STAFFORDSHIRE
UNIVERSITY

# Introduction to Microsoft Excel®

Microsoft *Excel*® is a piece of software which allows you to create professional spreadsheets and charts.

It performs numerous functions and formulas to assist you in your projects.

■ CREATE THE **DIFFERENCE**

# Getting started

Click on the start button at the bottom left of the screen ![start button] and click on **Programs – Office – Microsoft Office Excel 2007. Microsoft Excel 2007 will then open.**
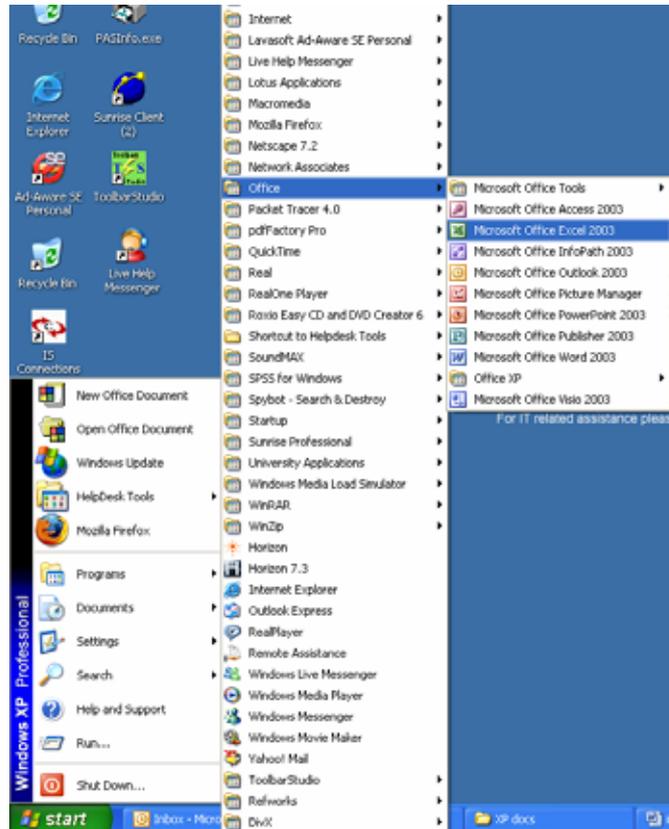


# Starting a new spreadsheet

- Click the **Microsoft Office Button** , and then click **New**.
- Under **Templates**, you see options you can use to create:
    - A blank workbook
    - A workbook  from a template.
    - A new workbook  from an existing file.
- If you are connected to the Internet, you also see templates that are available from Microsoft Office Online.
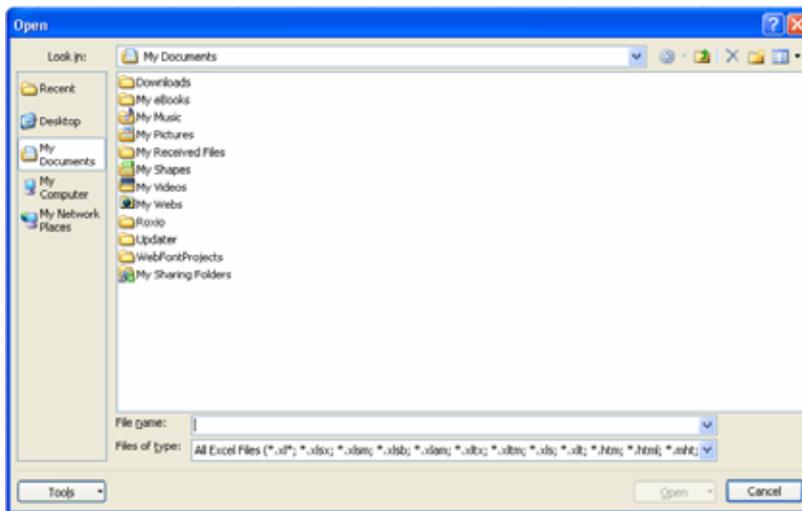
# Saving your work

- Click the **Microsoft Office Button** , and then click **Save**.

  **Keyboard shortcut**  To save the file, press CTRL+S.

# Opening an existing workbook

- Click the **Microsoft Office Button**  and click Open

- The following dialogue box will open



- Select the location where the Excel spreadsheet is located and double click the Excel spreadsheet. The spreadsheet will then load into Excel.

# Basic information about the worksheet

**Workbook:** An Excel file is called a workbook.

**Worksheet:** The page you work on which is made up of grid cells.

**Cell/Selected Cell:** Where you type data/formulae into. Cells are arranged in numbered rows and lettered columns. You have to select a cell to add data to it. data/formulae can also be typed into the formula bar.

**Column/Row Heading:** Use the column/row headings to identify a cells position on the worksheet i.e. A12, B6. Click heading buttons to select a whole column/row of cells.

**Name Box:** Holds a cell's selected reference number – it's position on the worksheet

**Worktab Sheet:** click the tabs to move between worksheets

**Scroll Bars:** use them to display hidden parts of the worksheet

## Entering numbers or text into the worksheet

- On the worksheet, click a cell.
- Type the numbers or text that you want, and then press ENTER or TAB.

TIP  To start data on a new line within a cell, enter a line break by pressing ALT+ENTER.

## Enter numbers with a fixed decimal point

- Click the Microsoft Office Button , and then click Excel Options.
- Click Advanced, and then under Editing options, select the Automatically insert a decimal point check box.
- In the Places box, enter a positive number for digits to the right of the decimal point or a negative number for digits to the left of the decimal point.
- For example, if you enter 3 in the Places box and then type 2834 in a cell, the value will be 2.834. If you enter -3 in the Places box and then type 283, the value will be 283000.
- On the worksheet, click a cell, and then enter the number that you want.

NOTE   Data that you typed in cells before selecting the Fixed decimal option is not affected.

TIP  To temporarily override the Fixed decimal option, type a decimal point when you enter the number.

# Enter dates or times

- On the worksheet, click a cell.
- Type a date or time as follows:
    - o For a date, use a slash mark or a hyphen to separate the parts of a date; for example, type **9/5/2002** or **5-Sep-2002**.

TIP  To enter the current date, press CTRL+; (semicolon).

For a time that is based on the 12-hour clock, type a space, and then type **a** or **p** after the time; for example, **9:00 p**. Otherwise, Excel enters the time as AM.

TIP  To enter the current time, press CTRL+SHIFT+; (semicolon).

# Enter the same data into several cells at once

- Select the cells into which you want to enter the same data. The cells do not have to be adjacent.
- In the active cell, type the data, and then press CTRL+ENTER.

TIP  You can also enter the same data into several cells by using the fill handle (fill handle: The small black square in the lower-right corner of the selection. When you point to the fill handle, the pointer changes to a black cross.) to automatically fill data in worksheet cells.

# Insert blank cells on a worksheet

- o Select the cell or the range (range: Two or more cells on a sheet. The cells in a range can be adjacent or nonadjacent.) of cells where you want to insert the new blank cells. Select the same number of cells as you want to insert. For example, to insert five blank cells, you need to select five cells.

o   On the **Home** tab, in the **Cells** group, click the arrow next to **Insert**, and then click **Insert Cells**.

Insert ▾
Delete ▾
Format ▾
Cells

TIP   You can also right-click the selected cells and then click **Insert** on the shortcut menu.

o   In the **Insert** dialog box, click the direction in which you want to shift the surrounding cells.

## Insert rows on a worksheet

o   Do one of the following:
    o   To insert a single row, select the row or a cell in the row above which you want to insert the new row. For example, to insert a new row above row 5, click a cell in row 5.
    o   To insert multiple rows, select the rows above which you want to insert rows. Select the same number of rows as you want to insert. For example, to insert three new rows, you need to select three rows.
    o   To insert nonadjacent rows, hold down CTRL while you select nonadjacent rows
    o   On the **Home** tab, in the **Cells** group, click the arrow next to **Insert**, and then click **Insert Sheet Rows**.

Insert ▾
Delete ▾
Format ▾
Cells
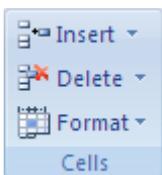
TIP   You can also right-click the selected rows and then click **Insert** on the shortcut menu.

## Change the column width to fit the contents

o   Select the column or columns that you want to change.
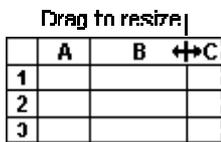o   On the **Home** tab, in the **Cells** group, click **Format**.
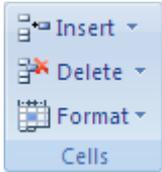
o Under **Cell Size**, click **AutoFit Column Width**.

## Change the width of columns by using the mouse

Do one of the following:

o To change the width of one column, drag the boundary on the right side of the column heading until the column is the width that you want.



o To change the width of multiple columns, select the columns that you want to change, and then drag a boundary to the right of a selected column heading.
o To change the width of columns to fit the contents, select the column or columns that you want to change, and then double-click the boundary to the right of a selected column heading.
o To change the width of all columns on the worksheet, click the **Select All** button, and then drag the boundary of any column heading.
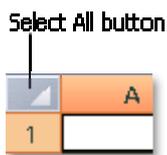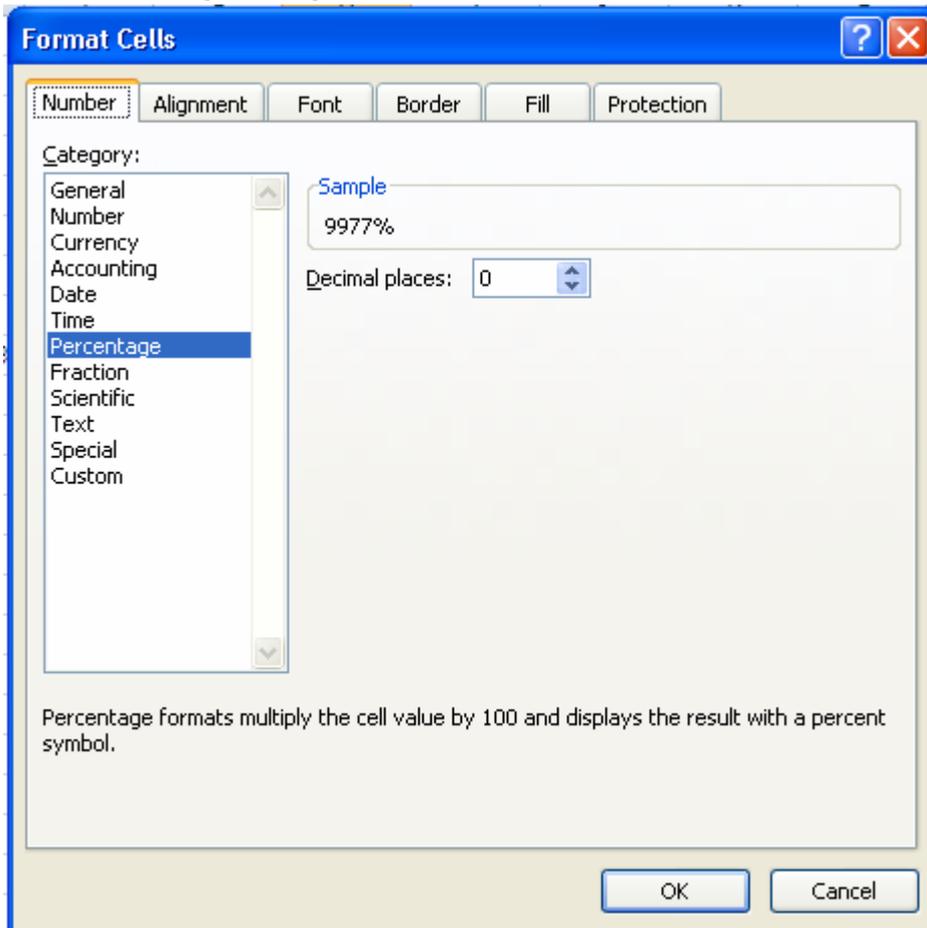


## Formatting your document

You can format individual cells or groups of cells in your worksheet by doing the following

o Select the cells to which you want to add formatting
o Right click the individual or group of cells

o The following dialogue box appears



o You can select from any of the formatting options under **_Category_**
o A sample can be seen under the Sample section of the dialogue box
o Extra formatting can be applied using the fields that appear under the Sample section

# Add formatting to your document by using the Mini toolbar

When you select text, you can show or hide a handy, miniature, semitransparent toolbar called the Mini toolbar. The Mini toolbar helps you work with fonts, font styles, font sizing, alignment, text color, indent levels, and bullet features.

NOTE   You cannot customize the Mini toolbar.

The following shows how the semitransparent toolbar looks when you select text on a slide or in a shape in Microsoft Office PowerPoint 2007.

The following shows the Mini toolbar when you rest your pointer on it. To use the toolbar, click any of the available commands.
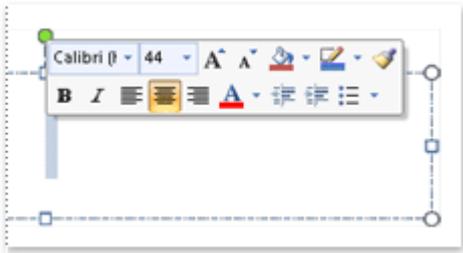


## Totaling cells

- o Select the cell below or to the side of the cells you want to total
- o Click the **Autosum** function from the **Editing** section of the toolbar



- o A dotted line appears around some or all of the cells you want to total. Excel will have a guess at what it is you want totaling and select those cells
- o If the cells you want totaling are not selected then you can select the cells by clicking the first

## Percentages

There are two ways of applying a percentage:

- Type in the actual percentage ie 54%
- Apply the percent style button from the toolbar



The percent style can be found on the **Numbers** section of the **Home** tab and can be applied before or after a number has been typed into the cell, but the number must be expressed as a decimal, as the *percent style* multiplys numbers by 100. Eg. 0.54 would give 54%; 54 would give 5400%.
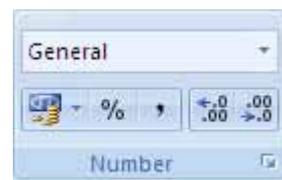
# Calculations

To perform calculations, you have to type in a mathematical formula. A formula must start with **=** followed by a combination of cell names, numbers and operators, Example formulae:

| | | | |
|---|---|---|---|
| Addition | =A4+C12 | Multiplication | =C1*D1 |
| Subtraction | =D3-H3 | Exponentiation | =E3^2 |
| Division | =B12/D18 | Percentage | =A3*20% |

- Click on a blank cell to hold the result of the calculation.
- Click in the formula bar or cell, type =, and then the formula.
- Press **Enter** to perform the calculation.

To refer to a range of cells, there is no need to type out each individual reference number from A1 to A15 for example, just type A1:A15 - the colons mean 'to'.
Like data, you can copy and paste formula as described earlier.

# Delete cells, rows, or columns

- o Select the cells, rows, or columns that you want to delete.
- o On the **Home** tab, in the **Cells** group, do one of the following:
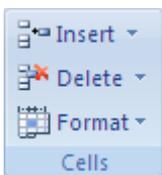


- o To delete selected cells, click the arrow next to **Delete**, and then click **Delete Cells**.
- o To delete selected rows, click the arrow next to **Delete**, and then click **Delete Sheet Rows**.
- o To delete selected columns, click the arrow next to **Delete**, and then click **Delete Sheet Columns**.

TIP You can also right-click a selection of cells, rows, or columns, click **Delete** on the shortcut menu, and then click the option that you want.

If you are deleting a cell or a range (range: Two or more cells on a sheet. The cells in a range can be adjacent or nonadjacent.) of cells, in the **Delete** dialog box, click **Shift cells left**, **Shift cells up**, **Entire row**, or **Entire column**.

- o If you are deleting rows or columns, other rows or columns automatically shift up or to the left.

**Tips**

To quickly repeat deleting cells, rows, or columns, select the next cells, rows, or columns, and then press CTRL+Y.

If needed, you can restore deleted data immediately after you delete it. On the **Quick Access** toolbar menu, click **Undo Delete**, or press CTRL+Z.

# Where to go for more help or information

You can get further help from the Information Services Help Desks at:

Thompson Library:  01782 294771
Brindley IT Centre:  01782 294135
Octagon IT Centre:  01785 353339

Online:      www.staffs.ac.uk/ishelp
Email:       libraryhelpdesk@staffs.ac.uk    (for all IT and Library queries)