

JavaScript for Beginners Syllabus

OUR PART-TIME, REMOTE, INTRODUCTORY COURSE

OUR MISSION

Codesmith's mission is to develop an exceptional network of brilliant and collaborative software engineers who are passionate about pushing the engineering community forward. JavaScript for Beginners is designed to be an accessible starting point for anyone looking to begin their software engineering education.

ABOUT JAVASCRIPT FOR BEGINNERS

JavaScript for Beginners is a part-time, remote program, consisting of two consecutive Saturday sessions, project presentations the following Monday, and homework in between. The program is designed for those with no coding experience, so it will cover JavaScript fundamentals and offer a broader context to how coding works. The program gives students a launching point to continue their JavaScript studies, prepare for CS Prep, and build a future in software engineering.

CLASSROOM EXPERIENCE

JavaScript for Beginners is a completely remote course. We use an immersive learning environment, where you'll be able to interact directly with your instructor and ask questions during lecture. One instructor will lead your time in the course and be your main mentor as you learn to code.

Our online learning environment also offers functionality to facilitate pair programming, allowing close connections to form with your classmates. You'll be part of a Slack team where you can ask questions during the week between classes, so you can continue to push through blocks and advance your coding knowledge.

CURRICULUM OVERVIEW

The curriculum for JavaScript for Beginners is carefully constructed to give both a broad introduction to what programming is, as well as cover fundamental JavaScript concepts, so you can solve challenges and build projects with confidence.



CURRICULUM COMPONENTS

Programming basics

- Variables storing and using data
- Control flow looping and when to run code

JavaScript principles

- Functions saving and using code
- Objects and arrays storing more complex data

Programming culture

- How the web works
- A history of programming why learn JavaScript?

Projects and soft skills

- Final Project you will build and present a unique text adventure game with a group
- Pair programming you will pair program through coding challenges at the end of every class

Final Assessment

At the end of the course, you will be given an assessment to test your knowledge of the course content

DAILY SCHEDULE

JavaScript for Beginners is a combination of live lectures and pair programming sessions, where you'll work through challenges to cement the concepts covered. JavaScript for Beginners is taught over two consecutive **Saturdays from 9-3pm PT / 12-6pm ET** with project presentations the following **Monday from 6-7:30pm PT / 9-10:30pm ET**.

PART 1

Lecture: Welcome, Why JavaScript, Intro to Programming

After meeting your cohort mates, you'll dive right into the background of programming, so you can understand the whole picture before focusing on JavaScript.

PART 2

Lecture: Variables, Primitive Data Types, Objects & Arrays

SATURDAY 1

After you understand the background of programming, we'll cover core JavaScript concepts that will create the foundation for the topics covered throughout the course. You'll cement these concepts through pair programming - a core aspect of all Codesmith courses and the best way to learn how to program.

PART 3

Lecture & Pair Programming: Loops & Control Flow

We'll go over how to control the flow of our code by building logic that allows it to make decisions about when to run blocks of code and repeat tasks until specified criteria are met. You'll start pair programming on challenges and then continue working through these concepts in your homework.



SUNDAY	To advance your learning between sessions, you'll be assigned coding challenges related to concepts covered on Day 1.
FRIDAY	
WEDNESDAY	Optional Office Hour Session with Prep Program Mentors
	This is an opportunity for you to ask questions about any of the material covered
	on Day 1, and go over parts of the homework you may need clarification on, so that you will feel ready to hit the ground running on Day 2.
	PART 1
SATURDAY 2	Lecture: How the Web Works
	To kick off Day 2, we'll jump into a background on how the web works, covering
	the client-server relationship, the cloud, and how HTML, CSS, and JavaScript
	work together to display webpages.
	PART 2
	Lecture & Pair Programming: Functions, Execution Context & Scope
	We'll continue through fundamental JavaScript, covering functions, one of the
	key concepts in programming. You will pair program and work on your technical
	communication with your partner.
	PART 3
	Final Assessment and Project: Text Adventure Game
	At the end of class, you will be given a final assessment that will assess your
	understanding of the course content! You will have until the following Monday
	night to submit the assessment. In addition to the assessment, building projects
	is essential to your growth as a developer because it forces you to hit blocks,
	whereas coding challenges will not! We'll finish this course by building a text
	adventure game and showcasing your new JavaScript skill set.
MONDAY	Project Presentations and Final Assessment Due
	Your group will present your text adventure game to the rest of your cohort on
	the Monday evening after the course finishes! Your final assessment is also due
	Monday night at 11:59pm PT.



PREPARE FOR JAVASCRIPT FOR BEGINNERS

This course is designed for those with no JavaScript or coding experience! You're eligible to apply without ever writing a line of code. Before the course begins, we recommend completing the **Precourse - Part 1** and **Precourse - Part 2 Units on CSX**, our free online learning platform. Having a basic familiarity with the concepts we'll cover in the course will help with your ability to absorb the information and ensure you're getting the most out of it.

AFTER JAVASCRIPT FOR BEGINNERS

This course is the perfect stepping stone to **CS Prep**, our part-time, online program that is designed to prepare you for advanced coding bootcamps, like our full-time immersive program. The content covered in JavaScript for Beginners will give you the foundation needed to get the most out of CS Prep.

If you are accepted into CS Prep, and later into the **Software Engineering Immersive Program**, your JavaScript for Beginners tuition will be applied to the next program you take.

We also recommend continuing your education with our free, weekly workshops hosted online and in-person in NYC. You can see the **upcoming events schedule here**.





