

## UI/UX Design

### Course Objectives:

- Equip students with foundational knowledge of front-end web technologies, including HTML, CSS, Bootstrap, JavaScript, Angular, and TypeScript, which are essential for web development.
- Emphasize the significance of HTML for structure, CSS for styling, and JavaScript for interactivity in creating dynamic and responsive web applications.
- Highlight the industry demand for skilled front-end developers capable of building user-friendly, interactive websites and web applications.
- Foster the ability to develop scalable and modern web applications by leveraging frameworks like Angular and TypeScript.
- Prepare students for real-world applications by focusing on creating user-centred, visually appealing, and interactive designs for various industries.

### Course Outcomes:

- Gain proficiency in JavaScript fundamentals, including its data types, operators, loops, and functions, to create interactive web applications.
- Design responsive and visually appealing web pages using HTML, CSS, and JavaScript, fulfilling the demand for dynamic web development.
- Acquire skills in the Angular framework to develop scalable, user-friendly, and modern web applications aligned with industry needs.
- Apply advanced programming concepts like polymorphism to bring flexibility and efficiency to coding practices.
- Build user-centered websites by understanding user needs and employing effective design principles for a seamless user experience.

**TABLE 2: MODULE WISE COURSE CONTENT AND OUTCOME**

SL.NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATION (HRS)
1	JavaScript <a href="#">TOC - JavaScript   Infosys Springboard</a>	Introduction to JavaScript, Setting up the Environment, Identifiers, Datatypes, Operators, Statements and Expressions, Loops, Functions, Classes, Event Handling, Objects, Iterables, Asynchronous Programming, Modular Programming, JavaScript – Security, JavaScript – Best Practices, JavaScript – Course Summary	This course will help you gain knowledge from the fundamentals of JavaScript to building full-fledged dynamic web applications.	16

2	<p>Creating Responsive Web Pages using Bootstrap 4</p> <p><a href="#">TOC - Creating Responsive Web Pages using Bootstrap 4</a>   <a href="#">Infosys Springboard</a></p>	<p>Introduction to Bootstrap, Designing Page Layout, UI Components, Forms, Responsive Web Design, Layout alternatives</p>	<p>This course helps in quick development of responsive websites. It uses HTML, CSS, and JS for faster and easier web development.</p>	<b>7</b>
3	<p>Angular</p> <p><a href="#">TOC - Angular</a>   <a href="#">Infosys Springboard</a></p>	<p>Getting Started with Angular, Angular Development Environment Setup, Creating Components and Modules, Templates, Directives</p>	<p>They would get skills to develop complex, customizable, modern, responsive, and user-friendly web applications.</p>	<b>18</b>
4	<p>Angular</p> <p><a href="#">TOC - Angular</a>   <a href="#">Infosys Springboard</a></p>	<p>Data Binding, Pipes, Nested Components, Forms, Services, Routing</p>	<p>This course introduces learners to various concepts like creating components, enhancing the functionality of components, validating forms, communicating with backend code, and building a single-page application.</p>	<b>19</b>
5	<p>UX Design for Web Developers</p> <p><a href="#">TOC - UX Design for Web Developers</a>   <a href="#">Infosys Springboard</a></p>	<p>Introduction, Applying Human-Centred Design, Wireframing 1- Using Responsive Web Design, Designing the Home Page, Using Media, Best Practices and Usability, Wireframing 2.0, Prototyping- Clickable Wireframes, The Lean UX Prototype User Testing and Iteration Process.</p>	<p>UX Design for Web Developers is a comprehensive course that teaches web developers the principles and techniques of user experience (UX) design</p>	<b>5</b>