Microsoft® Office Excel® 2010 Course Outlines

These courses cover Microsoft Office Specialist exam objectives to help students prepare for the Excel Certification Exams.

Prerequisites: To ensure success, students will need to be familiar with using personal computers, and should have experience using a keyboard and mouse. Students should also be comfortable working in the Windows 7 environment, and be able to use Windows 7 to manage information on their computers. Specific tasks the students should be able to perform include: opening and closing applications, navigating basic file structures, and managing files and folders.

Course-specific Technical Requirements:

Hardware: For these courses, you will need one workstation for each student and one for the instructor. Each computer will need the following minimum hardware configurations:

- •500 MHZ or higher processor
- •256 MB RAM or higher (512 MB or higher recommended)
- •3.5 GB available disk space
- DirectX 9.0c graphics card with 64-MB or greater video memory (recommended)
- •CD-ROM drive (if installing any software from a CD-ROM)
- Keyboard and mouse (or other pointing device)
- •1,024 × 768 resolution or higher monitor recommended
- Network cards and cabling for local network access
- •Internet access (contact your local network administrator)
- •Printer (optional) or an installed printer driver
- Projection system to display the instructor's computer screen

Software

- •Microsoft® Office Excel® Professional Plus 2010.
- Microsoft Office 2010 Service Pack 2 (32-bit package or 64-bit package depending on your system).
- Microsoft Windows® 7 Professional or Windows 10
- Microsoft Windows 7 Service Pack 1 (SP1).
- Microsoft Silverlight® plug-in.
- •Graphics card driver dated 11/1/2004 or later.
- •If necessary, software for viewing the course slides. (Instructor machine only.)

Although it may be possible to deliver course content using Microsoft Office Excel 2010 on a Windows 8/8.1 installation, we cannot guarantee that all activities will key as authored in that environment.

Excel Part 1 (Second Edition) (Rev 1.01)

Course Number: 091018 Course Length: 1 day

Course Objectives: Upon successful completion of this course, you will be able to create and develop Excel worksheets and workbooks in order to work with and analyze the data that is critical to the success of your organization. You will:

- •Get started with Microsoft Office Excel 2010.
- •Perform calculations.
- Modify a worksheet.
- •Format a worksheet.
- Print workbooks.
- Manage workbooks.

Course Content

Lesson 1: Getting Started with Microsoft Office Excel 2010

Topic A: Navigate the Excel User Interface

Topic B: Use Excel Commands

Topic C: Create and Save a Basic Workbook

Topic D: Enter Cell Data Topic E: Use Excel Help

Lesson 2: Performing Calculations

Topic A: Create Worksheet Formulas

Topic B: Insert Functions
Topic C: Reuse Formulas

Lesson 3: Modifying a Worksheet

Topic A: Insert, Delete, and Adjust Cells, Columns, and Rows

Topic B: Search for and Replace Data
Topic C: Use Proofing and Research Tools

Lesson 4: Formatting a Worksheet

Topic A: Modify Fonts

Topic B: Add Borders and Colors to Worksheets

Topic C: Apply Number Formats Topic D: Align Cell Contents

Topic E: Apply Styles and Themes

Topic F: Apply Basic Conditional Formatting

Topic G: Create and Use Templates

Lesson 5: Printing Workbooks

Topic A: Preview and Print a Workbook

Topic B: Define the Page Layout

Lesson 6: Managing Workbooks

Topic A: Manage Worksheets

Topic B: Manage Workbook and Worksheet Views

Topic C: Manage Workbook Properties

Appendix A: Microsoft Office Excel 2010 Exam 77-882

Appendix B: Microsoft Office Excel 2010 Expert Exam 77–888
Appendix C: Microsoft Excel 2010 Common Keyboard Shortcuts

Excel Part 2 (Second Edition) (Rev 1)

Course Number: 091019 Course Length: 1 day

Course Objectives: Upon successful completion of this course, you will be able to leverage the power of data analysis and presentation in order to make informed, intelligent organizational decisions. You will:

- Customize the Excel environment.
- Create advanced formulas.
- Analyze data by using functions and conditional formatting.
- •Organize and analyze datasets and tables.
- •Visualize data by using basic charts.
- Analyze data by using PivotTables, slicers, and PivotCharts.

Course Content

Lesson 1: Customizing the Excel Environment

Topic A: Configure Excel Options

Topic B: Customize the Ribbon and the Quick Access Toolbar

Topic C: Enable Excel Add-Ins

Lesson 2: Creating Advanced Formulas

Topic A: Use Range Names in Formulas

Topic B: Use Specialized Functions

Topic C: Use Array Formulas

Lesson 3: Analyzing Data with Functions and Conditional Formatting

Topic A: Analyze Data by Using Text and Logical Functions

Topic B: Apply Advanced Conditional Formatting

Lesson 4: Organizing and Analyzing Datasets and Tables

Topic A: Create and Modify Tables

Topic B: Sort Data
Topic C: Filter Data

Topic D: Use SUBTOTAL and Database Functions

Lesson 5: Visualizing Data with Basic Charts

Topic A: Create Charts

Topic B: Modify and Format Charts

Lesson 6: Analyzing Data with PivotTables, Slicers, and PivotCharts

Topic A: Create a PivotTable

Topic B: Analyze PivotTable Data

Topic C: Present Data with PivotCharts

Topic D: Filter Data by Using Slicers

Appendix A: Financial Functions

Appendix B: Date and Time Functions

Appendix C: Working with Graphical Objects

Appendix D: Microsoft Office Excel 2010 Exam 77-882

Appendix E: Microsoft Office Excel 2010 Expert Exam 77–888

Excel Part 3 (Second Edition) (Rev 1.01)

Course Number: 091020 Course Length: 1 day

Course Objectives: Upon successful completion of this course, you will be able to perform advanced data analysis, collaborate on workbooks with other users, and automate workbook functionality. You will:

- Work with multiple worksheets and workbooks simultaneously.
- Share and protect workbooks.
- Automate workbook functionality.
- Apply conditional logic.
- Audit worksheets.
- Use automated analysis tools.
- Present your data visually.

Course Content

Lesson 1: Working with Multiple Worksheets and Workbooks Simultaneously

Topic A: Use 3-D References

Topic B: Use Links and External References

Topic C: Consolidate Data

Lesson 2: Sharing and Protecting Workbooks

Topic A: Collaborate on a Workbook

Topic B: Protect Worksheets and Workbooks

Lesson 3: Automating Workbook Functionality

Topic A: Apply Data Validation

Topic B: Work with Forms and Controls

Topic C: Work with Macros

Lesson 4: Applying Conditional Logic

Topic A: Use Lookup Functions

Topic B: Combine Functions

Topic C: Use Formulas and Functions to Apply Conditional Formatting

Lesson 5: Auditing Worksheets

Topic A: Trace Cells

Topic B: Search for Invalid Data and Formulas with Errors

Topic C: Watch and Evaluate Formulas

Lesson 6: Using Automated Analysis Tools

Topic A: Determine Potential Outcomes by Using Data Tables Topic B: Determine Potential Outcomes by Using Scenarios

Topic C: Use the Goal Seek Feature

Topic D: Activate and Use the Solver Tool

Topic E: Analyze Data with Analysis ToolPak Tools

Lesson 7: Presenting Your Data Visually

Topic A: Use Advanced Chart Features

Topic B: Create Sparklines

Appendix A: Cube Functions

Appendix B: Import and Export Data

Appendix C: Microsoft Office Excel 2010 Exam 77-882

Appendix D: Microsoft Office Excel 2010 Expert Exam 77-888

Excel Level 4 (Rev 1)

Course number: 084579 Course length: 1.0 day

Course Content

Lesson 1: Manipulating Data Using Statistical and Lookup Functions

Topic 1A: Forecast GDP Using Statistical Functions

Topic 1B: Evaluate Sales Data Using Statistical Functions Topic 1C: Analyze Stock Data Using Statistical Functions

Topic 1D: Mine Data Using the Lookup and Reference Functions

Lesson 2: Analyzing Data Using Data Analysis Tools

Topic 2A: Analyze Sales Data Using Descriptive Statistics

Topic 2B: Analyze Time Series Data Using Exponential Smoothing

Topic 2C: Analyze Data Using Regression

Topic 2D: Identify the Beta Value of a Security

Topic 2E: Analyze Sector Data Using Correlation and Covariance Matrices

Topic 2F: Optimize a Stock Portfolio Using Solver

Lesson 3: Working with Data Using Financial Functions

Topic 3A: Develop an Investment Schedule Using Financial Functions

Topic 3B: Make Investment Decisions Using Financial Functions

Lesson 4: Examining Data Using Math Functions

Topic 4A: Analyze Sales Data Using Math Functions

Topic 4B: Calculate Stock Returns Using Math Functions

Topic 4C: Aggregate GDP Data Using Math Functions

Lesson 5: Manipulating Data Using Text and Information Functions

Topic 5A: Manipulate Data Using Text Functions

Topic 5B: Validate Data Using Information Functions

Lesson 6: Working with Templates and Charts

Topic 6A: Create Advanced Templates

Topic 6B: Create Advanced Charts

Lesson 7: Managing Data in Workbooks

Topic 7A: Retrieve and Paste Data

Topic 7B: Clean Data in Workbooks

Appendix A: Commonly Used Excel Functions

Appendix B: Microsoft Office Excel 2010 Exam 77-882

Appendix C: Microsoft Office Excel Expert 2010 Exam 77–888

Excel Dashboards (Rev 1.0)

Course Number: 091035 Course Length: 1 day

Course Objectives: Upon successful completion of this course, you will be able to create dashboards in Microsoft Office Excel 2010. You will:

- Create advanced formulas.
- Automate workbook functionality.
- Apply conditional logic.
- Visualize data by using basic charts.
- Implement advanced charting techniques.
- Analyze data by using PivotTables, slicers, and PivotCharts.

Course Content

Lesson 1: Creating Advanced Formulas

Topic A: Use Range Names in Formulas Topic B: Use Specialized Functions

Lesson 2: Automating Workbook Functionality

Topic A: Apply Data Validation

Topic B: Work with Forms and Controls

Lesson 3: Applying Conditional Logic

Topic A: Use Lookup Functions
Topic B: Combine Functions

Lesson 4: Visualizing Data with Basic Charts

Topic A: Create Charts

Topic B: Modify and Format Charts

Lesson 5: Advanced Charting Techniques

Topic A: Use Advanced Chart Features

Topic B: Create Sparklines

Lesson 6: Analyzing Data with PivotTables, Slicers, and PivotCharts

Topic A: Create a PivotTable

Topic B: Analyze PivotTable Data

Topic C: Present Data with PivotCharts

Topic D: Filter Data by Using Slicers

Excel VBA (Macros)(Rev 1)

Course number: 084288 Course length: 1.0 day

Course Objectives: Upon successful completion of this course, students will be able to:

- develop a macro.
- format worksheets using macros.
- create an interactive worksheet.
- work with multiple worksheets.
- perform calculations.

Course Content

Lesson 1: Developing Macros

Topic 1A: Create a Macro Using the Macro Recorder

Topic 1B: Edit a Macro

Topic 1C: Debug a Macro

Topic 1D: Customize the Quick Access Toolbar and Hotkeys

Topic 1E: Set Macro Security

Lesson 2: Formatting Worksheets Using Macros

Topic 2A: Insert Text

Topic 2B: Format Text

Topic 2C: Sort Data

Topic 2D: Duplicate Data

Topic 2E: Generate a Report

Lesson 3: Creating an Interactive Worksheet

Topic 3A: Determine the Dialog Box Type

Topic 3B: Capture User Input

Lesson 4: Working with Multiple Worksheets

Topic 4A: Insert, Copy, and Delete Worksheets

Topic 4B: Rename Worksheets

Topic 4C: Modify the Order of Worksheets

Topic 4D: Print Worksheets

Lesson 5: Performing Calculations

Topic 5A: Create User-Defined Functions

Topic 5B: Automate SUM Functions

Excel PivotTables (Rev 1.01)

Course number: 084580 Course length: 0.5 day

Course Objectives: Upon successful completion of this course, students will be able to:

- build a PivotTable.
- analyze data using PivotTables.
- present PivotTable data visually.

Course Content

Lesson 1: Building a PivotTable

Topic 1A: Insert a PivotTable

Topic 1B: Create a PivotTable Based on External Data

Topic 1C: Categorize PivotTable Data

Topic 1D: Customize a PivotTable

Lesson 2: Analyzing Data Using PivotTables

Topic 2A: Create Custom Calculations in a PivotTable

Topic 2B: Restructure a PivotTable

Lesson 3: Presenting PivotTable Data Visually

Topic 3A: Format a PivotTable

Topic 3B: Present a PivotTable in a PivotChart Topic 3C: Print PivotTables and PivotCharts

Appendix A: Solvers
Appendix B: Goal Seek

Appendix C: Troubleshooting PivotTables

Excel PowerPivot for Knowledge (Rev 1)

Course number: 084606 Course length: 1.0 day

Course Objectives: Upon successful completion of this course, students will be able to:

- become familiar with the PowerPivot application and import data.
- manipulate data in a PowerPivot worksheet.
- create reports using PowerPivot data.
- use DAX functions in PowerPivot.
- distribute PowerPivot Data.

Course Content

Lesson 1: Getting Started with PowerPivot

Topic 1A: Explore the PowerPivot Application

Topic 1B: Import Data from Various Data Sources

Topic 1C: Refresh Data from a Data Source

Topic 1D: Create Linked Tables

Lesson 2: Manipulating PowerPivot Data

Topic 2A: Organize and Format Tables

Topic 2B: Create Calculated Columns

Topic 2C: Sort and Filter PowerPivot Data

Topic 2D: Create and Manage Table Relationships

Lesson 3: Creating PowerPivot Reports

Topic 3A: Create a PivotTable

Topic 3B: Create PivotCharts

Topic 3C: Filter Data Using Slicers

Topic 3D: Present PivotTable Data Visually

Lesson 4: Using DAX Functions in PowerPivot

Topic 4A: Manipulate PowerPivot Data Using DAX Functions

Topic 4B: Extract Data from Tables Using Functions

Topic 4C: Work with Time Dependent Data

Lesson 5: Distributing PowerPivot Data

Topic 5A: Protect Reports

Topic 5B: Save Reports in Different File Formats