

JavaScript Certification Course

Course Duration : 45 Days

Topics & Details

Introduction to JavaScript:

★ Introduction to JavaScript

- What is JavaScript?
- History and evolution of JavaScript.
- JavaScript's role in web development

★ Basic JavaScript Syntax

- Writing your first JavaScript code (in browser console or script tag).
- Variables (var, let, const).
- Data types (numbers, strings, booleans, arrays, objects).
- Operators (arithmetic, comparison, logical)

★ Control Flow and Loops

- Conditional statements (if, else if, else).
- Switch statement.
- Loops (for, while, do-while).
- Iterating through arrays and objects

★ Functions

- Declaring functions.
- Function parameters and return values.
- Scope and closures.
- Arrow functions

★ Arrays and Objects

- Working with arrays (methods like push, pop, map, filter).
- Object literals and properties.
- Accessing and modifying object properties.
- JSON (JavaScript Object Notation).

★ DOM Manipulation

- Introduction to the Document Object Model (DOM).
- Accessing DOM elements.
- Manipulating DOM elements (changing styles, attributes, content).



- Event handling (addEventListener, event object)

★ **Asynchronous JavaScript**

- setTimeout and setInterval.
- Callback functions.
- Promises (creating, consuming, chaining).
- Async/await (syntax and usage)

★ **ES6+ Features**

- Let and const.
- Arrow functions.
- Template literals.
- Destructuring assignments.
- Spread and rest operators.
- Classes and inheritance.
- Modules (import/export).

★ **Error Handling**

- try...catch statement.
- Error objects and throwing errors.

★ **Browser Storage**

- Cookies.
- Local Storage and Session Storage.
- IndexedDB (basic understanding)

★ **AJAX and Fetch API**

- Making HTTP requests.
- Fetch API basics (fetch, promises, handling responses)

★ **Introduction to Node.js (optional)**

- What is Node.js?
- Setting up Node.js environment.
- Basic File I/O operations

★ **Basic Projects**

- Simple form validation.
- Todo list application.
- Basic DOM manipulation exercises.
- Fetching data from an API.

