

# ARE YOU A 10+2 STUDENT?

TechSquare  
Solutions

UNLOCK YOUR FUTURE WITH  
WEB DEVELOPMENT

## WHY CHOOSE US?

- 100% Practical Learning
- Learn from Industry Experts
- Hands-on Projects & Website Development
- Job-Oriented Training with Placement Assistance
- Founded in 2010.



FULL STACK DEVELOPMENT

ENROLL TODAY

TSS



98720-65086

[www.techsquaresolutions.com](http://www.techsquaresolutions.com)



**CSS SYLLABUS (BEGINNER TO ADVANCED)****1. Introduction to CSS**

- What is CSS?
- Advantages of CSS
- Different ways to apply CSS:
  - Inline CSS, Internal CSS, External CSS
- CSS Syntax and Selectors

**2. CSS Selectors**

- Universal Selector (\*)
- Element Selector (h1, p, div, etc.)
- Class Selector (.class)
- ID Selector (#id)
- Grouping Selector (h1, h2, p)
- Descendant Selector (div p)
- Child Selector (div > p)
- Adjacent Sibling Selector (h1 + p)
- General Sibling Selector (h1 ~ p)
- Attribute Selectors:
  - [attribute]
  - [attribute="value"]
  - [attribute^="value"]
  - [attribute\$="value"]
  - [attribute\*="value"]
- Pseudo-classes (:hover, :focus, :nth-child(), etc.)
- Pseudo-elements (::before, ::after, ::first-letter, ::first-line)

**3. CSS Box Model**

- Content, Padding, Border, Margin
- Understanding box-sizing: content-box vs box-sizing: border-box
- Overflow (overflow: visible, hidden, scroll, auto)
- Outline vs Border

**4. CSS Units & Measurements**

- Absolute Units (px, pt, cm, mm, in)
- Relative Units (em, rem, %, vw, vh, vmin, vmax)
- CSS Calculations (calc() function)

**5. Colors in CSS**

- Named Colors (red, blue, green, etc.)
- Hexadecimal Colors (#ff0000, #00ff00, #0000ff)
- RGB Colors (rgb(255, 0, 0))
- RGBA Colors (rgba(255, 0, 0, 0.5))
- HSL & HSLA (hsl(120, 100%, 50%))
- hsla(120, 100%, 50%, 0.5))

**6. CSS Backgrounds**

- Background Color (background-color)
- Background Image (background-image)
- Background Repeat (repeat, no-repeat, repeat-x, repeat-y)
- Background Position (left, right, center, top, bottom, px, %)
- Background Size (auto, cover, contain)
- Background Attachment (scroll, fixed, local)
- Multiple Backgrounds

**7. CSS Borders & Shadows**

- Border Styles (solid, dotted, dashed, double, groove, ridge, inset, outset)
- Border Radius (border-radius)
- Box Shadow (box-shadow)
- Text Shadow (text-shadow)

**8. CSS Typography (Fonts & Text)**

- Font Family (font-family)
- Font Size (px, em, rem, %)
- Font Weight (normal, bold, lighter, bolder, 100-900)
- Font Style (normal, italic, oblique)
- Text Alignment (left, right, center, justify)
- Text Decoration (underline, overline, line-through, none)
- Text Transformation (uppercase, lowercase, capitalize)
- Letter Spacing, Word Spacing, Line Height
- Margins and padding

**9. CSS Positioning & Layout**

- Normal Flow
- position Property:
  - static
  - relative
  - absolute
  - fixed
  - sticky
- Z-index (z-index)
- Display Property (block, inline, inline-block, none)
- Visibility (visibility: hidden vs display: none)
- Overflow (visible, hidden, scroll, auto)

**10. CSS Flexbox**

- Introduction to Flexbox
- Flex Container Properties:

- display: flex
  - flex-direction
  - justify-content
  - align-items
  - align-content
  - flex-wrap
  - Flex Item Properties:
    - flex-grow
    - flex-shrink
    - flex-basis
    - align-self
    - order
  - Responsive Design with Flexbox
- 

## 11. CSS Grid

- Introduction to CSS Grid
  - Grid Container Properties:
    - display: grid
    - grid-template-columns
    - grid-template-rows
    - grid-gap
    - grid-auto-rows
  - Grid Item Properties:
    - grid-column, grid-row, grid-area, align-self
    - justify-self
  - Grid vs Flexbox (When to Use What?)
- 

## 12. CSS Transforms

- 2D Transforms:
    - translate(), rotate(), scale(), skew()
  - 3D Transforms:
    - perspective(), rotateX(), rotateY(), rotateZ()
- 

## 13. CSS Transitions & Animations

- CSS Transitions:
    - transition-property
    - transition-duration
    - transition-timing-function
    - transition-delay
  - CSS Animations:
    - @keyframes, animation-name
    - animation-duration
    - animation-timing-function
    - animation-delay
    - animation-iteration-count
    - animation-direction
- 

## 14. CSS Responsive Design

- Media Queries:
    - min-width
    - max-width
    - orientation
    - aspect-ratio
  - Viewport Meta Tag
  - Mobile-First vs Desktop-First Design
  - Responsive Typography
  - CSS Units for Responsiveness (em, rem, vh, vw, %)
  - Responsive Images (max-width: 100%)
  - CSS Grid & Flexbox for Responsive Layouts
- 

## 15. Advanced CSS Topics

- CSS Variables (--primary-color)
  - CSS @supports Rule
  - CSS @import Rule
  - CSS clip-path
  - CSS object-fit and object-position
  - CSS aspect-ratio, CSS Scroll Snap
  - CSS Blend Modes (mix-blend-mode, background-blend-mode)
  - CSS Custom Properties (var())
  - CSS Grid Auto-Placement
- 

## 16. CSS Frameworks (Optional)

- Bootstrap Basics
  - Tailwind CSS Basics
  - Materialize CSS
  - Bulma CSS
- 

## 17. CSS Best Practices & Performance Optimization

- Writing Maintainable & Scalable CSS
- Avoiding Overuse of !important
- Minifying CSS for Performance
- Using CSS Preprocessors (SCSS, SASS)
- CSS BEM (Block Element Modifier) Methodology
- Accessibility (A11Y) Best Practices