. Either way, this bootcamp provides the training to build dynamic, data-driven web applications using the latest and most popular web development tools.

Learn to develop web applications using HTML, CSS, JavaScript, MongoDB, Express, React

and Node.js, along with other industry-relevant technologies. Throughout the program, you'll discover how technologies and devices interact to power seamless web applications. You'll also explore professional approaches to product design and best practices for web development. No prior coding experience? No problem. This bootcamp takes you from beginner to career-ready professional.

Beyond web development

In this bootcamp, you'll explore industry-leading development frameworks and innovative approaches to web development. You'll dive into object-oriented and functional programming, gaining hands-on experience with the techniques that drive real-world results. Along the way, you'll apply best practices, build a professional portfolio and develop the skills to navigate today's competitive job market.

Your journey doesn't stop at learning—it's about preparing for what comes next. Through capstone projects, you'll showcase your expertise to potential employers or lay the foundation for launching your own online business. With a focus on career readiness, this bootcamp equips you with the tools, knowledge and confidence to take the next step in tech.



The process

- 1** Log onto your personalized dashboard
- 2** Complete coding exercises online
- 3** Your Mentor reviews your work
- 4** Perfect your coding over 3-6 months
- 5** Receive a certificate of completion
- 6** Begin your new career in tech with our post-bootcamp support



Code review in partnership with HyperionDev

Bootcamp code reviewers and mentors are expertly trained to integrate code review into the learning experience. This on-demand approach helps participants become fluent in their chosen area of study faster.

Our one-on-one code review approach works

Code review helps you learn to code the right way by mastering the deeper aspects of software development that are essential for a career in tech. We help you build a strong foundation for a successful career in coding.

Why learning through code review is smarter

Don't make the same mistakes as computers

Automated code checking is like spell check for computer programs. But you can't write a world-class essay with just good spelling – you need the right tone, facts, grammar, and style. Only human-led code review can help you learn aspects of coding that are analogous to tone and style that will make you truly fluent as a developer – automated graders just can't help you learn this!

Be exposed to industry standards from day one

In the tech industry, developers have their work assessed through code review by senior developers. We are the only bootcamp that introduces this technique from day one, giving you a competitive edge in the job market.

Get unstuck with on- demand technical help

Our code reviewers help you debug your programs, ensuring you maintain steady progress and stay on track.

A unique, proven and personalized approach to code review

A safe space to learn and grow

Human-led code review fosters trust with your mentors and allows you to learn at your own pace. It provides a supportive environment to discuss challenges without fear of failure.

Join a community of career changers

Learn alongside a cohort of bootcamp participants who are also pursuing career fulfillment. Engage in online group tutorials, community chats and peer coaching.

Industry experts with expertise tailored to your goals

You'll work with experienced code reviewers and mentors who provide guidance through one-on-one calls and email support.

Why choose web development as a career?

The World Wide Web is woven into every aspect of business today. Web developers are in high demand, playing a crucial role in a digitally driven world. Businesses depend on web developers to establish and maintain a strong digital presence. As demand for front-end and back-end developers continues to rise, web development remains a competitive and rewarding career path. Even if you don't plan to become a developer, understanding coding fundamentals is a valuable asset in any tech-driven role.



How we help you get hired

We're with you every step of the way, and our support doesn't end when you graduate. Our career services are designed to help you stand out from the competition and get noticed by top employers.

Technical résumé and portfolio

Receive technical assistance in getting your résumé and tech portfolio industry-ready by applying accepted best-practice formats.

Interview preparation

Know what to expect when getting ready for that big interview with expert interview preparation guidance from professionals who have been where you are.

Bootcamp certificate

Walk away with a newly minted certificate as evidence of your skills and expertise in web development.

Join our hiring network

We work with select hiring partners and aim to help you prepare for and land your first tech job opportunity after completing your bootcamp.



Potential career paths

JavaScript Developer

JavaScript developers implement website programming, optimize UI/UX, and collaborate with front-end and back-end developers.

Responsibilities of a JavaScript developer include:

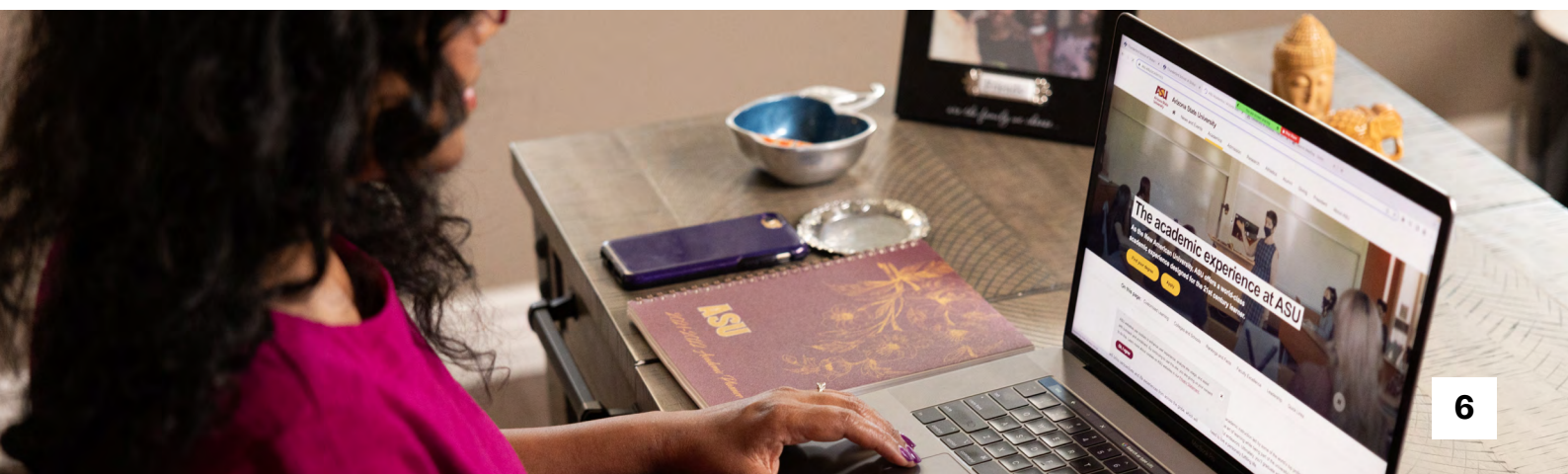
- Building sustainable code that may be used in the future.
- Ensuring the feasibility of UI/UX designs.
- Enhancing performance of the main front-end website.
- Modifying designs and specifications of complex applications.
- Analyzing code, requirements, system risks, and software reliability.
- Collaborating with front-end and back-end Web Developers.

UX Designer

UX designers improve the accessibility and effectiveness of software and hardware from a user's perspective. They collaborate with developers, programmers, engineers and project managers to determine product goals. UX Designers build wireframes, test prototypes and conduct focus groups. They make modifications to products as necessary.

Responsibilities of a UX designer include:

- Planning and conducting user research and competitor analysis.
- Interpreting data and qualitative feedback.
- Creating user stories, personas and storyboards.
- Determining information architecture and creating sitemaps.
- Creating prototypes and wireframes.
- Conducting usability testing.



Full Stack Developer

Full-stack developers are proficient in both front- and back-end coding. Their primary responsibilities include designing user interactions on websites, developing servers and databases for website functionality and coding for mobile platforms.

Responsibilities of a full stack developer include:

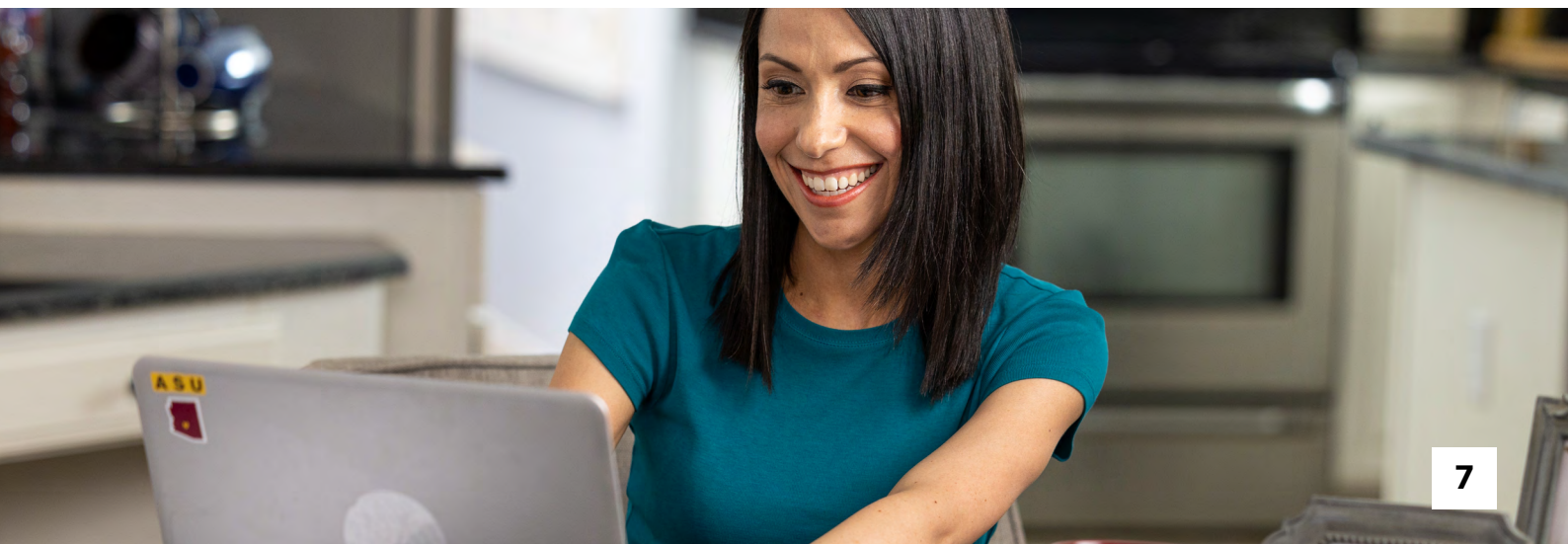
- Developing front-end website architecture.
- Designing user interactions on web pages.
- Developing back-end website applications.
- Creating servers and databases for functionality.
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.

Computer Programmer

A computer programmer or systems programmer writes code to help software applications operate more efficiently. Their duties include designing and updating software solutions, writing and updating source-code, and managing various operating systems.

Responsibilities of a computer programmer include:

- Reviewing operating systems and software frequently and making any adjustments necessary to keep them running well.
- Writing code and implementing computer programs on multiple systems in the business.
- Building and using computer-assisted software engineering tools to automate some aspects of coding.
- Performing all requirements needed for the implementation of automated computer systems from start to finish.
- Using code libraries to simplify the writing of code.
- Collaborating with software developers in the creation of programs for their organization.



Web Designer

As a web designer, you'll plan, create and code web pages, using both technical and creative skills to produce websites that fit your customers' requirements. Being involved in the technical and graphical aspects of pages, you'll determine not only the look and feel of the website, but how it works as well. You may also be responsible for the maintenance of an existing site.

Responsibilities of a web designer include:

- Drawing up detailed website specifications.
- Designing sample page layouts including text size and colors.
- Designing graphics and animations and manipulating digital photographs.
- Registering web domain names and organizing the hosting of websites.
- Editing content, debugging code and re-designing web pages.
- Working with other web specialists, including Web Developers and graphic designers.
- Liaising with outside agencies.
- Coding using a variety of languages.
- Search engine optimization (SEO).

Technical Writer

As a technical writer, you will be responsible for writing specialist information about products and services and how they work. You will need to explain how things are used in a way that is easy to understand. The information may be presented in the form of user guides for software applications, reference and instruction manuals for appliances, training guides, instructional videos or online help incorporated into software and operating guides.

Responsibilities of technical writer include:

- Collaborating with developers and managers to clarify any technical issues.
- Using the product or service in question to understand the technology and applications for which documentation is being prepared.
- Gathering and analyzing the information needs of the user.
- Organizing information according to your user's needs.



Structure of the bootcamp

Our online coding bootcamp helps you progress from a complete novice to mastering the fundamentals of web development—the core skills of a full-stack developer. This program serves as a launchpad for a rewarding and dynamic career in tech. Our mentors, student success team, and career services team will guide you every step of the way, from beginner to aspiring professional, as you navigate applications and interviews to secure the career you deserve.

Your learning journey includes:

- **Bootcamp prep (before you start)** – Get an introduction to the web development industry and learn how HyperionDev supports your goals. Explore HTML and CSS to gain hands-on experience and better prepare for the Full Stack Web Development Bootcamp.
- **JavaScript programming** – Learn JavaScript, one of the world's most widely used programming languages. Build a strong foundation in various programming paradigms, including imperative, procedural, object-oriented, functional and concurrent programming. Apply JavaScript to standard HTML and CSS APIs to create interactive, responsive applications. Master the fundamentals of front-end development without relying on external libraries and frameworks.
- **Front-end development** – Go beyond the basics of web development by exploring single-page applications that enhance performance, responsiveness and usability. Learn how to manage an application's front-end state using React.js's component lifecycle and implement global state management to streamline data handling.
- **Full Stack development** – Develop backend applications using Express.js to build web servers and RESTful APIs. Work with MongoDB, a document-oriented non-relational database, to create stateful applications. Once you've learned the key components of the MERN stack, you'll develop one of the most critical skills for web developers: reducing complexity. Learn to gather project requirements, integrate multiple systems and design web-based solutions for businesses operating on a global scale..
- **Career readiness and employability (post-bootcamp completion)** – After completing your bootcamp, you'll receive career support, including interview preparation and résumé reviews. Our goal is to equip you with both technical expertise and the professional development tools necessary for job success. You'll also gain access to networking events, career expos and job opportunities with our hiring partners. Most bootcamp graduates secure a job within six months with our support and mentorship.



What to expect from the web developer syllabus

During your bootcamp, you will progress through a series of learning tasks. Each task includes a lesson and one or more practical activities. Some are coding tasks introducing and practicing new concepts; some are coding projects, intended to challenge you to bring together the skills you've learned over a number of weeks to create a more complex program that you can use to showcase your learning.

By the end of your coding bootcamp, you should be able to:

- Apply fundamental web development principles and technologies to design and develop interactive and responsive websites.
- Utilize HTML, CSS, JavaScript and related tools to create visually appealing, user-friendly and adaptable web pages and applications across various devices.
- Demonstrate proficiency in front-end development using the React framework.
- Construct dynamic and interactive user interfaces, showcasing your skills in building React components, handling events, managing state and implementing modern front-end practices for efficient and scalable web applications.
- Implement back-end development techniques using Node.js and Express.js, enabling you to create server-side applications, handle data interactions, work with APIs, manage HTTP requests and responses and use databases like MongoDB for data storage and retrieval.
- Demonstrate proficiency in full-stack Web Development with React and Express, creating a web app that interacts with the iTunes Search API.
- Learn to deploy with Render (optionally).
- Produce well-organized documentation.
- Design basic wireframes with UI best practices.

With Arizona State University and HyperionDev, you're never alone. Reach out to a code reviewer or mentor whenever you need help. Every piece of code you submit is reviewed by an expert who provides feedback to enhance its efficiency and quality.

We look forward to supporting you on your journey to becoming a web developer!

Arizona State University is partnering with online education provider HyperionDev to offer a portfolio of high-impact outcomes-oriented online learning programs. Please note that course contents shown here are subject to change without prior notice. These programs are provided by HyperionDev and quality assured by Arizona State University to leverage their thought leadership in technical practice developed over decades of expertise.