

HTML Syllabus

1. Introduction to HTML

- What is HTML?
- History of HTML
- Basic structure of an HTML document
- HTML elements and tags

2. Basic HTML Elements

- Headings (<h1> to <h6>)
- Paragraphs (<p>)
- Links (<a>)
- Images ()
- Lists (ordered and unordered)
- Tables (<table>, <tr>, <td>, <th>)
- Forms (<form>, <input>, <textarea>, <button>, <select>, <option>)

3. HTML Attributes

- Global attributes (id, class, style, title, etc.)
- Specific attributes (href, src, alt, etc.)

4. Semantic HTML

- Header (<header>)
- Footer (<footer>)
- Navigation (<nav>)
- Main (<main>)
- Sections (<section>)
- Articles (<article>)
- Aside (<aside>)
- Figure and Figcaption (<figure>, <figcaption>)

5. Forms and Input

- Form controls (text, password, email, number, etc.)
- Form attributes (action, method, enctype, etc.)
- Form validation (required, pattern, etc.)

6. Multimedia Elements

- Audio (<audio>)
- Video (<video>)
- Embedding (iframe, object, embed)

7. HTML5 New Features

- New input types (date, color, range, etc.)
- New elements (progress, meter, time, etc.)
- New attributes (placeholder, autofocus, required, etc.)

8. Best Practices

- Code organization
- Accessibility (ARIA)
- SEO-friendly HTML
- Comments and readability

CSS Syllabus

1. Introduction to CSS

- What is CSS?
- CSS syntax and selectors
- Inline, internal, and external CSS

2. Basic Styling

- Colors (color names, HEX, RGB, RGBA, HSL)
- Backgrounds (color, image, repeat, position, size)
- Borders (style, width, color, radius)
- Margins and padding
- Height and width

3. Text and Fonts

- Font families
- Font size and weight
- Text color
- Text alignment
- Text decoration
- Line height and letter spacing

4. Box Model

- Understanding the box model
- Content, padding, border, margin
- Box-sizing property

5. Positioning

- Static, relative, absolute, fixed, sticky
- Z-index
- Float and clear
- Flexbox
 - Container properties (display, flex-direction, justify-content, align-items, etc.)
 - Item properties (order, flex-grow, flex-shrink, flex-basis, align-self, etc.)

6. CSS Grid

- Grid container properties (display, grid-template-columns, grid-template-rows, grid-gap, etc.)
- Grid item properties (grid-column, grid-row, justify-self, align-self, etc.)

7. Responsive Design

- Media queries

- Responsive units (% , em, rem, vw, vh)
- Mobile-first design
- Responsive images and videos

8. Advanced Styling

- Transitions
- Animations (keyframes)
- Transformations (translate, rotate, scale, skew)
- Pseudo-classes (:hover, :focus, :nth-child, etc.)
- Pseudo-elements (::before, ::after)

9. CSS Preprocessors (optional)

- Introduction to SASS/SCSS or LESS
- Variables
- Nesting
- Mixins
- Functions

10. Best Practices

- Code organization and structure
- Commenting
- Naming conventions (BEM, OOCSS, SMACSS)
- Cross-browser compatibility