

HTML & JS Essentials with Professional Email Template Design

Course Duration: 40 Hours

Course code: HTML-JA Essentials

1. Course Overview

This course provides a strong foundation in HTML and JavaScript essentials, with a special focus on applying these skills to design and develop professional, responsive email templates. Learners will begin by understanding the building blocks of HTML, move into core JavaScript functionality, and then apply these skills to create real-world, marketing-ready email templates. By the end of the course, students will be able to design, code, and optimize professional emails that render correctly across various devices and email clients.

2. What you'll learn?

By the end of the course, you will be able to:

- Understand and apply HTML structure for web and email content.
- Use JavaScript essentials such as variables, functions, and event handling.
- Build responsive layouts using HTML for email design.
- Implement inline CSS styling best practices for email clients.
- Design professional, reusable, and optimized email templates.
- Test email templates across popular devices and email clients.
- Apply JavaScript for basic interactivity in browser-based email previews.
- Follow industry standards and email deliverability best practices.

3. Target Audience

- Beginners looking to learn HTML and JavaScript fundamentals.
- Marketing professionals and designers who want to create custom email templates.
- Developers aiming to enhance front-end coding skills for professional communication design.

4. Pre-Requisites

- No strict prerequisites.
- Basic knowledge of computers and internet usage.
- Familiarity with CSS basics is helpful but not mandatory.

5. Course content

Day 1 — HTML Foundations & Content Structuring

Topics

- Introduction to web technologies & ecosystem
- Difference between HTML, CSS, and JavaScript
- HTML syntax rules, nesting, and case sensitivity
- HTML document structure (<!DOCTYPE>, <html>, <head>, <body>)
- Common elements: headings, paragraphs, line breaks, horizontal rules
- Text formatting: bold, italics, superscript, subscript, special characters
- Links: absolute vs relative paths, mailto links, target attribute, fragment identifiers
- Images: file formats, alt text best practices, linking images, responsive images (HTML only)
- Lists: unordered, ordered, definition lists, nesting lists
- Semantic HTML tags: <header>, <footer>, <main>, <section>, <article>, <aside>
- Accessibility fundamentals: ARIA attributes overview (no deep CSS styling)

Labs

- Create a semantic company profile page with headings, text, links, and images
- Add internal navigation using anchor links
- Create a nested list-based site map for a fictional website

Day 2 — HTML Forms, Tables & JavaScript Basics

Topics

- HTML forms: <form> attributes (action, method, novalidate)
- Form controls: text, email, number, date, radio buttons, checkboxes, select menus, textareas
- Grouping form controls: <fieldset> and <legend>
- Using default HTML5 validation attributes: required, pattern, min, max
- HTML tables: <table>, <thead>, <tbody>, <tfoot>, <tr>, <td>, <th>
- Introduction to JavaScript: where and how to embed it
- Variables (let, const), data types, operators
- Arrays and objects (basic)
- Functions: declaration, parameters, return values
- JavaScript built-in objects: Math, Date, String

Labs

- Create a contact form with multiple input types and HTML validation attributes
- Build a product price list table for an online store
- Write JavaScript to calculate the total price for a given set of quantities from a table

Day 3 — DOM, Events & JavaScript Validation

Topics

- DOM tree concept and element selection (getElementById, querySelector, querySelectorAll)
- Reading and modifying text/content (innerHTML, textContent)
- Reading and modifying attributes (setAttribute, getAttribute)
- Adding/removing HTML elements dynamically (appendChild, removeChild)
- Event handling: onclick vs addEventListener
- Keyboard events, form events, and timers (setTimeout, setInterval)

- HTML form validation with JavaScript
- Using regex for pattern matching (email, phone, custom formats)
- Preventing invalid submissions and displaying custom error messages

Labs

- Build an interactive to-do list: add, delete, and mark items as done
- Create a real-time form validation script that checks email format and password strength
- Enhance the contact form from Day 2 to validate all fields with JavaScript before submission

Day 4 — HTML Email Fundamentals

Topics

- Differences between web HTML and email HTML
- Why CSS is limited in email and the role of HTML attributes
- Table-based layouts: <table>, <tr>, <td> for structure
- Creating multi-column layouts with tables
- Image hosting & using absolute paths
- Creating “bulletproof” buttons using table cells + links
- Preheader text best practices
- Safe fonts and alt text for images
- CAN-SPAM & GDPR compliance considerations
- Testing emails in different clients

Labs

- Create a single-banner promotional email using only HTML tables
- Add a clickable button inside the email using a table cell and a link
- Test the email design in an online email preview tool

Day 5 — HTML Email Templates & Automation

Topics

- Modular email design (header, body, footer sections)
- Personalization with merge tags ({{first_name}}, {{cta_url}})
- Linking email templates to analytics with UTM tags
- Dark mode considerations without CSS
- Creating transactional emails (order confirmations, password resets)
- Using JavaScript outside email to generate email HTML (templating approach)
- Exporting HTML for ESPs (Email Service Providers) like Mailchimp, SendGrid
- Final project planning and checklist for email best practices

Labs

- Build a modular newsletter template with header, body, and footer
- Create a transactional email (e.g., order confirmation) with placeholders for dynamic data
- Write a JavaScript script that takes JSON input and generates the final HTML email for upload to an ESP
- Final Project: Complete both a promotional and transactional email, test in two clients, and validate links/images