



# Certificate in Web Designing

Duration : 240 Hrs / 3 Months

## Internet Basics

- email fundamentals
- IP addressing (IPv4 and V6)
- Browser layout engine differences
- Search Engine Optimization
- How to use search engines
- Absolute vs. relative URL
- Domain registration and DNS
- Site hosting
- File naming conventions (including case sensitive names)
- Protocols (TCP/IP, FTP/ sFTP, http/ https)
- Sitemap
- Code validation
- Captcha

## Security Basics

- Anti-malware
- Firewalls
- DOS and DDOS
- SPAM

## Web Audio and Video

- Streaming server concepts
- Creating and optimizing audio and video
- Podcasting

## HTML

- HTML elements and attributes (including comments and proper coding techniques)
- Deprecated HTML elements and attributes
- HTML coding fundamentals (paragraphs, headings, quotes, entities and related)
- Differences between head and body tags
- Links and anchors
- Data tables
- iFrames
- Forms (including Get vs. Post) and data validation
- Lists
- Semantic markup
- History of HTML
- Presentation vs. content
- Images
- File Paths
- Information architecture

## CSS

- CSS syntax
- Selectors, properties, values
- CSS transitions
- CSS transforms
- CSS animation
- Pseudo-classes
- Pseudo-behaviors
- Media queries and breakpoints
- Responsive design techniques
- Box model
- Colors, backgrounds, borders
- Specificity
- Cascade
- CSS units
- Fonts and font families
- Positioning
- Gradients

- Flex box and Grid
- CSS variables and mix-ins
- CSS Pre-Processors (LESS, SASS)
- Advanced CSS concepts (blends, shapes, exclusions)

## Web Graphics

- Color theory
- Image optimization
- File formats
- Resolution and file size
- Whitespace
- Corporate identity and logo use
- Canvas vs. SVG
- Proximity, alignment, repetition, contrast

## UX and UI

- User interviews
- User stories
- Customer journey map
- Task analysis
- Affinity map
- Personas
- User flows
- Prototypes and wireframes
- Usability
- A/B testing
- Smokescreen test
- Patterns
- Hick's Law
- Fitt's Law
- Function vs. feature (don't do it because it is cool)
- Mouse vs. keyboard vs. touch interactions
- Visual hierarchy
- Responsive vs. adaptive design

## Accessibility

- Types of disabilities
- WCAG
- Semantics
- ARIA
- Accessible styles
- Focus and DOM order
- Accessibility tree
- Accessible tables
- Contrast
- Accessible devices (screen readers)
- Accessible non-web documents (i.e. PDFs)
- Alternate text

## Web Project Management

- Project management, program management, portfolio management
- Code commenting and documentation
- Scope (and scope creep)
- Time management
- Cost management
- Risk management
- Communication management
- Version control and change management (including Git)
- Backups and recovery
- Website planning
- Site goals and target audience
- Communicating expected outcomes (site maps, wireframes, style tiles, mood boards)
- Releases (model, location, media)
- Requirements
- Local vs. remote vs. testing servers
- Deliverables and supporting materials
- Post-mortem/ retrospectives after project completed

## Computer Basics

- Explaining computer characteristics and various types of computers.
- Detailing various devices of a computer system for input, output memory and storage.
- Understanding ports for data communication and printers for hard copy generation.

## Software

- Describing the various Windows XP features and components.
- Understanding windows explorer for file management.
- Illustrating the installation and troubleshooting of hardware and software.
- Detailing the need and procedure for sharing information.

## Word Processing

- Describing the MS-Word Interface and technique for editing document.
- Understanding the process to print and format documents.
- Explaining advanced features of MS-WORD as find, replace, thesaurus and graphics.
- Detailing the usage of tables & charts in a document of MS-Word.

## Web Technology

- Illustrating the different terms used in web as Hypertext, URL, Domain Name, etc.
- Understanding the usage of web browser and the role of internet service provider
- Detailing the process to upload and download files from internet.

## HTML

- Describing the role of web page and using HTML and MS Front page for making web. pages

## Introduction to Printing

- Describing the various types of printing like offset, lithography, etc.
- Understanding the hardware and software required for DTP operations.

## DTP Basics

- Explaining the raster and vector graphics and their impact on DTP.
- Detailing different types and parts of fonts as serif, sans-serif, font pitch, etc.
- Describing the various fonts formatting options indent, hyphenate, etc.

## Publishing Elements

- Illustrating the concept and application of half tone images in DTP.
- Explaining the basics and techniques for using spot and process colors.

## CorelDraw 10

- Describing various components and interface of CorelDraw as toolbar, guideline, etc.
- Explaining the steps to create, open and save files in CorelDraw.
- Understanding the usage of Cartesian coordinates and the property bar.
- Detailing the various options and utility of page and document setup.
- Describing the concept and application of artistic text and object arrangement.

## Photoshop 7

- Explaining various components and interface of Photoshop as tools, bars, etc.
- Illustrating the process to create, open and save files in Photoshop.
- Describing the concept and usage of layers in Photoshop.
- Detailing the application of color picker and work path.
- Understanding different filters in Photoshop used for image manipulation.
- PageMaker 7
- Describing various components and interface of PageMaker as toolbar, ruler, etc.
- Explaining the steps to create, open and save files in PageMaker.
- Understanding various formatting options for text and usage of text blocks.
- Illustrating different options for formatting the page and paragraph.
- Detailing the story editor, styles and master pages feature of Photoshop.