



Indian Institute of Information Technology - Allahabad

Deoghat, Jhalwa- 211015, Prayagraj, Uttar Pradesh

Department of Information Technology

Subject Name	Web Development		
Course Type	Core		
Subject Code		Credits	2
Scheme (L-T-P)	0-0-4	Instruction	0 Hours/week (L) 4 Hours/week (P)

Course Objectives: To make students aware about the latest technologies in Web development. To give hands-on exposure to students on web development technologies. This course will be short but covering a wide variety of topics related to web development.

Course Outcomes: Students will have a basic understanding of modern web development tools and techniques

Unit	Content	Hours (Lab)
Unit 1	Introduction to Web Development, Overview of web technologies, Client-side vs. server-side development, Web development tools and environments, HTML (Hypertext Markup Language), Basic HTML structure and syntax, Working with text, links, images, and tables, Semantic HTML and accessibility, HTML forms and input validation, multi page websites. CSS (Cascading Style Sheets), Introduction to CSS and its role in web design, CSS selectors, properties, and values, Layout and positioning of HTML elements, Responsive design and media queries.	14
Unit 2	JavaScript, Introduction to JavaScript and its role in web development, JavaScript syntax, variables, and data types, Control structures (loops, conditionals), DOM manipulation and event handling, Backend Development, Introduction to server-side programming (Node.js), Handling HTTP requests and responses, Working with databases (MongoDB).	14
Unit 3	MVC (Model-View-Controller) architecture, Frontend Frameworks and Libraries, Introduction to frontend frameworks (React), Component-based development, State management and data binding.	14
Unit 4	Web Security, Common web vulnerabilities, Best practices for secure web development, User authentication and authorization, Web Performance Optimization, Techniques for improving website performance, Web Deployment and Hosting, Setting up a web server, Deploying web applications to a hosting platform.	14

Text Book:

- HTML and CSS: Design and Build Websites by Jon Duckett, Wiley
- JavaScript and jQuery by Jon Duckett, Wiley

References:

- The Web Developer Bootcamp" by Colt Steele (<https://www.udemy.com/course/the-web-developer-bootcamp/>)
- Modern JavaScript From The Beginning 2.0 - 2023 Revamp (<https://www.udemy.com/course/modern-javascript-from-the-beginning/>)
- The Complete Web Developer Course 3.0 (<https://www.udemy.com/course/the-complete-web-developer-course-2/>)
- Web Design for Everybody: Basics of Web Development & Coding by University of Michigan, (<https://www.coursera.org/specializations/web-design>)
- LinkedIn Learning (www.linkedin.com/learning),
- Become a Web Developer learning path
- Front-End and Full-Stack Web Development learning path