

# Flexbox, Grid, & Bootstrap

Learn how to use CSS flexbox and grid to layout and align webpage content and make it adapt to different-sized screens. See how both of these newer CSS techniques are useful and when to use each. You'll also learn how to use Bootstrap (which uses Flexbox) to build out layouts quickly.

Group classes in Live Online and onsite training is available for this course. For more information, email [onsite@graduateschool.edu](mailto:onsite@graduateschool.edu) or visit: <https://www.graduateschool.edu/courses/flexbox-grid-css-layout-techniques>



[CustomerRelations@graduateschool.edu](mailto:CustomerRelations@graduateschool.edu) •  
[\(888\) 744-4723](tel:(888)744-4723)

## Course Outline

### Section 1

#### Intro to Flexbox

- Display Flex
- Alignment & Distribution on Main Axis & Cross Axis
- Flex Direction (Row & Column)
- How Auto Margins Are Useful

#### Flexbox: Sizing & Alignment

- Controlling Size with Flex-Grow, Flex-Shrink, & Flex-Basis
- Aligning All vs. Specific Flex Items
- Nesting Flexbox
- Flex Shorthand

#### Flexbox: Vertical Centering on a Full Screen Background

- Creating a Full Screen Background
- Using Viewport Sizing Units vh & vw
- Vertically Aligning Content With Flexbox
- Darkening the Background Image Via CSS

#### Flexbox Wrapping

- Flex-Wrap
- Sizing Flex Items (Flex-Grow & Flex-Basis)

### Section 2

#### Flexbox: Reordering Content

- Changing the Order of Flex Items
- Positive vs. Negative Order Values

### **Flexbox: Creating a Responsive Pricing Grid**

- Nesting Flexbox
- Application of Flexbox Concepts to a Pricing Grid Layout

### **Bootstrap: Getting Started**

- Using Bootstrap's Grid System (Containers, Rows, & Columns)
- Creating Columns & Adding Content
- Adjusting Column Sizes Across Screen Sizes
- Using Some of Bootstrap's Components & Pre-Made Styles

### **Bootstrap: More About Grids & Components**

- Nesting Grids
- Adding a Navbar & Other Components
- Showing & Hiding Elements at Specific Sizes

## **Section 3**

### **Bootstrap: Spacing & Adapting Layout Across Screen Sizes**

- Adding an Email Signup Form
- Adjusting Spacing
- Changing the Layout Across Screen Sizes

### **Intro to Grid**

- Getting Start With Grid (Columns, Rows, & Gaps)
- The Explicit vs. Implicit Grid
- Firefox DevTools for Grid

### **Grid: Sizing & Placing Items Within the Grid**

- Spanning Columns & Rows
- Placing & Sizing Using Numbered Grid Lines
- Naming Grid Lines

### **Grid: Minmax, Auto-Fit, & Auto-Fill**

- Sizing with Minmax
- Auto-Fit vs. Auto-Fill
- Max-Content & Min-Content

## **Section 4**

### **Grid: Template Areas**

- Setting Up Grid Template Areas
- Creating Empty Grid Areas
- Using Automatically Created Named Lines
- Multiple Elements Occupying the Same Grid Area
- Viewing Grid Template Area Names In Firefox's DevTools

**Grid: Alignment, Centering, & Reordering Content**

- Aligning Grid Items
- Aligning Within the Grid Container
- Aligning Individual Grid Items
- Ordering Grid Items

**Grid: Laying out an Article**

- Using Grid to Lay Out an Article
- Making Elements Go Full-Width
- Adding Elements into the Side Columns

**Grid: A Responsive Image Gallery (Masonry Layout)**

- Creating the Grid Layout
- Enlarging Some Photos to Create a Masonry Layout