**1. Introduction to JavaScript**

* Overview of JavaScript in Web Development
* How JavaScript Executes
* Understanding the JavaScript Runtime

**2. Fundamentals: Variables and Operators**

* Declaring Variables and Types
* Working with Basic Operators
* Hands-on: Manipulating Variables

**3. JavaScript Data Types**

* Primitive vs Complex Data Types
* Type Conversion and Coercion
* Hands-on: Type Checking Examples

**4. Conditional Statements and Control Flow**

* If-Else and Switch Statements
* Ternary Operators
* Hands-on: Building a Simple Decision Tree

**5. Working with Arrays in JavaScript**

* Creating and Modifying Arrays
* Essential Array Methods
* Multi-dimensional Arrays
* Hands-on: Data Extraction Challenge

**6. Loops and Iteration in JavaScript**

* While, Do-While, and For Loops
* Break and Continue Statements
* Hands-on: Iterating Arrays and Objects

**7. Functions in JavaScript**

* Declaring and Invoking Functions
* Arrow Functions and Nested Functions
* Passing Functions as Arguments
* Hands-on: Creating Modular Code

**8. JavaScript Scope and Closure**

* Lexical Scope and Global Variables
* Understanding Closures
* Hands-on: Debugging Scope Issues

**9. Object-Oriented Programming in JavaScript**

* Introduction to OOP Concepts
* Working with Classes and Inheritance
* Data Encapsulation
* Hands-on: Designing Simple Classes

**10. Functional Programming in JavaScript**

* Function Composition and Recursion
* Map, Filter, and Reduce
* Hands-on: Recursive Functions

**11. Regular Expressions in JavaScript**

* Creating Regular Expressions
* String Matching and Validation
* Hands-on: Form Validation with Regex

**12. JavaScript in Web Development**

* Manipulating the DOM and BOM
* Event Handling in JavaScript
* Hands-on: Building a Simple Web App

**13. Asynchronous JavaScript**

* Callbacks, Promises, and Async/Await
* Error Handling in Asynchronous Code
* Hands-on: Building an Async Function

**14. Modern JavaScript Workflow**

* ECMAScript Versions and Features
* Using Transpilers and Bundlers
* Hands-on: Setting up a Modern JavaScript Project

**15. Advanced JavaScript Techniques**

* Proxies, Iterators, and Generators
* Memory Management and Optimization
* Hands-on: Optimizing Code Performance

**16. JavaScript Project: Build a Web Application**

* Project Overview: Creating a Web App with Dynamic Content
* Setting Up the Development Environment
* Implementing Core Features
* Final Touches and Deployment