

Course Code : WFE 108

Course Title : JAVASCRIPT

Course Description : JavaScript is the programming language of HTML and the Web. Programming makes computers do what you want them to do and can be used to respond to the user's actions. In this course, you will learn JavaScript from basic to advanced. At the end of the training, students will be able to: monitor users activity on the page, listen to events and perform functions using events, create a complete client-side-only web application, save information in the localStorage, DOM manipulation, and lots more.

Course Outline:

- Introduction
- Variables and Operators
- Functions and Events
- Conditional Statements
- Data structures (Arrays ,Maps, Objects)
- Loops and Iterations
- Break,continue
- Looping through Arrays
- Loop through Array of Objects (create a signup page)
- Local Storage and JSON
- Working with complex data structures (understanding MVC architecture)
- JQUERY
- Regular Expression (REGEX)
- Truthy and Falsy
- Ternary operators
- Local storage
- Return keyword and using the variable returned as a value
- ES6 syntax (let, const, template literals, multiline string, string substitution)
- Arrow Functions (return in arrow functions)
- Higher Order Function (set timeout, Navigator.geolocation, map, filter, find) and callback functions
- Destructuring (array and object)
- Spread Operator (array and object) and Rest Operator

- Promises,Async,Await,Fetch, Error Codes
- Date Object, Math Object
- OOP (Classes, Objects ,Constructors,Inheritance,Prototypes)
- Graphs and Canvas (HTML Canvas,Charts)
- Native methods (Alert,Console,Math,Date,Windows,typeof)
- Async,Promises and closure, Fetch Api, Error Codes, Catch Blocks
- Consuming public API
- DOM (DOCUMENT OBJECT MODEL)

ADVANCED JAVASCRIPT

- File System
- Try and catch
- EmailJS
- Factor patterns and Design pattern
- Switch Case
- Then blocks
- Singleton, Module pattern.
- Decorator & Observer
- bind, apply and call
- Setters and Getters
- This keyword
- Concurrency
- Notification API
- Navigator API
- History API
- 3D JS
- MODULARIZATION