

Excel 2007

Microsoft Certified Application Specialist Exam Objectives Map

This document lists all Microsoft Certified Application Specialist exam objectives for Excel 2007 (Exam 77-602) and provides references to corresponding coverage in ILT Series courseware.

1 Creating and Manipulating Data

Objective	Course level	Conceptual information	Supporting activities
1.1 Insert data by using AutoFill			
1.1.1 Fill a series			
• Fill a series without formatting	Intermediate	Unit 5, Topic D	D-5
• Fill a series with formatting only	Basic	Unit 5, Topic E	E-2
1.1.2 Copy a series	Basic	Unit 3, Topic B	B-3
1.2 Ensure data integrity			
1.2.1 Restrict data by using data validation			
• Restrict the type of data that can be entered in cells			
– Only numbers less than x can be entered	Advanced	Unit 3, Topic A	A-2
– Only data of a specified character length to be entered	Advanced	Unit 3, Topic A	A-2
• Restrict the values entered in cells	Advanced	Unit 3, Topic A	A-2
• Create drop-down lists	Advanced	Unit 3, Topic A	A-2
1.2.2 Remove duplicate rows from spreadsheets			
• Select which columns are used to determine duplication	Advanced	Unit 5, Topic A	A-4
1.3 Modify cell contents and formats			
1.3.1 Cut, copy, and paste data and cell contents			
• Transpose data during paste	Intermediate	Unit 2, Topic E	E-4
• Paste data from a bordered cell without pasting borders	Basic	Unit 5, topic B	B-5
• Paste values instead of the formula (and other paste special functions)	Intermediate	Unit 2, Topic B	B-1

Objective	Course level	Conceptual information	Supporting activities
1.4 Change Worksheet Views			
1.4.1 Change views within a single window			
• Change zoom level	Basic	Unit 1, Topic D	D-1
• Change view to:			
– normal	Basic	Unit 6, Topic A	A-4
– page layout	Basic	Unit 6, Topic A	A-4
– page break preview	Basic	Unit 8, Topic B	B-2
• Freeze and unfreeze panes	Basic	Unit 8, Topic A	A-1
• Hide the Ribbon to maximize space	Basic	Unit 8, Topic A	A-4
1.4.2 Split windows	Basic	Unit 8, Topic A	A-2
1.4.3 Open and arrange new windows	Intermediate	Unit 1, Topic C	C-1
1.5 Manage worksheets			
1.5.1 Copy worksheets			
• Within a workbook	Basic	Unit 8, Topic C	C-3
• Between workbooks	Intermediate	Unit 1, Topic A	A-2
1.5.2 Reposition worksheets within workbooks	Basic	Unit 8, Topic C	C-3
1.5.3 Rename worksheets	Basic	Unit 8, Topic C	C-2
1.5.4 Hide and unhide worksheets	Basic	Unit 8, Topic A	A-3
1.5.5 Insert and delete worksheets	Basic	Unit 8, Topic C	C-3

2 Formatting Data and Content

Objective	Course level	Conceptual information	Supporting activities
2.1 Format worksheets			
2.1.1 Use themes to format worksheets			
• Apply a theme to a workbook	Intermediate	Unit 2, Topic D	D-1
• Modify and save a theme	Intermediate	Unit 2, Topic D	D-2
2.1.2 Show and hide gridlines and headers			
• Hide gridlines for presentation purposes	Basic	Unit 6, Topic B	B-4
• Hide headers for presentation purposes	Basic	Unit 6, Topic B	B-4
2.1.3 Add color to worksheet tabs	Basic	Unit 8, Topic C	C-2
2.1.4 Format worksheet backgrounds			
• Add color	Intermediate	Unit 2, Topic E	E-5
• Add watermarks	Intermediate	Unit 2, Topic E	E-6
2.2 Insert and modify rows and columns			
2.2.1 Insert and delete cells, rows, and columns			
• Insert a column or row above, below, to the left, or right of an existing column or row	Basic	Unit 3, Topic D	D-2
• Insert multiple rows or columns simultaneously	Basic	Unit 3, Topic D	D-2
2.2.2 Format rows and columns			
• Format all the cells in a row or column simultaneously	Basic	Unit 5, Topic B	B-2
2.2.3 Hide and unhide rows and columns			
• Unhide a row or column	Basic	Unit 8, Topic A	A-3
• Hide a row or column	Basic	Unit 8, Topic A	A-3
2.2.4 Modify row height and column width			
• Using AutoFit	Basic	Unit 5, Topic B	B-1
• Using a specified value	Basic	Unit 5, Topic B	B-1
2.3 Format cells and cell content			
2.3.1 Apply number formats			
• Format the values in the cell with a specified number of decimal places	Basic	Unit 5, Topic C	C-1
• Format the values in the cell as a date	Basic	Unit 5, Topic C	C-2
2.3.2 Create custom cell formats	Intermediate	Unit 2, Topic B	B-3

Objective	Course level	Conceptual information	Supporting activities
2.3.3 Apply and modify cell styles			
• Format cells by using Quick Styles	Basic Intermediate	Unit 5, Topic E Unit 2, Topic C	E-2 C-1
• Format cells by using other methods	Basic	Unit 5, Topic E	E-1
2.3.4 Format text in cells			
• Font, alignment, attributes, wrapping, etc	Basic	Unit 5, Topic A Unit 5, Topic B	A-1 B-2
2.3.5 Convert text to columns	Advanced	Unit 5, Topic A	A-3
2.3.6 Merge and split cells	Intermediate	Unit 2, Topic E	E-1, E3
2.3.7 Add and remove cell borders	Basic	Unit 5, Topic B	B-3-B-4, B6
2.3.8 Insert, modify and remove hyperlinks	Intermediate	Unit 6, Topic B	B-1
2.4 Format data as a table			
2.4.1 Apply Quick Styles to tables			
• Apply and change Quick Styles	Basic	Unit 5, Topic E	E-2
• Add and remove header rows	Intermediate	Unit 5, Topic D	D-2
• Band the rows or columns in a table (using banded rows)	Intermediate	Unit 5, Topic D	D-2
• Emphasize the first column or last column in a table	Intermediate	Unit 5, Topic D	D-2
• Change a table with banded rows to have banded columns	Intermediate	Unit 5, Topic D	D-2
2.4.2 Add total rows to a table			
• Add total rows to a table	Intermediate	Unit 5, topic D	D-3
• Change the summary function of total rows in tables	Intermediate	Unit 5, Topic D	D-3
2.4.3 Insert and delete rows and columns in tables	Intermediate	Unit 5, Topic D	D-3

3 Creating and Modifying Formulas

Objective	Course level	Conceptual information	Supporting activities
3.1 Reference data in formulas			
3.1.1 Create formulas that use absolute and relative cell references			
<ul style="list-style-type: none"> • Create a formula that, when copied to an adjacent cell, updates its cell references to reflect its new location 	Basic	Unit 3, Topic B	B-2
<ul style="list-style-type: none"> • Create a formula that maintains its reference point when copied to a new location 	Basic	Unit 3, Topic C	C-2
<ul style="list-style-type: none"> • Create a formula with mixed relative and absolute references 	Basic	Unit 3, Topic C	C-2
<ul style="list-style-type: none"> • Troubleshoot a formula 	Intermediate	Unit 8, Topic A	A-2
3.1.2 Create formulas that reference data from other worksheets or workbooks			
<ul style="list-style-type: none"> • Using sales figures from other worksheets, create summary sheets that have four lines titles for four fiscal quarters' total sales figures 	Intermediate	Unit 1, Topic B	B-1
3.1.3 Manage named ranges			
<ul style="list-style-type: none"> • Select and name a range of cells 	Intermediate	Unit 4, Topic A	A-1
<ul style="list-style-type: none"> • Modify a named range by adding a column 	Intermediate	Unit 4, Topic B	B-1
<ul style="list-style-type: none"> • Delete a named range 	Intermediate	Unit 4, Topic B	B-1
3.1.4 Use named ranges in formulas			
<ul style="list-style-type: none"> • Using sales figures named in three ranges, create formulas for sales figures that summarize the sales figures for three teams 	Intermediate	Unit 4, Topic A	A-2
3.2 Summarize data using a formula			
3.2.1 Use SUM, COUNT, COUNTA, AVERAGE, MIN, MAX			
<ul style="list-style-type: none"> • SUM 	Basic	Unit 4, Topic A	A-1, A-2
<ul style="list-style-type: none"> • COUNT 	Basic	Unit 4, Topic C	C-4
<ul style="list-style-type: none"> • COUNTA 	Basic	Unit 4, Topic C	C-4
<ul style="list-style-type: none"> • AVERAGE 	Basic	Unit 4, Topic C	C-1
<ul style="list-style-type: none"> • MIN 	Basic	Unit 4, Topic C	C-2
<ul style="list-style-type: none"> • MAX 	Basic	Unit 4, Topic C	C-3
3.3 Summarize data using subtotals			
3.3.1 Create and modify list ranges			
<ul style="list-style-type: none"> • Create a formula that finds the average of displayed values in a filtered list 	Intermediate	Unit 5, Topic D	D-4
<ul style="list-style-type: none"> • Create a formula that finds the sum of displayed values in a filtered list 	Intermediate	Unit 5, Topic D	D-4
<ul style="list-style-type: none"> • Create a formula that finds the mean or count of displayed values in a filtered list 	Intermediate	Unit 5, Topic D	D-4

Objective	Course level	Conceptual information	Supporting activities
3.4 Conditionally summarize data using a formula			
3.4.1 Using SUMIF, SUMIFS, COUNTIF, COUNTIFS, AVERAGEIF, AVERAGEIFS			
• SUMIF	Advanced	Unit 1, Topic B	B-1
• SUMIFS	Advanced	Unit 1, Topic B	B-4
• COUNTIF	Advanced	Unit 1, Topic B	B-2
• COUNTIFS	Advanced	Unit 1, Topic B	B-4
• AVERAGEIF	Advanced	Unit 1, Topic B	B-3
• AVERAGEIFS	Advanced	Unit 1, Topic B	B-4
3.5 Look up data using a formula			
3.5.1 Includes: VLOOKUP, HLOOKUP			
• Use VLOOKUP to locate values associated with an exact match (FALSE)	Advanced	Unit 2, Topic A	A-2
• Use VLOOKUP to locate a cell in a list that has the value closest to the target value (TRUE)	Advanced	Unit 2, Topic A	A-3
• Use HLOOKUP to locate values associated with an exact match (FALSE)	Advanced	Unit 2, Topic A	A-4
• Use HLOOKUP to locate a cell in a list that has the value closest to the target value (TRUE)	Advanced	Unit 2, Topic A	A-5
3.6 Use conditional logic in a formula			
3.6.1 Using IF, AND, OR, NOT, IFERROR			
• IF	Advanced	Unit 1, Topic A	A-1
• AND	Advanced	Unit 1, Topic A	A-2
• OR	Advanced	Unit 1, Topic A	A-2
• NOT	Advanced	Unit 1, Topic A	A-2
• IFERROR	Advanced	Unit 1, Topic A	A-4
3.7 Format or modify text using formulas			
3.7.1 Using PROPER, UPPER, LOWER, SUBSTITUTE			
• PROPER	Intermediate	Unit 2, Topic B	B-1
• UPPER	Intermediate	Unit 2, Topic B	B-1
• LOWER	Intermediate	Unit 2, Topic B	B-1
• SUBSTITUTE	Intermediate	Unit 2, Topic B	B-2
3.7.2 Convert text to columns	Advanced	Unit 5, Topic A	A-3
3.8 Display and print formulas	Advanced	Unit 1, Topic D	D-1

4 Presenting Data Visually

Objective	Course level	Conceptual information	Supporting activities
4.1 Create and format charts			
4.1.1 Select appropriate data sources for charts			
• Select the appropriate data to create a column chart	Basic	Unit 7, Topic A	A-1
4.1.2 Select appropriate chart types to represent data sources			
• Create a chart that shows what part of the budget the x department uses	Basic	Unit 7, Topic A	A-4
• Create a chart that shows a trend over time	Intermediate	Unit 7, Topic B	B-2
• Create a chart that compares two data sets over time	Intermediate	Unit 7, Topic B	B-1
4.1.3 Format charts using Quick Styles			
• Quick Styles	Basic	Unit 7, Topic B	B-2
• Quick Layouts	Basic	Unit 7, Topic B	B-2
4.2 Modify charts			
4.2.1 Add and remove chart elements			
• Axis information	Basic	Unit 7, Topic B	B-3
• Titles	Basic	Unit 7, Topic A	A-1
• Legends	Basic	Unit 7, Topic B	B-4
• Percentages	Intermediate	Unit 7, Topic A	A-2
4.2.2 Move and size charts			
• Move an embedded chart to a new sheet	Basic	Unit 7, Topic A	A-2
• Move an embedded chart from a chart sheet to a worksheet by embedding as an object	Basic	Unit 7, Topic A	A-2
• Size a chart by increasing length or width	Basic	Unit 7, Topic B	B-4
• Size a chart while maintaining scale	Basic	Unit 7, Topic A	A-4
4.2.3 Change chart types	Basic	Unit 7, Topic B	B-1
4.3 Apply conditional formatting			
4.3.1 Manage conditional formats by using the rule manager			
• Create a new conditional formatting rule	Basic	Unit 5, Topic D	D-1
• Edit an existing conditional formatting rule	Basic	Unit 5, Topic D	D-2
• Delete a conditional formatting rule	Basic	Unit 5, Topic D	D-2
4.3.2 Allow more than one rule to be true	Basic	Unit 5, Topic D	D-1

Objective	Course level	Conceptual information	Supporting activities
4.3.3 Apply the following conditional formats:			
• Highlight	Basic	Unit 5, Topic D	D-1
• Top, bottom rules	Basic	Unit 5, Topic D	D-1
• Data bars	Advanced	Unit 8, Topic A	A-1
• Color scales	Advanced	Unit 8, Topic A	A-2
• Icon sets	Advanced	Unit 8, Topic A	A-3
4.4 Insert and modify illustrations			
4.4.1 Insert and modify pictures from files			
• Insert pictures	Basic Intermediate	Unit 2, Topic C Unit 7, Topic C	C-1 C-3
• Modify pictures	Basic Intermediate	Unit 2, Topic C Unit 7, Topic C	C-1 C-3
4.4.2 Insert and modify SmartArt graphics			
• Insert SmartArt graphics	Advanced	Unit 8, Topic B	B-1
• Modify SmartArt graphics using Quick Styles	Advanced	Unit 8, Topic B	B-2
• Add effects to SmartArt graphics	Advanced	Unit 8, Topic B	B-2
4.4.3 Insert and modify shapes	Intermediate	Unit 7, Topic C	C-1, C-2
4.5 Outline data			
4.5.1 Group and ungroup data	Intermediate	Unit 3, Topic A	A-1
4.5.2 Subtotal data			
• Add subtotals to grouped data without using the AutoSum button	Intermediate	Unit 3, Topic B	B-1
4.6 Sort and filter data			
4.6.1 Sort data by using single or multiple criteria	Basic Intermediate	Unit 5, Topic E Unit 5, Topic B	E-3 B-1
4.6.2 Filter data by using AutoFilter			
• Filter data by using Custom AutoFilter	Intermediate	Unit 5, Topic C	C-1
4.6.3 Filter and sort data by using conditional formatting	Intermediate	Unit 5, Topic B	B-3
4.6.4 Filter and sort data by using cell attributes	Intermediate	Unit 5, Topic B	B-3

5 Collaborating and Securing Data

Objective	Course level	Conceptual information	Supporting activities
5.1 Manage changes to workbooks			
5.1.1 Insert, display, modify, and resolve tracked changes			
• Begin tracking changes	Intermediate	Unit 8, Topic D	D-3
• Resolve tracked changes	Intermediate	Unit 8, Topic D	D-3
5.1.2 Insert, display, modify, and delete comments			
• Insert comments	Intermediate	Unit 8, Topic B	B-2
• Edit comments	Intermediate	Unit 8, Topic B	B-2
• Delete comments	Intermediate	Unit 8, Topic B	B-2
5.2 Protect and share workbooks			
5.2.1 Protect workbooks and worksheets			
• Prevent changes to worksheets	Intermediate	Unit 8, Topic C	C-2
• Allow users to edit ranges	Intermediate	Unit 8, Topic C	C-2
• Require passwords to open workbooks	Intermediate	Unit 8, Topic C	C-1
5.2.2 Enable workbooks to be changed by multiple users			
• Share a workbook by using the share workbook command	Intermediate	Unit 8, Topic D	D-1
5.3 Prepare workbooks for distribution			
5.3.1 Remove private and other inappropriate data from workbooks			
• Determine when to use the Document Inspector	Intermediate	Unit 8, Topic D	D-4
5.3.2 Restrict permissions to a workbook			
• Enable a specific user to change a workbook by using digital rights management (DRM) (IRM)	Intermediate	Unit 8, Topic C	C-3
5.3.3 Add keywords and other information to workbook properties			
• Add keywords, author name, and other information to properties	Intermediate	Unit 8, Topic B	B-3
5.3.4 Add digital signatures	Intermediate	Unit 8, Topic C	C-4
5.3.5 Mark workbooks as final			
• Certify and protect content from changes by marking as final	Intermediate	Unit 8, Topic C	D-5

Objective	Course level	Conceptual information	Supporting activities
5.4 Save workbooks			
5.4.1 Save workbooks for use in a previous version of Excel			
<ul style="list-style-type: none"> Using Compatibility Checker, determine which feature of a workbook is incompatible with a previous version 	Basic	Unit 2, Topic D	D-3
<ul style="list-style-type: none"> Save a specific feature to the Excel 97/2003 format 	Basic	Unit 2, Topic D	D-3
5.4.2 Using the correct format, save a workbook as a template, a Web page, a macro-enabled document, or another appropriate document			
<ul style="list-style-type: none"> Save as a template 	Intermediate	Unit 9, Topic C	C-1
<ul style="list-style-type: none"> Save as a PDF 	Intermediate	Unit 6, Topic C	C-1
<ul style="list-style-type: none"> Save as a Web page 	Intermediate	Unit 6, Topic A	A-2
<ul style="list-style-type: none"> Save as a macro-enabled workbook 	Advanced	Unit 7, Topic A	A-1
5.5 Set print options for printing data, worksheets and workbooks			
5.5.1 Define the area of a worksheet to be printed			
<ul style="list-style-type: none"> Set a print area on a single sheet 	Basic	Unit 6, Topic C	C-2
5.5.2 Insert and move a page break			
<ul style="list-style-type: none"> Preview and change a page break from the third to the fourth column 	Basic	Unit 8, Topic B	B-2
5.5.3 Set margins			
<ul style="list-style-type: none"> Set worksheet margins to specified values 	Basic	Unit 6, Topic B	B-2
5.5.4 Add and modify headers and footers			
<ul style="list-style-type: none"> Change the date or other information in a footer 	Basic	Unit 6, Topic B	B-3
5.5.5 Change the orientation of a worksheet	Basic	Unit 6, Topic B	B-1
5.5.6 Scale worksheet content to fit a printed page	Basic	Unit 6, Topic B	B-1