



## Excel 2010 Level 3-Advanced

This course builds on the skills and concepts taught in Excel 2010: Intermediate. Students will work with advanced formulas and functions. Such functions as lookup functions, a variety of If functions, Round, Payment functions, Dual Variable tables, Data Validation, Converting text to columns, and removing duplicates records. In addition, students will learn about a series of database versions of popular functions (DSUM, DAVERAGE...). They will learn 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, SmartArt graphics, and conditional formatting with graphics. A very loaded day.

### Course Length

1 day and 2 day version

### Prerequisites

Windows Basic, Excel Intermediate

### Topics

#### Unit 1 :Logical and statistical functions

##### Topic A: Logical functions

A-1:Using the IF function

A-2:Using a formula to apply conditional formatting

A-3:Using OR, AND, and NOT as nested functions

A-4:Using nested IF functions

A-5:Using the IFERROR function

##### Topic B: Math and statistical functions

B-1: Using SUMIF

B-2: Using COUNTIF

B-3: Using AVERAGEIF

B-4: Using SUMIFS, COUNTIFS, and AVERAGEIFS

B-5: Using ROUND

#### Unit 2 :Financial and date functions

##### Topic A: Financial functions

A-1:Using the PMT function

##### Topic B: Date and time functions

B-1:Using date functions



B-2:Using time functions

**Topic C:** Array formulas

C-1:Using an array formula

C-2:Applying arrays to functions

C-3:Modifying the array formula

**Topic D:** Displaying and printing formulas

D-1: Showing, printing, and hiding formulas

D-2: Setting calculation options

### Unit 3 :Lookups and data tables

**Topic A:** Using lookup functions

A-1:Examining VLOOKUP

A-2:Using VLOOKUP to find an exact match

A-3:Using VLOOKUP to find an approximate match

A-4:Using HLOOKUP to find exact matches

A-5:Using HLOOKUP to find approximate matches

**Topic B:** Using MATCH and INDEX

B-1:Using the MATCH function

B-2:Using the INDEX function

**Topic C:** Creating data tables

C-1: Creating a one-variable data table

C-2: Creating a two-variable data table

### Unit 4 :Advanced data management

**Topic A:** Validating cell entries

A-1:Observing data validation

A-2:Creating a data validation rule

A-3:Setting date and list validation rules

**Topic B:** Exploring database functions

B-1: Examining the structure of database functions

B-2: Using the DSUM function

### Unit 5 :Exporting and importing

**Topic A:** Exporting and importing text files

A-1:Exporting Excel data to a text file

A-2:Importing data from a text file into a workbook

A-3:Converting text to columns

A-4:Removing duplicate records



**Topic B:** Exporting and importing XML data

B-1:Using the XML Source pane

B-2:Importing XML data into a workbook

B-3:Exporting data from a workbook to an XML data file

B-4:Deleting an XML map

**Topic C:** Getting external data

C-1: Getting external data from Microsoft Query

C-2: Using a Web query to get data from the Web

C-3: Discussing cube functions

### Unit 6 :Analytical tools

**Topic A:** Goal Seek and Solver

A-1:Using Goal Seek to solve for a single variable

A-2:Activating Solver and the Analysis ToolPak

A-3:Using Solver to solve for multiple variables

**Topic B:** The Analysis ToolPak

B-1:Using the Sampling analysis tool

**Topic C:** Scenarios

C-1: Creating scenarios

C-2: Switching among scenarios

C-3: Merging scenarios from another worksheet

### Unit 7 :Macros and custom functions

**Topic A:** Running and recording a macro

A-1:Running a macro

A-2:Recording a macro

A-3:Assigning a macro to a command button

A-4:Inserting a macro button

A-5:Creating an Auto\_Open macro

**Topic B:** Working with VBA code

B-1:Observing a VBA code module

B-2:Editing VBA code

**Topic C:** Creating functions

C-1:Creating a custom function