



Certificate Program

Full Stack Development

Subject Name: HTML/CSS

Total Units: 14

Unit – 1

- Unit 1: Web Programming Introduction: Architecture of a website, Different technologies in making the website;
- Unit 2: Introduction to HTML: History of HTML, Basic structure of an HTML document
- Unit 3: HTML Lists

Unit - 2

- Unit 4: HTML Table
- Unit 5: HTML Forms

Unit – 3

- Unit 6: Introduction to CSS
- Unit 7: CSS Selectors
- Unit 8: CSS - Pseudo Classes
- Unit 9: CSS Texts

Unit – 4

- Unit 10: CSS Lists
- Unit 11: CSS Tables
- Unit 12: CSS Box Models
- Unit 13: CSS Positioning
- Unit 14: CSS Floats

Subject Name: JavaScript

Total Units: 14

UNIT 1

- Unit 1: Introduction to JavaScript
- Unit 2: Intermediate JavaScript
- Unit 3: Variables, Data Types and Keywords

UNIT 2



- Unit 4: Operators, Operator Precedence, Arithmetic Operator, Comparison Operator, Logical Operator, Bitwise Operator
- Unit 5: Assignment Operator , Ternary Operator, Unary Operator
- Unit 6: Document Object Model(DOM)
- Unit 7: inner HTML Property and Control Statement

UNIT 3

- Unit 8: Introduction to Objects
- Unit 9: Array
- Unit 10: JavaScript Event
- Unit 11: Validations

UNIT 4

- Unit 12: JavaScript OOPS, Class, objects and prototypes
- Unit 13: JavaScript OOPS, Inheritance , Polymorphism, Encapsulation, Static and Constructor Methods
- Unit 14: Exception handling and JavaScript Cookies

Subject Name: PHP

Total Units: 14

UNIT 1

- Unit 1: Introduction to PHP, Advantages, Differentiate Client side scripting vs server side scripting
- Unit 2: Installation of PHP, Variable types and variable Scopes
- Unit 3: PHP \$ and \$\$ Variables, PHP Constants
- Unit 4: PHP Data Types, Echo vs Print

UNIT 2

- Unit 5: PHP Operators
- Unit 6: Conditional Statements
- Unit 7: Control Statements

UNIT 3

- Unit 8: Arrays
- Unit 9: Functions, Function Arguments
- Unit 10: Strings

UNIT 4

- Unit 11: Forms Processing, Designing a form
- Unit 12: GET and POST Methods, Form Handling
- Unit 13: Form Validation, Client Side Validation, Server Side Validation



- Unit 14: Session Management

Subject Name: Database System

Total Units: 5

UNIT 1

Unit 1: Introduction to database, Applications, History of database system

Unit 2: File Processing system, Database management system

Unit 3: Database design and Data models

UNIT 2

- Unit 4: Introduction to Database language, DDL DML
- Unit 5: DCL, TCL

UNIT 3

- Unit 6: Data Types
- Unit 7: MySQL Tables
- Unit 8: Constraints

UNIT 4

- Unit 11: PHP, MyAdmin, Connecting MySQL database
- Unit 12: Performing basic database operations
- Unit 13: Setting query parameter, Executing query, Joins
- Unit 14: Aggregate functions