

## WEB DEVELOPER

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108 Clock Hours/8 weeks Certificate Program/up to 40 Hours a week

The Web Developer program course is designed to teach students the skills and abilities to design complete web applications and websites. Graduates from this program will gain the knowledge of both front end(client-side) and back end(server-side) & Database portions of the web application.

### Admission Requirements:

- Must be at least 18 years of age.
- Must present a valid picture ID and an original social security card.
- Must possess a high school diploma/GED

## PROGRAM OUTLINE

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Course Title	Lecture Hours	Lab Hours	Extern Hours	Total Hours
Introduction to Web Development	8	8	0	16
HTML	7	7	0	14
CSS	6	6	0	12
Git & Github	6	6	0	12
Javascript (ES 6+)	8	8	0	16
Node..JS	6	6	0	12
Database	7	7	0	14
REACT	6	6	0	12
Total	54	54	0	108

### Subject Descriptions

#### Web Developer Training

#### **WD 101: 8/8/0 Introduction to Web Development**

Students will learn the introduction to the Web Development course. This will consist of What is Web Developing, what is the course about, peer introduction, walkthrough, how to ask for suggestions, prerequisites about the course, course-overview, and task overview. What is the MERN stack, it's alternative, it's future and scope. (Lec 8 CHR / Lab 8 CHR / Ext 00 CHR / Total 16 CHR) [Prerequisite: Non]

#### **WD 102:7/7/0 HTML**

In this subject, students will get introduced to HTML. Using the recommended w3c structure system for the HTML page. Demonstration of the types and uses of heading fonts (H1-H6), creating lists, attaching links, creating forms and tables and adding images. (Lec 7 CHR / Lab 7 CHR / Ext 00 CHR / Total 14 CHR) [Prerequisite: WD 101: Introduction to Web Development]

#### **WD 103: 6/6/0 CSS**

Students will learn what is CSS. Students will also learn about Selectors; how many types of CSS usage are there. Basic Styling, Relative and Absolute. This will also include Media Query, Responsive Design, Bootstrap, Grid & Flex, Position and Box Model for designing. (Lec 6 CHR / Lab 6 CHR / Ext 00 CHR / Total 12 CHR) [Prerequisite: WD 102: HTML]

### **WD 104:6/6/0 Git & Github**

This subject is devoted to instructing and introducing students about Git & Github. Web developing techniques such as Commit, Push, Pull, Add, Merge, checkout methods. (Lec 06 CHR / Lab 06 CHR / Ext 00 CHR / Total 12 CHR) [Prerequisite: WD 103: CSS]

### **WD 105: 8/8/0 Javascript (ES 6+)**

During this portion of the program, students will learn about JavaScript. The student will learn how to place JavaScript Code, Defining Variables, Functions and Scopes, Types of JavaScript, and DOM manipulation (Lec 8 CHR / Lab 8 CHR / Ext 00 CHR / Total 16 CHR) [Prerequisite: WD 104: Git & Github]

### **WD 106: 6/6/0 Node.JS**

In this subject, students will discuss and discover the simple server. How to utilize the different response types (HTML and JSON). Students will be introduced to Express Params/Query String, and Express Middleware. API Authentication along with JWT token. (Lec 6 CHR / Lab 6 CHR / Ext 00 CHR / Total 12 CHR) [Prerequisite: WD 105: JavaScript ES 6+]

### **WD 107: 7/7/0 Database**

During module 7, the students will learn about database variations. Some of the different type of Databases the students will learn about are SQL/No-SQL, Mongo, JSON/BSON. Other topics of review will be Mongo Structure, Atlas, \_id, CRUD with MongoDB Atlas from CMD. Learn how to operate Mongo Sharding, Mongo Master Slave, ACID, Mongo Compass & NoSQL Booster Mongoose, Schema & Schema Types, Middlewares, and subdocuments. (Lec 7 CHR / Lab 7 CHR / Ext 00 CHR / Total 14 CHR) [Prerequisite: WD-106: Node.JS]

### **WD 108: 6/6/0 REACT**

In this portion of the program, students will be introduced to REACT Application. These will include Single Page Applications, Multi Page Applications, Webpack, JSX, Axios, SASS Idea, Redux, and Hooks. (Lec 6 CHR / Lab 6 CHR / Ext 00 CHR / Total 12 CHR) [Prerequisite: WD 107: Database]

- Students are required to pass a certification exam to complete the seminar