

Microsoft Office Excel 2010: Advanced (R2)

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 Outline

<u>Course Introduction</u>	2m
<u>Unit 01 - Logical & Statistical Functions</u>	37m
Topic A: Logical Functions	
The IF Function	
Demo - A-1: Using the IF Function	
Demo - A-2: Using a Formula to Apply Conditional Formatting	
OR, AND, and NOT Functions	
Demo - A-3: Using OR, AND, and NOT as Nested Functions	
Nested IF Functions	
Demo - A-4: Using Nested IF Functions	
The IFERROR Function	
Demo - A-5: Using the IFERROR Function	
Topic B: Math and Statistical Functions	
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	
Unit 01 Review	
<u>Unit 02 - Financial & Date Functions</u>	32m
Topic A: Financial Functions	
The PMT Function	
Demo - A-1: Using the PMT Function	
Topic B: Date and Time Functions	
Date Functions	
Demo - B-1: Using Date Functions	
Calculating Time	
Demo - B-2: Using Time Functions	
Topic C: Array Formulas	
Array Formulas	

Creating an Array Formula
Demo - C-1: Using an Array Formula
Applying Arrays to Functions
Demo - C-2: Applying Arrays to Functions
Modify an Array Formula
Demo - C-3: Modifying the Array Formula
Topic D: Displaying and Printing Formulas
Displaying Formulas in Cells
Hide Formulas from Users
Show Hidden Formulas
Demo - D-1: Showing, Printing, and Hiding Formulas
Automatic Recalculation
Edit Iteration Calculation Options
Demo - D-2: Setting Calculation Options
Unit 02 Review

Unit 03 - 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 03 Review

Unit 04 - 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 04 Review

Unit 05 - Exporting and Importing

25m

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

28m

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

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

Add a Scenario Manager Button

Merging Scenarios

A Sample Scenario Summary

Unit 06 Review

Unit 07 - Macros and Custom Functions

33m

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

Add Macro Buttons to the Ribbon

Insert a Button

Change Button Properties

Demo - A-4: Inserting a Macro Button

Create Auto_Open Macro

Demo - A-5: Creating an Auto_Open Macro

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

Creating a Custom Function

Demo - C-1: Creating a Custom Function

Unit 07 Review

Total Duration: 3hrs 20m