

# Microsoft Office Excel 2010: Advanced

- **Course Length:** 1 Day

## Course Overview

This course builds on the skills and concepts taught in Excel 2010: 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, SmartArt graphics, and conditional formatting with graphics.

## Course Overview

<b><u>Course Introduction</u></b>	1m
<b><u>Unit 01 - Advanced Functions</u></b>	40m
<b>Topic A: Logical Functions</b>	
The IF Function	
Demo - A-1: Using the IF Function	
AND, OR, and NOT Functions	
Demo - A-2: Using OR, AND, and NOT as Nested Functions	
Nested IF Functions	
Demo - A-3: Using Nested IF Functions	
The IFERROR Function	
Demo - A-4: Using the IFERROR Function	
<b>Topic B: Math and Statistical Functions</b>	
The SUMIF Function	
Demo - B-1: Using SUMIF	
The COUNTIF Function	
Demo - B-2: Using COUNTIF	
The AVERAGEIF Function	
Demo - B-3: Using AVERAGEIF	
SUMIFS, COUNTIFS, AVERAGEIFS	
Demo - B-4: Using SUMIFS, COUNTIFS, and AVERAGEIFS	
The ROUND Function	
Evaluate Formula Dialog Box	
Demo - B-5: Using ROUND	
<b>Topic C: Financial Functions</b>	
The PMT Function	
Demo - C-1: Using the PMT Function	
<b>Topic D: Displaying and Printing Formulas</b>	
Displaying Formulas in Cells	
Hiding Formulas from Users	

Showing Hidden Formulas  
Demo - D-1: Showing, Printing, and Hiding Formulas  
Unit 01 Review

## **Unit 02 - Lookups and Data Tables**

28m

### **Topic A: Using Lookup Functions**

The HLOOKUP Function  
The VLOOKUP Function  
Demo - A-1: Examining VLOOKUP  
VLOOKUP for Exact Matches  
Demo - A-2: Using VLOOKUP to Find an Exact Match  
VLOOKUP for Approximate Matches  
Demo - A-3: Using VLOOKUP to Find an Approximate Match  
HLOOKUP for Exact Matches  
Demo - A-4: Using HLOOKUP to Find Exact Matches  
HLOOKUP for Approximate Matches  
Demo - A-5: Using HLOOKUP to Find Approximate Matches

### **Topic B: Using MATCH and INDEX**

The MATCH Function  
Demo - B-1: Using the MATCH Function  
The INDEX Function  
Demo - B-2: Using the INDEX Function

### **Topic C: Creating Data Tables**

One-Variable Data Tables  
Demo - C-1: Creating a One-variable Data Table  
Two-Variable Data Tables  
Demo - C-2: Creating a Two-variable Data Table  
Unit 02 Review

## **Unit 03 - Advanced Data Management**

16m

### **Topic A: Validating Cell Entries**

Data Validation  
Demo - A-1: Observing Data Validation  
Setting Data Validation Rules  
Demo - A-2: Setting Up Data Validation  
Using Date Criteria  
Demo - A-3: Setting Date and List Validations

### **Topic B: Exploring Database Functions**

Structure of Database Functions  
Demo - B-1: Examining the Structure of Database Functions  
DSUM and DAVERAGE  
Demo - B-2: Using the DSUM Function  
Unit 03 Review

## **Unit 04 - PivotTables and PivotCharts**

27m

### **Topic A: Working with PivotTables**

A Sample PivotTable  
Creating a PivotTable  
Demo - A-1: Creating a PivotTable  
Adding Fields

Demo - A-2: Adding Fields to a PivotTable  
Inserting a Slicer  
A PivotTable with Slicers  
Demo - A-3: Using Slicers to Filter PivotTable Data

**Topic B: Rearranging PivotTables**

Moving Fields  
Demo - B-1: Moving Fields  
Hiding Details  
Expanding a Collapsed Range  
Demo - B-2: Collapsing and Expanding Fields  
Refreshing Data  
Demo - B-3: Refreshing the Data in a PivotTable

**Topic C: Formatting PivotTables**

Using Styles  
Demo - C-1: Applying a PivotTable Style  
Changing Field Settings  
Value Field Settings Dialog Box  
Demo - C-2: Changing Field Settings

**Topic D: PivotCharts**

Creating PivotCharts  
A Sample PivotChart  
Demo - D-1: Creating a PivotChart  
Unit 04 Review

**Unit 05 - Exporting and Importing**

24m

**Topic A: Exporting and Importing Text Files**

Using the Save As Command  
Demo - A-1: Exporting Excel Data to a Text File  
Importing Data  
Demo - A-2: Importing Data from a Text File into a Workbook  
The Text Import Wizard  
Converting Text to Columns  
Demo - A-3: Converting Text to Columns  
Removing Duplicates  
Demo - A-4: Removing Duplicate Records

**Topic B: Exporting and Importing XML Data**

The XML Maps Dialog Box  
The XML Source Pane  
Importing XML Data  
Exporting Data to an XML File  
Deleting XML Maps

**Topic C: Querying External Databases**

Using Microsoft Query  
Demo - C-1: Getting External Data from Microsoft Query  
Web Query  
Retrieving Data from a Web Page

Demo - C-2: Using a Web Query to Get Data from the Web  
Unit 05 Review

**Unit 06 - Analytical Tools**

30m

**Topic A: Goal Seek and Solver**

Using the Goal Seek Utility

Demo - A-1: Using Goal Seek to Solve for a Single Variable

Activating Add-Ins

The Add-Ins Dialog Box

The Solver Parameters Dialog Box

Demo - A-3: Using Solver to Solve for Multiple Variables

**Topic B: The Analysis ToolPak**

Using the Sampling Analysis Tool

Demo - B-1: Using the Sampling Analysis Tool

**Topic C: Scenarios**

Creating a Scenario

Demo - C-1: Creating Scenarios

Switching Among Scenarios

Merging Scenarios

A Sample Scenario Summary

**Topic D: View**

Creating Views

Demo - D-1: Creating Views

Switching Among Custom Views

Demo - D-2: Switching Among Views

Unit 06 Review

**Unit 07 - Macros and Custom Functions**

21m

**Topic A: Running and Recording a Macro**

Running Macros

Demo - A-1: Running a Macro

Recording Macros

Demo - A-2: Recording a Macro

Assigning Macros to Buttons

Demo - A-3: Assigning a Macro to a Button

**Topic B: Working with VBA Code**

VBA Code

Observing VBA Code

Demo - B-1: Observing a VBA Code Module

Example of Editing VBA Code

Demo - B-2: Editing VBA Code

**Topic C: Creating Functions**

Function Procedures

Demo - C-1: Creating a Custom Function

Unit 07 Review

**Unit 08 - Conditional Formatting and SmartArt Graphics**

15m

**Topic A: Conditional Formatting with Graphics**

Data Bars

Conditional Formatting Rules Manager

Demo - A-1: Creating Data Bars

Color Scales

Demo - A-2: Using Color Scales

Icon Sets

Demo - A-3: Creating Icon Sets

**Topic B: SmartArt Graphics**

Creating SmartArt Graphics

Demo - B-1: Inserting a SmartArt Graphic

Quick Style and Bevel Effects

Demo - B-2: Modifying a SmartArt Graphic

Unit 08 Review

Course Closure

**Total Duration: 3h 23m**