Microsoft Office 97: Excel 97 for Power Users

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How to Use the Course

To start the course

If you are using the course completely independently and you have to install it for yourself, consult the section "Installation Procedure" in this manual.

Normally, the course will have been installed for you, and all you will have to do is start it up.

First turn on your computer.

Make sure you know which drive the course is installed on. (The course administrator or whoever is in charge of the installation should be able to tell you. It is normally installed on the C: drive or on your LAN.)

Run windows, open the appropriate CBT group and then select the course.

All you have to do now is follow the instructions on screen.

If the Student Registration system is in place
Type your user-number. This will be supplied by whoever is administering the course. You may also be asked to type a password. This will be supplied by your course administrator.

If the Student Registration system is not in place
Type 0 when you are asked for your user-number.
This will take you straight to the main menu screen.

If the Self Registration system is in place
If you have not been allocated a user-number, type *self*.
You will then be prompted to enter your name and whatever number you choose.
Your user-number will then be created for you, and any time you re-enter the course, you should enter this user-number.

Main menu/course map

When you first enter the course, you will be presented with the course map, which also functions as the course menu, with course units listed.

To see the topics menu for any unit, click that unit. To see the topics menu for another unit, there is no need to close the current topics menu: simply click the relevant unit in the list of course units to replace the current topics list with the required topics list.

Double-click any topic to enter the unit at the start of that topic.

Double-click any screen number to enter the unit at the start of that particular screen.

Option button	Keypress	Action
Bookmark	Alt + b	Takes you back to the start of the screen you were in when you last left the course (only active if you have been into the course before)
Test	Alt + t	Takes you to the test menu
Progress	Alt + p	Shows parts of the course accessed and your test score (if applicable)
Glossary	Alt + g	Takes you to the course glossary
OK	Alt + o	Takes you into the course at the topic or screen selected
Close	Alt + l	Takes you back to the point in the course where you chose the **Navigate** option (only active if you have entered the course map from the **Navigate** option in the course)
Exit course	Alt + x	Takes you out of the course

Course screens

Unit aim and objectives screen

Option button	Keypress	Action
Objectives	Alt + o	Displays objectives
Exit course	Alt + x	Takes you out of the course
Help	Alt + h	Takes you to the course help
Navigate	Alt + n	Takes you to the course map, from where you can navigate through the course
Footnote	Alt + f	Not active on this screen
Step back	Alt + s	Not active on this screen
Continue	Alt + c	Takes you to the first screen of the course
Close	Alt + l	Closes the objectives window

Unit Navigation
Right-clicking the mouse anywhere on the screen displays a pop-up menu with a list of all the topics in the current unit. Left-clicking on the topic name displays the screen numbers relevant to that topic. Left-clicking on a screen number brings you to the start of that topic screen.

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Unit summary screen

Option button	Keypress	Action
Summary	Alt + s	Displays full summary for the unit
Exit course	Alt + x	Takes you out of the course
Help	Alt + h	Takes you to the course help
Navigate	Alt + n	Takes you to the course map, from where you can navigate through the course
Footnote	Alt + f	Not active on this screen
Step back	Alt + s	Not active on this screen
Continue	Alt + c Takes you to the course map	
Close	Alt + l	Closes the full summary

Unit Navigation
Right-clicking the mouse anywhere on the screen displays a pop-up menu with a list of all the topics in the current unit. Left-clicking on the topic name displays the screen numbers relevant to that topic. Left-clicking on a screen number brings you to the start of that topic screen.

Regular course screen

Option button	Keypress	Action
E<u>x</u>it course	Alt + x	Takes you out of the course
<u>H</u>elp	Alt + h	Takes you to the course help
<u>N</u>avigate	Alt + n	Takes you to the course map,from where you can navigate through the course
<u>S</u>tep back	Alt + s	Displays the previous block of text along with its graphic. Clicking repeatedly on this button allows you to backtrack to the start of the current screen
<u>F</u>ootnote	Alt + f	Displays extra text relevant to the point you are at in the course (active only when a footnote is available)
<u>C</u>ontinue	Alt + c	Takes you forward through the course, by bringing up the next piece of text, graphic or question

Unit Navigation
Right-clicking the mouse anywhere on the screen displays a pop-up menu with a list of all the topics in the current unit. Left-clicking on the topic name displays the screen numbers relevant to that topic. Left-clicking on a screen number brings you to the start of that topic screen.

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Simulation screen

Option button	Keypress	Action
E<u>x</u>it course	Ctrl + shift + x	Takes you out of the course
<u>H</u>elp	Ctrl + shift + h	Takes you to the course help
<u>N</u>avigate	Ctrl + shift + n	Takes you to the course map, from where you can navigate through the course
<u>S</u>kip task	Ctrl + shift + s	Allows you to bypass tasks
<u>C</u>ontinue	Ctrl + shift + c	Takes you forward through the course, by bringing up the next piece of text, graphic, question, or task

Question window

Option button	Keypress	Action
OK	Alt + o or Enter	1. Confirms choice 2. Closes question window after feedback
Cancel	Alt + c	Takes you forward to correct answer
Help	Alt + h	Shows question help
Hint	Alt + i	Provides a hint to help you to answer the question
Redo	Alt + r	Undoes any attempt you have made at the question and allows you to start again (only available before you choose OK to complete the question)

Test question window

Option button	Keypress	Action
OK	Alt + o or Enter	1. Confirms choice 2. Closes question window after feedback
Redo	Alt + r	Undoes any attempt you have made at the question and allows you to start again (only available before you choose OK to complete the question)
Help	Alt + h	Shows question help
Status	Alt + s	Tells you how much of the test you have completed and gives your percentage score so far
Exit Test	Alt + x	Allows you to abandon the test. In this case, your score so far will be discounted

Questions and Tasks

As you work through the course, you will find that presentation of material is constantly tempered by questions.

Some questions are asked in order to check that you have understood a point you learned earlier in the course. But more often, you are asked discovery questions. These are questions that you may not know the answers to. This is part of our teaching technique and is a strategy for drawing you into active participation in your own learning.

Discovery questions are there not to test you but to provide you with the opportunity to enter into dialog with the course. They are asked in a spirit of involvement, nudging you towards conclusions, helping you to make connections. Instead of being a passive recipient of snippets of narrative, you are asked to take an active part, attempting to work out for yourself how you think the narrative will unfold. For this reason, you should not feel intimidated by these questions, or feel that you should be able to answer them all. If you answer a question incorrectly, that is not a mark of failure; look on it simply as an opportunity to learn the right answer.

In addition, the course may include simulations, where you are invited to practice using the application by completing a series of tasks. If you complete a task correctly, you will not normally be given feedback, but your action will simply have the result it would have in a real application environment. If you do not complete the task successfully, you will either be invited to try again, or the task will be completed for you.

Taking the Test

The test is presented in two formats: you can take a course test, where you are tested on the contents of the whole course; or there may also be individual unit tests.

We recommend that you should follow the course and then take the course test. The test results indicate which units if any you need to review. We suggest that you should review the recommended units, and then take the appropriate unit tests (if available). You could also repeat the full course test if you wish.

The course test can also be used as a pre-course test. If you feel you are reasonably proficient in the course material, you could test your skills by taking the course test before you follow the course. The results may indicate that you should take the whole course, or that you should concentrate on particular units. Again, if you decide to concentrate on particular units, you can test your knowledge of these units afterwards by taking the unit test.

In any case, it is not recommended that you follow a unit and then take the unit test immediately. It is better to allow a time lapse, and perhaps to take a group of unit tests together.

To take the test, click the option button **Test** at the foot of the Course Map screen. You will be presented with a menu, from where you can choose the test you require.

The first option on this menu is **Full Course Test**. If you choose this option, you will be taken into a test consisting of a large number of randomly generated questions ranging over the content of the whole course. Because the questions are randomly generated, you may take the full course test more than once without being presented with the same selection of questions.

Alternatively, you may choose to be tested on any individual unit, simply by selecting that unit from the test menu. Note that the questions in the unit-based tests are not randomly generated, so if you repeat any unit test, you will be asked the same series of questions.

Although the questions in the test look much like questions in the course, it is important to realize that they serve a different function - that of assessing your assimilation of material covered in the course. For this reason, questions in the test are more strictly judged than questions in the course. You will not have the option to skip questions (ie the **Cancel** button will not be active) and you will not normally have a second chance to attempt a question after feedback has been given.

At the end of the test you will be given your results, and it will be indicated to you which units of the course you need to review, if any.

It is especially important to type answers carefully in the test. The test is not designed to accept as wide a range of spelling errors as the course.

Your score is electronically recorded via the CMI (computer managed instruction) system. If you take the course test, and subsequently take individual unit tests, your score in the unit test will over-ride your score in the same units in the course test. If you take the course test again, your latest course-test score will over-ride any other tests you may have taken earlier.

Your test score is accessible to the course administrator and you can also check it yourself at any point from the main menu screen. Simply click on the **Progress** button (or press Alt+ p) at the foot of the main menu screen.

Microsoft Office 97: Excel 97 for Power Users_____

Preceding course: *Microsoft Office 97: Advanced Excel 97*

Course duration: 4 hours

Audience: People already proficient in the use of Excel, and people aiming for

Expert User certification

Pre-requisites: Proficiency in the use of Excel 97, and comprehensive understanding of all the topics covered in the preceding course *Microsoft Office 97: Advanced Excel 97*

Course aim: To enable students to maximize their usage of all of Excel 97's functionality, and to prepare students for certifiication as Expert Users of Excel 97

Learning objectives:

After taking this course, the student should be able to

q   record, run and edit macros
q   use database functions and run Web queries
q   share data with other workbooks and other applications
q   use Report Manager to create custom reports

Course incorporates:

Test

Hands-on exercises

Units and topics in Microsoft Office 97: Excel 97 for Power Users

Using macros
Recording and running macros
Hands-on: Recording a macro
Hands-on: Running a macro
Editing macros
Hands-on: Editing a macro

Sharing data
Linking data
Hands-on: Creating a data link
Importing and exporting between Excel and other applications
Hands-on: Embedding an object

Using database functions
Lists as databases
Hands-on: Using data forms
Sorting and filtering lists
Hands-on: Sort and Custom AutoFilter
Querying a database
Hands-on: Running a Web query
Data analysis with PivotTables

Using Report Manager
Defining custom views and scenarios
Hands-on: Defining a scenario
Creating reports
Hands-on: Creating a report

To run the course, you need

* 386SX or faster PC, MS-DOS V3.1 or later, Windows 3.1
* VGA monitor and card
* 4MB of RAM
* at least 26MB of space available on the hard disk

The course will be installed in a directory called **MSOPE.**

Course Guide

Units in Microsoft Office 97: Excel 97 for Power Users

Using macros

Using database functions

Sharing data

Using Report Manager

Using macros

Topics
Recording and running macros
Hands-on: Recording a macro
Hands-on: Running a macro
Editing macros
Hands-on: Editing a macro

Unit aim
To show how to record, run, and edit macros

Unit objectives
After completing this unit you should be able to

q   describe how to record macros

q   explain where macros can be stored

q   explain the use of absolute and relative references in macros

q   describe how to run macros

q   record a simple macro in the current workbook

q   run an existing macro in the current workbook

q   describe how to edit macros using the Microsoft VB Editor

q   edit a macro in the current workbook

Unit summary
You can record macros using the **Macro** - **Record New Macro** option on the Tools menu.

Macros can be stored in the current workbook, a new workbook, or your Personal Macro Workbook.

Normally macros will be recorded with absolute references.

You can record a macro with relative references by clicking the **Relative Reference** button on the Stop Recording toolbar.

You can run macros using the **Macro** - **Macros** option in the **Tools** menu.

In Excel, you use the Visual Basic Editor to edit macros.

To edit macros you choose the **Edit** button in the Macro dialog box.

User's Notes

Using database functions

Topics
Lists as databases
Hands-on: Using data forms
Sorting and filtering lists
Hands-on: Sort and Custom AutoFilter
Querying a database
Hands-on: Running a Web query
Data analysis with PivotTables

Unit aim
To introduce you to some database features in Excel 97

Unit objectives
After completing this unit you should be able to

q   explain how an Excel list can function as a database

q   use data forms to add and delete list records

q   explain how to rearrange (sort) a list using the **Data** - **Sort** command

q   describe ways of filtering an Excel database list

q   sort a list

q   filter a list using Custom AutoFilter

q   explain how to query an external database from an Excel workbook

q   run a Web query

q   describe the elements and uses of a PivotTable

Unit summary
A Microsoft Excel list can function as a flat-file database, where columns act as fields, and rows act as records.

You can use a data form to

q   add a record to a list

q   edit a record in a list

q   delete a record from a list

q   find a record meeting certain criteria

Sorting is rearranging the order of rows or columns in a list, based on values in the list.

You can use the Sort dialog box to rearrange a list.

Filtering a list refers to the selection of records meeting certain requirements.

You can filter an Excel list using AutoFilter, Custom AutoFilter, or Advanced Filter.

If you have Microsoft Query installed on your computer, you can query an external database, or the Web, from an Excel workbook.

A PivotTable is an interactive table useful for cross-tabulating data.

User's Notes

PivotTables can be constructed and modified using the PivotTable Wizard.

After making changes to source data, you must use the **Data** - **Refresh Data** command to effect the changes in associated PivotTables.

User's Notes

Sharing data

Topics
Linking data
Hands-on: Creating a data link
Importing and exporting between Excel and other applications
Hands-on: Embedding an object

Unit aim
To introduce the concepts of linking and embedding

Unit objectives
After completing this unit you should be able to

- q explain how to create link formulas

- q create a data link

- q describe how to import or export objects between Excel and other applications

- q embed an object created in another application in an Excel 97 workbook

Unit summary
You can create links in a worksheet to

- q other portions of the same worksheet

- q other worksheets in the same workbook

- q other workbooks

Formulas with links can be created

- q manually

- q by point-and-click

- q by using the Paste Special command

You can easily import or export objects between Excel and other applications.

Linked objects are kept in the original (server) applications, so destination files are not enlarged significantly.

Embedded objects are contained in client files, resulting in larger files.

User's Notes

User's Notes

Using Report Manager

Topics
Defining custom views and scenarios
Hands-on: Defining a scenario
Creating reports
Hands-on: Creating a report

Unit aim
To explain how to create a printed report using custom views or scenarios in conjunction with Report Manager

Unit objectives
After completing this unit you should be able to

q   explain what custom views and scenarios are

q   describe how to define custom views and scenarios

q   define a scenario

q   explain how to create a report containing custom views or scenarios

q   create a report to be printed

Unit summary
You can record groups of file, print, and format settings for a worksheet as custom views in a workbook.

With the Custom Views dialog box you can add, delete, or show any view in a workbook.

You can save different sets of variable values on a worksheet as scenarios.

The Scenario Manager allows you to

q   add new scenarios

q   edit or delete existing scenarios

q   view the outcome of a scenario

q   merge scenarios from several worksheets or workbooks onto a single worksheet

q   create a summary report of variable values (changing cells) and outcomes (result cells) for all the scenarios on a worksheet

Report Manager enables you to create a report with one or more sections.

Each section in a report is based on a combination of custom view and scenario for a chosen worksheet.

User's Notes

Installation Procedure

To install the course

First run Windows.

Then insert disk 1 in the A or B drive, as appropriate.

From the Program Manager, choose **File - Run**.

Next either

    q   type **a:setup** (or **b:setup**, as appropriate) and press **Enter**

or

    q   use the **Browse** option and select your floppy disk drive and then **setup.exe**

You will then be given the option to change the drive on which the course is to be installed. When you are happy with the options here, click **Continue.**

Next, you will be asked to specify where you wish to install the Windows resource files which the course needs. You may choose to install these in the course directory or in your Windows **SYSTEM** directory. If installing on a network, read *Considerations for network use* on the next page before installing.

You will be prompted to insert further disks as required.

To remove the course

Run Windows.

Insert the course disk 1 in drive A or B, as appropriate.

From the Program Manager, choose **File - Run**.

Next either

    q type **a:remove** (or **b:remove**, as appropriate) and press **Enter**

or

    q use the **Browse** option and select your floppy drive and then **remove.exe**

You will then be asked to select the drive where *Microsoft Office 97: Excel 97 for Power Users* is installed.

If you choose **Continue**, and if the course is on the selected drive, the course will be deleted and the subdirectory removed.

Considerations for network use

There are a number of Windows resource files which the course needs in order to run.

During installation, you are given the choice of installing these in either the course directory or the Windows **SYSTEM** directory.

If you are installing the course on a **LAN** drive, it is best to put these files in the **course** directory, so that they will be accessible to other workstations on the network.

Access from other workstations

To access the course from a workstation other than the one used to install the course, follow these steps:

Load Windows.

Either create a program group for **CBT Systems courses**, or open this group if it already exists on the workstation.

Choose **File - New - Program Item**.

Using the **Browse** option, select the file **MSOPE.EXE** in the course directory on the network drive where you installed the course.

Click **OK** when satisfied with the options.

There will now be an icon for the course on your Windows desktop. Double-clicking on this icon will run the course.

Computer Managed Instruction Administration

The course is administered via a CMI (Computer Managed Instruction) system. Normally, only the course administrator has access to the CMI system.

How to install the CMI Administration system

It's best to install the CMI Administration system on the **course administrator's** PC. But remember, the CMI system must be able to access the course - if the course is not on a LAN, you must install the CMI system and the course on the same PC.

First run Windows (version 3.1 or later required).

Insert the **CBT Curriculum - CMI Admin Disk** in drive A or B, as appropriate.

From the Program Manager, choose **File - Run**.

Next either

type **a:setup** or **b:setup** (as appropriate), and press **Enter**

or

use the **Browse** option to select your floppy disk drive and then type **setup.exe**

You are now given the option of changing your CMI system installation drive.

When you're ready, click **Continue**.

The CMI Administration system is now installed on your selected drive, and a program group called "CBT Systems CMI Administration" is created.

This group contains the program icon. If you want, you can move this icon to another group.

How to enter the CMI Administration system

Run Windows and select the CMI Administration icon from the appropriate group.

On entering the program, you will be asked to enter your CMI password.

If this is the first time the program is being run, enter a new password - this will then become the CMI password.

If the program has been run before, you must enter the existing CMI password.

If you want to change the existing password, click the **New** button. You must then enter the existing password, before entering your choice for the new password.

The CMI password is not case-sensitive.

How to register a course with the CMI Administration system

From the **Setup** drop-down menu select **Register Course(s)**.

Specify the drive(s) you wish to search for CBT courses.

To specify all drives, click the **Select All** button.

Click the **Search** button.

Your specified drive(s) will now be searched for CBT courses, and you are given a list of all that are found.

Highlight the course(s) you wish to register.

Click **Select All** if you want to highlight all courses found.

Click the **Register Course(s)** button.

Your selected course(s) are now registered.

> ***NOTE*** **If you have previously registered any other course, all existing students will automatically be registered in the new course or courses.**

Course registration - drive selection options

Select <u>A</u>ll   selects all listed drives

<u>S</u>earch   initiates the search for courses on the selected drive(s)

<u>C</u>ancel   closes the drive list and returns to the main menu

Course registration - list of course options

<u>R</u>egister Course(s)   registers the selected courses

Select <u>A</u>ll   selects all listed courses for registration

<u>C</u>ancel   closes the course list and returns to the main menu

How to de-register a course with the CMI Administration system

From the **<u>S</u>etup** drop-down menu select **D<u>e</u>-register Course(s)**. You are given a list of all registered courses.

Specify the course(s) you want to de-register.

If you want to de-register all courses, click the **Select <u>A</u>ll** button.

Click the **D<u>e</u>-register** button.

After individual confirmation, each selected course will be de-registered.

> ***NOTE***   **This procedure only removes the course from the CMI Administration system. The course itself - and all student details related to it - is not affected.**

Course de-registration - list of course options

D<u>e</u>-register   de-registers the selected course(s)

Select <u>A</u>ll   selects all listed courses for de-registration

<u>C</u>ancel   closes the course list and returns to the main menu

How to register a student to the CMI Administration system

From the **<u>S</u>etup** drop-down menu select **Register <u>S</u>tudent**.

Fill in the two fields, Name and Number, in the Student registration dialog box.

Select **<u>R</u>egister.**

Student registration dialog box options

<u>R</u>egister   confirms your entries in the Name and Number fields and registers the student to the system

<u>C</u>ancel   closes the dialog box

<u>A</u>dvanced   displays the Site/Dept, Mastery, and Password fields, for more detailed student registration

Student registration dialog box fields

Name   for name of the student to be registered

Number   for number of the student to be registered (the number must be alphanumeric and can consist of up to eight characters)

Site/Dept   to identify the student by department or site (optional field)

Mastery   allows you to set the pass level for course tests (70% is the default)

Password   for a password for the student to be registered

How to change a student's registration details

From the **<u>S</u>etup** drop-down menu, choose **C<u>h</u>ange Student Details**.

Select the student whose details you want to change, and click the **C<u>h</u>ange** option button.

When the Change student details dialog box appears, make the required changes in the appropriate fields.

Click the **<u>A</u>ccept** option button.

Student selection dialog box options

<u>C</u>ancel   cancels the operation, closes the dialog box and returns you to the main CMI menu screen

C<u>h</u>ange   accepts the selected student and moves you to the next dialog box, where changes are made

Change student details dialog box options

<u>A</u>ccept   confirms changes made (or current student details) in the dialog box fields

<u>C</u>ancel   closes the Change student details dialog box and returns you to the Student selection dialog box

Change student details dialog box fields

These are the same as the Student registration dialog box fields.

> ***Note***   **Before changing student details, ensure that all CBT courses are registered.**

How to remove a student from the CMI Administration system

From the **<u>Setup</u>** menu choose **<u>Delete Student(s)</u>**.

Highlight the appropriate student name(s).

Click **<u>Delete.</u>**

Delete Student(s) dialog box option buttons

<u>C</u>ancel   closes the dialog box

Select <u>All</u>   selects all the listed students (for deletion)

<u>D</u>elete   deletes the selected student(s) from the CMI system

> ***Note***   **Before removing students, ensure that all CBT courses are registered.**

How to generate a report on a student's progress

From the **Reports** drop-down menu choose **Student Progress.**

Highlight the student(s) for whom you require a report.

Click **Report**.

Select Students dialog box option buttons

Cancel   closes the dialog box

Select All   selects all the listed students (for reports)

Report   displays the Student Progress - Report Options dialog box

Student Progress - Report Options dialog box options

Report Type   allows you to select either general or detailed student course
                        progress report(s)

Output Destination allows you to select to have your report(s) sent to a text or
                        comma-separated file, displayed on screen, or printed out

Generate   generates the report for the selected student(s)

Cancel   closes the report options dialog box
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