

# Excel Charts for Data Visualization

GoSkills online course syllabus

Thursday, May 1, 2025

**Skill level**

Beginner

**Lessons**

37

**Accredited by**

CPD

**Pre-requisites**

[Excel - Basic](#)

**Versions supported**

Excel 365, 2021

**Video duration**

3h 29m

**Estimated study time**

18h for all materials

**Instructor**

Deborah Ashby

## Introduction

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1

### Course Introduction

Introduction to the course and course instructor.

## Data Visualization

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2

### Data Visualization Principles

Understand the 3 principles of data visualization to ensure you create charts that are relevant, clear, and well-designed.

3

### Examples of Good and Bad Chart Design

Explore some examples of good and bad chart design.

## Create and Customize Excel Charts

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4

### Make Sense of Chart Elements and Chart Formats

Build your first chart and explore chart elements and chart formatting options.

5

### More Formatting Options

Explore the advanced formatting options available in the Format Pane.

6

### Brand Charts with Custom Themes

Use company colors in charts by creating a custom theme.

**7** **Dynamic Charts with Excel Tables**  
Create a dynamic chart that automatically updates when new data is added using Excel tables.

**8** **Change Chart Type and Add a Secondary Axis**  
Learn how to change the chart type and add a secondary axis to represent two data series.

**9** **Use Custom Number Formatting in Charts**  
Makes numbers more meaningful by using Custom Number formats in Charts.

**10** **Create a Chart Template**  
Save time by creating a reusable chart template.

## Chart Types

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**11** **The Good All-Rounders: Column and Bar Charts**  
Visualize and analyze datasets using column and bar charts.

**12** **Time-Based Data: Line Charts and Trendlines**  
Visualize time-based data using line charts and trendlines.

**13** **Comparing Data: Pie and Doughnut Charts**  
Create a Pie or a Doughnut Chart to effectively represent comparison data.

**14** **Show the Composition of Data: Area Charts**  
Create an Area Chart to show the composition of data.

**15** **Show the Distribution of Data: Histogram and Pareto Charts**  
Create a Histogram and a Pareto Chart in Excel to show a graphical representation of the distribution of numerical data.

**16** **Scatter Plots**  
Create a scatter plot chart in Excel to display a graphical representation of the relationship between two sets of data.

**17** **Bubble Charts**  
Create a bubble chart in Excel to display three dimensions of data.

**18** **Box and Whisker Charts**  
Create a Box and Whisker (Box plot) chart in Excel to display the distribution of data based on a five-number summary.

**19** **Treemaps and Sunburst Charts**  
Create a treemap and sunburst chart in Excel to visualize hierarchical data in different ways.

**20** **Waterfall Charts**  
Create a Waterfall Chart to visualize how an initial value is affected by a series of intermediate positive or negative values, leading to a final value.

**21** **Stock Charts**  
Create a Stock Chart in Excel, also known as a financial chart, to visualize the price movements of a stock over a certain period.

**22** **Radar Charts**  
Create a Radar Chart in Excel, also known as a spider chart or web chart, to display multivariate data in the form of a two-dimensional chart.

**23** **Funnel Charts**  
Create a funnel chart in Excel to represent stages in a process, showing the flow and drop-off of data at each stage.

**24** **Dumbbell Charts**  
Create a Dumbbell Chart to show the difference between two data points.

**25** **Geographic Data: Map Charts**  
Create a Map Chart in Excel to represent geographic data overlaid on a map.

**26** **Use Images in Charts**  
Create a chart that uses images, icons, or shapes to represent the columns.

## Chart Tips and Shortcuts

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**27** **The Quick Analysis Tool**  
Use the Quick Analysis tool in Excel to quickly analyze and visualize data without extensive manual formatting or calculations.

**28** **Charts with Conditional Formatting**  
Use Conditional Formatting along with Charts and formulas to highlight key values.

**29** **Create Dynamic Chart Titles**  
Create chart titles that dynamically update when the chart changes.

## In-Cell Charts

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- 30** **Heat Maps: Color Scales**  
Apply Color scales to a dataset to visually represent the relative values in a range of cells using colors.
- 31** **Data Bars**  
Apply Data Bars to values in Excel to visually represent the relative values in a range of cells using horizontal bars within the cells.
- 32** **Create Dynamic In-Cell Charts with the REPT Function**  
Use the REPT function to create in-cell charts using symbols that dynamically update when the data changes.
- 33** **Sparklines**  
Use Sparklines - small, condensed charts that fit into a single cell - to provide a visual representation of data trends or variations.

## Pivot Charts and Slicers

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- 34** **Create a Pivot Chart**  
Create a Pivot Table and Pivot Chart from a dataset.
- 35** **Filter Pivot Chart Data with Slicers**  
Use Slicers to filter Pivot Table data.
- 36** **Connect Slicers to Multiple Charts**  
Connect slicers to multiple charts.

## Course Close

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- 37** **Course Close**  
Course Close and instructor goodbye.

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