

Course overview:

MS Excel 2007 Advanced



Overview and objectives

This one-day course builds on the skills and concepts taught in Excel 2007: Intermediate. Students will work with advanced formulas, as well as lookup functions such as VLOOKUP, MATCH, and INDEX. In addition, students will learn about data validation and database functions such as DSUM. They will learn how to work with PivotTables and PivotCharts, how to import and export data, and how to query external databases. Finally, students will learn about the analytical features of Excel (such as Goal Seek and Solver), running and recording macros, and sharing Excel data via the Web.

Target audience

You should have some experience with Excel 2007 and should be familiar with intermediate-level tasks, such as sorting data, linking worksheets, and outlining and consolidating data. You'll get the most out of this course if your goal is to become proficient in performing advanced tasks, such as creating nested functions, working with data tables, exporting and importing data, performing what-if analyses, and recording macros.

Course prerequisites

Before taking this course, you should be familiar with personal computers and the use of a keyboard and a mouse. Furthermore, this course assumes that you've completed the following courses or have equivalent experience: Excel 2007: Basic and Excel 2007: Intermediate.

Course objectives

- Use the IF and SUMIF functions to calculate a value based on specified criteria; use a nested IF function to evaluate complex conditions; use the ROUND function to round off numbers; and use the PMT function to calculate periodic payments for a loan.
- Use the VLOOKUP function to find a value in a worksheet list; use the MATCH function to find the relative position of a value in a range; use the INDEX function to find the value of a cell at a given position in a range; and use data tables to project values.
- Use the Data Validation feature to validate data entered in cells; and use database functions to summarize list values that meet criteria you specify.
- Create a PivotTable for analyzing and comparing large amounts of data; change PivotTable views by moving fields and hiding and showing details; improve the appearance of a PivotTable by changing its field settings and applying a style; and create a PivotChart to graphically display data from a PivotTable.
- Export data from Excel to a text file, and import data from a text file into an Excel workbook; import XML data into a workbook, and export data from a workbook to an XML data file; and use Microsoft Query and the Web query feature to import data from external databases.
- Use the Goal Seek and Solver utilities to meet a target output for a formula by adjusting the values in the input cells; install and use the Analysis ToolPak to perform statistical analysis; create

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scenarios to save various sets of input values that produce different results; and create views to save different sets of worksheet display and print settings.

- Run a macro to perform tasks automatically; record macros; assign a macro to a button, and use the button to run the macro; edit a macro by editing VBA code; and create a custom function to perform calculations when built-in functions are not available.
- Represent data graphically within cells by applying three forms of conditional formatting: data bars, color scales, and icon sets; and insert and modify SmartArt graphics.

Course contents

- Advanced functions • Logical functions • Math and statistical functions • Financial functions • Displaying and printing formulas
- Lookups and data tables • Using lookup functions • Using MATCH and INDEX • Creating data tables
- Advanced list management • Validating cell entries • Exploring database functions
- PivotTables and PivotCharts • Working with PivotTables • Rearranging PivotTables • Formatting PivotTables • PivotCharts
- Exporting and importing • Exporting and importing text files • Exporting and importing XML data • Querying external databases
- Analytical options • Goal Seek and Solver • The Analysis ToolPak • Scenarios • Views
- Macros and custom functions • Running and recording a macro • Working with VBA code • Creating functions
- Conditional formatting and SmartArt • Conditional formatting with graphics • SmartArt graphics