

# An Introduction to Excel

2010

Get to grips with the most common uses of Microsoft Excel

**Excel Guides** 

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The + symbol does not mean you need to hit the addition sign on the keyboard; rather, it shows the key combination you need to hold down when using a shortcut.

### Introduction

Microsoft Excel is a vast application full of possibilities. However, most users need to know how to perform just a certain set of tasks. This guide acts as a primer to take you through some of the basics that come up time and again in everyday usage.

# 1. Entering data

When you type data in, you can choose where to move next within the spreadsheet.

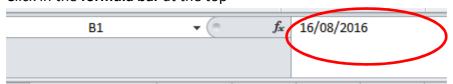
- If you hit **Enter** after making your entry, you will move one cell **down**
- If you hit the TAB key, you will move one cell to the right
- If you hit one of the arrow keys (► ◀ ▲ ▼), you will move one cell in that direction (unless you are in column A or row 1 and can't move further left or up)
- If you press CTRL + Enter after making your entry, you will stay in the same cell
- If you press **SHIFT + Enter**, you will move one cell **up**

To enter data, just select a cell and begin making your entry. If you select a range of cells, enter your data and then hit **CTRL + SHIFT + Enter**, your data will be entered in every cell of the selected range. To ensure your data entries are correct, see <u>data validation</u> (section 14).

You can also make mass entries by copying a cell (CTRL + C), selecting a range and pasting (CTRL + V).

To start editing the existing contents of a cell, you can:

- **Double click** the cell
- Click in the **formula bar** at the top



Press the F2 key to insert your cursor at the end of the cell's contents

To come out of edit mode, press the **Esc** key.

# 2. Sorting

Excel can recognise data headers, but to make certain, select the data you're arranging, click the **Sort** button (under the **Data** menu) and select the **My data has headers** checkbox.



You can then sort by one or additional levels by alphabetical or numerical order (e.g. A to Z, or Smallest to Largest).



The same is true when you **Delete** rows or columns, which uses the same right click menu.

If you want to remove (a) row(s) or column(s) from sight but leave the data untouched, you can use the **Hide** (and, conversely, **Unhide**) commands that are available from the same right click menu. However, functions will **not** be updated, apart from in a special case.<sup>8</sup>

To unhide, you need to select the columns or rows either side of those that are hidden before right clicking and choosing **Unhide**. Alternatively, select the whole sheet (CTRL + A) and right click a row or column to unhide all hidden columns or rows at once.

# 11. Conditional formatting

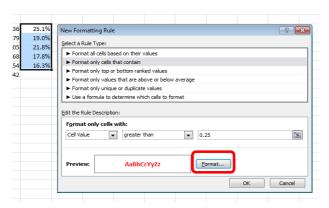
Conditional formatting is a special type of dynamic formatting that changes the appearance of a cell and / or cell contents based on what those contents are. This draws attention to it and flags significant data.

For example, if there are five members of a team, you may want to check that each has a reasonably similar workload, and highlight where members are being overworked, e.g. if their workload exceeds 25%.

- Select the range of cells to format
- Click the **Conditional Formatting** button that is on the **Home** tab
- Lots of options are available. **Manage Rules** takes you to the box where you can make the most customisations. Click **New Rule**



**Format only cells that contain** is often the option to select. Here you can decide to format cells whole values are above / below or between certain values. You can also highlight where they contain specific text or blanks.



Click the **Format** button to select the appearance you want, e.g. bold red text.

In our case, we're specifying a condition regarding a cell value being greater than 25%. You can enter this as 25% (including the % sign) or as 0.25.

(Excel processes rules regarding percentages based on 0 being 0% and 1 being 100%.)

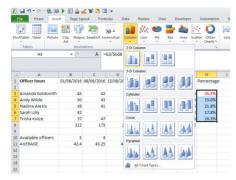
(The **109** is a function number that instructs Excel to disregard hidden rows. You would use function number **9** to include hidden rows in that particular instance.)

<sup>&</sup>lt;sup>8</sup> Hiding rows or columns has no effect on function results unless you are using a special version of the SUBTOTAL function in dealing with (un)hidden *rows*. For example, using =SUBTOTAL(109,A2:A6) sums the values in that range only if they are visible. If you have hidden row 4, it will just sum the other five cells.

Once you **OK** and then **Apply**, when cells in the range meet the rule, their appearance will change accordingly.

### 12. Charts

Charts are a massive area of Excel. The basic principle is to select an array of data, then under the **Insert** tab, choose a Chart type to generate.



Excel is pretty good at guessing how to chart your data, but you can use the **Switch Row / Column** command to look at alternative presentations of the data selected.

Once you select a Chart, the coloured boxes surround data that is being charted, and you can resize these in the same way as when we looked at setting the range to which functions refer.

A contextual menu also appears when you select a chart that allows you to format different elements such as titles, axes and data labels. You can also change the chart type.



Right clicking on chart elements will also allow you to format or change charts to suit your purpose, such as changing individual series types or plotting series on a secondary axis.

### 13. Filtering

Filters allow you to limit the data you're looking at according to criteria you specify. You apply filters under the **Data** tab with the **Filter** command, which displays a special button on the right hand side of column headers.

Clicking this button prompts Excel to provide a list of all unique entries in the column. You can select or deselect the checkboxes to remove or add items that you want to see.

There are also specialised filters that allow you to search for specific text, filter for data above / below / between a certain value and many other options.

Filtering a column means that neighbouring columns are also filtered based on the criteria for the initial filter. You can execute additional filters on other columns to further restrict the visible data.

### 14. Data validation

Data validation ensures that incorrect, mistyped or otherwise erroneous data is not added to a spreadsheet, whether this is dates, numbers, lists, or other text strings. **List** data validation is probably the most frequently-used type.

First you need to (manually) type the list of entries to which users should be restricted in a range of cells.