

Module 1: Introduction to Bootstrap

- What is Bootstrap and why use it?
- History and versions of Bootstrap (focus on Bootstrap 5)
- Installing Bootstrap (CDN vs. local setup)
- Understanding the Bootstrap grid system

Module 2: Layout & Grid System

- Containers, rows, and columns
- Responsive breakpoints (xs, sm, md, lg, xl)
- Nesting and ordering columns
- Creating responsive layouts with examples

Module 3: Typography & Basic Components

- Headings, paragraphs, and text utilities
- Lists and blockquotes
- Buttons and button groups
- Badges, alerts, and progress bars

Module 4: Navigation & Forms

- Navigation bars and menus
- Dropdowns and collapsible menus
- Forms: input types, validation, and styling
- Form layouts (inline, horizontal, stacked)

Module 5: Media & Advanced Components

- Images and responsive image classes
- Tables and table styling
- Cards and media objects
- Modals, tooltips, and popovers

Module 6: Utilities & Helpers

- Spacing utilities (margin, padding)
- Colors and background utilities
- Display and flexbox utilities
- Visibility classes (show/hide elements)

Module 7: Bootstrap with JavaScript

- Bootstrap JS components (carousel, accordion, collapse)
- Using Bootstrap with jQuery (optional)
- Integrating Bootstrap with custom JavaScript
- Event handling in Bootstrap components

Module 8: Customization & Integration

- Customizing Bootstrap with CSS overrides
- Using Sass with Bootstrap
- Integrating Bootstrap with frameworks (React, Angular basics)
- Best practices for performance optimization

Module 9: Practical Projects

- Build a responsive personal portfolio website
- Create a blog layout with navigation and cards
- Design a product landing page with forms and modals
- Final project: Complete multi-page responsive website

Learning Outcomes

By the end of this course, students will:

- Understand Bootstrap's grid system and responsive design principles
- Use Bootstrap components to build modern websites
- Customize and extend Bootstrap with CSS/JS
- Create mobile-friendly, professional web projects
- Confidently design and deploy websites using Bootstrap