

To center an image using CSS, you can use the following code. It works for both horizontal and vertical centering.

Option 1: Using Flexbox (Modern and responsive)

css code

```
.container {
  display: flex;
  justify-content: center; /* Centers the image horizontally */
  align-items: center; /* Centers the image vertically */
  height: 100vh; /* Makes the container take up the full viewport height */
}

img {
  max-width: 100%; /* Ensures the image is responsive */
  height: auto; /* Maintains the image's aspect ratio */
}
```

HTML Structure:

Html code

```
<div class="container">
  
</div>
```

Option 2: Using Grid (Alternative modern approach)

css code

```
.container {
  display: grid;
  place-items: center; /* Centers the image both horizontally and vertically */
  height: 100vh;
}

img {
  max-width: 100%;
  height: auto;
}
```

Option 3: Using Traditional Method (Using margin)

Css code

```
.container {
  text-align: center; /* Centers the image horizontally */
}

img {
  display: block; /* Removes inline display of the image */
  margin: 0 auto; /* Centers the image horizontally */
  max-width: 100%;
}
```

```
height: auto;
}
```

HTML Structure (for both options):

Html code

```
<div class="container">
  
</div>
```

- **Flexbox** and **Grid** are the modern and more flexible approaches, especially for responsive layouts.
- The **Traditional Method** (with `margin: 0 auto`) is simple and works well for horizontally centering block elements but doesn't handle vertical centering as well as the others.