

# Web Design Syllabus

## Module 1: Introduction to Mockup Designing

- Getting Started with Figma
  - Creating a Figma Account
  - Managing Figma Design Files
- Designing Basics in Figma
  - Shapes and Drawing Tools
  - Typography and Colors
  - Formatting Principles
- Advanced Techniques in Figma
  - Constraints and Resizing
  - Layout Grids
  - Responsive Design Fundamentals
- Iconography and Component Design
  - Introduction to Styles and Components
  - Figma Component Variants

## Module 2: Mockup Designing with Adobe Photoshop

- Fundamentals of Mockup Design
- Psychology of Color in Web Design
- Typography Essentials
- Vector Design and Element Creation
- Mastering Design Elements
- Utilizing Important Tools and Extensions

## Module 3: Introduction to HTML5

- Understanding HTML Elements and Attributes
- Text Formatting with HTML Tags
- Lists and Tables in HTML
- Creating Forms and Working with Images
- Incorporating Multimedia: Audio, Video, and Canvas
- Exploring HTML5 Features: Drag & Drop, Geolocation, Web Storage, SVG, Semantics

## Module 4: CSS Essentials

- CSS Basics and Syntax
- Styling HTML Elements

- Managing Layouts with CSS
- Exploring CSS3 Features: Flexbox, Grid, Animations, Transforms
- Responsive Design with Media Queries
- Browser Compatibility and Vendor Prefixes

#### Module 5: Advanced CSS Techniques

- Introduction to Sass/SCSS Preprocessing
- Leveraging Variables, Nesting, and Partials
- Utilizing Mixins, Inheritance, and Operators
- Exploring CSS3 Enhancements: Gradients, Shadows, Web Fonts
- Flexbox and CSS Grid Layouts

#### Module 6: Building Dynamic Websites with JavaScript

- JavaScript Fundamentals: Data Types, Variables, Operators
- Control Structures: Conditionals and Loops
- Functions and Scope
- Working with Arrays and Objects
- Introduction to the Document Object Model (DOM)
- Enhancing Interactivity with jQuery

#### Module 7: Bootstrap Framework

- Overview and Setup
- Utilizing Bootstrap Components: Alerts, Buttons, Forms, Navbar, etc.
- Creating Responsive Layouts with Grid System
- Customizing and Extending Bootstrap

#### Module 8: Next-Level Web Development

- Introduction to Tailwind CSS
- Core Concepts and Customization
- Styling with Utility Classes
- Building UI Components with Tailwind

#### Module 9: React Development

- Getting Started with React
- Understanding JSX and Components
- Managing State and Props

- React Router for Navigation
- Form Handling and Event Management
- Introduction to React Hooks

#### Module 10: Redux State Management

- Introduction to Redux and Redux Toolkit
- Managing Global State with Redux
- Integrating Redux with React Applications

#### Module 11: Domain Registration and Web Hosting

- Domain Registration Process
- Web Hosting Essentials
- Managing Web Hosting via cPanel/Webmail
- Uploading Files with FileZilla
- Version Control with GitHub

#### Module 12: Career Preparation

- Tips and Strategies for Job Interviews
- Portfolio Development and Showcase
- Professional Networking and Online Presence

#### Project Work

- Throughout the course, students will undertake various projects to apply their knowledge and skills, including:
  - E-commerce Website
  - News Portal Website
  - Travel & Tours Website
  - Corporate Website
  - NGO Website

#### Final Project

- As per Institute Rules, students will independently complete one project from the following options:
  - NGO Website
  - Travel & Tours Website
  - E-commerce Website

- Corporate Website
- News Portal Website