

Certified Entry-Level Web Developer- WDE

Prerequisites: Knowledge of Web Development

Day 1: HTML Fundamentals (8 Hours)

Morning Session (4 Hours)

1. Introduction to HTML (2 Hours)

- Role of HTML in Web Development
- History and Evolution of HTML
- Basic Structure of an HTML Document (<!DOCTYPE>, <html>, <head>, <body>)
- Overview of Common HTML Tags

2. Basic Elements (2 Hours)

- Headings (<h1> to <h6>)
- Paragraphs (<p>) and Breaks (
)
- Lists: Ordered () and Unordered ()
- Comments (<!-- -->)

Lab Session (2 Hours)

- Create a basic HTML page using headings, paragraphs, and lists.
- Add comments and validate the HTML document.

Afternoon Session (4 Hours)

3. HTML Semantic Elements (2 Hours)

- Importance of Semantics in HTML
- Usage of <header>, <footer>, <section>, <article>, <aside>, and <nav>.

4. Metadata and Linking (2 Hours)

- Setting the Document Title (<title>)
- Using <meta> Tags for Keywords, Description, and Encoding
- Linking External Stylesheets (<link>) and Scripts (<script>).

Lab Session (2 Hours)

- Build a structured webpage using semantic elements.
- Add metadata for SEO optimization.

Day 2: Text Formatting, Structure, and Multimedia (8 Hours)

Morning Session (4 Hours)

1. Text Formatting Tags (2 Hours)

- Bold (), Italics (<i>), Underline (<u>)
- Emphasis (), Strong (), Inline Quotes (<q>)
- Superscript (<sup>) and Subscript (<sub>)

2. HTML Tables (2 Hours)

- Creating Tables (<table>, <tr>, <td>, <th>)
- Adding Borders and Spans (colspan, rowspan)
- Table Captions (<caption>)

Lab Session (2 Hours)

- Format a text document with appropriate tags.
- Create a data table with advanced formatting (e.g., colspan/rowspan).

Afternoon Session (4 Hours)

3. Multimedia Basics (2 Hours)

- Embedding Images (): Attributes like src, alt, width, height
- Adding Videos (<video>): Controls, Autoplay, and Source
- Adding Audio (<audio>)

4. Hyperlinks and Navigation (2 Hours)

- Creating Hyperlinks with <a>
- Types of Links: Internal, External, and Anchors
- Navigation Bars using Lists

Lab Session (2 Hours)

- Embed multimedia elements in a sample webpage.
- Create a basic navigation menu with hyperlinks.

Day 3: Forms and HTML Styling (8 Hours)

Morning Session (4 Hours)

1. HTML Forms (2 Hours)

- Creating Forms with <form>
- Input Types: Text, Email, Password, Radio, Checkbox
- Labels, Placeholders, and Submit Buttons

2. Form Validation (2 Hours)

- Required Fields
- Input Validation Patterns (pattern attribute)
- Form Accessibility Best Practices

Lab Session (2 Hours)

- Build a user registration form with validations.
- Test form behavior with various inputs.

Afternoon Session (4 Hours)

3. HTML Inline and Internal Styling (2 Hours)

- Using style Attribute
- Changing Font, Color, and Background
- Using Inline and Internal CSS for Layout

4. HTML Layouts with CSS Basics (2 Hours)

- Box Model Basics
- Structuring Layout with Divs and Spans
- Aligning Content with CSS Properties (e.g., text-align, margin, padding)

Lab Session (2 Hours)

- Style a simple webpage using inline and internal CSS.
 - Design a layout with header, footer, and content sections.
-

Day 4: Advanced Styling, Accessibility, and Modern HTML (8 Hours)

Morning Session (4 Hours)

1. HTML Styling and Layout (2 Hours)

- Advanced Layouts with CSS Grid and Flexbox
- Responsive Design Concepts
- Embedding Google Fonts and Icons

2. HTML Accessibility Features (2 Hours)

- Understanding ARIA Roles and Attributes
- Keyboard Navigation and Screen Reader Support
- Contrast and Readability

Lab Session (2 Hours)

- Build a responsive webpage with a grid-based layout.

- Add accessibility features to improve usability.

Afternoon Session (4 Hours)

3. HTML Best Practices (2 Hours)

- Code Organization and Readability
- Using Modern HTML5 Features (e.g., <template>, <dialog>)
- Optimizing HTML for SEO and Performance

4. Final Project and Review (2 Hours)

- Final Project: Develop a Fully Functional Webpage
 - Include Forms, Multimedia, Navigation, and Styling
 - Focus on Accessibility and Best Practices

Lab Session (2 Hours)

- Work on the final project with instructor guidance.
- Present and receive feedback on the project.