

# Microsoft® Excel 2013

## Expert Certification Guide

Courseware 3254    Exams 77-427 & 77-428    ISBN 978-1-55332-398-3

### Course Description

Microsoft® Excel Expert teaches students how to use a variety of intermediate and advanced features to merge workbooks, perform data analysis, and audit formulas in spreadsheets. Students also use summary functions, create PivotTables and PivotCharts, and work with macros.

Students who complete this course will have reviewed all the exam objectives to prepare for: Microsoft Excel 2013 Expert Exams #77-427 and #77-428. Successful completion of the certification exam provides a competitive advantage by validating the knowledge and skill sets for individuals who may be seeking employment or further job opportunities in their careers.

### Course Prerequisites

This course assumes that students have completed the *Microsoft Excel 2013 Core* course or have equivalent Excel knowledge and experience.

- |                                                           |                                                                |
|-----------------------------------------------------------|----------------------------------------------------------------|
| <input type="checkbox"/> Manage the worksheet environment | <input type="checkbox"/> Apply formulas and functions          |
| <input type="checkbox"/> Create cell data                 | <input type="checkbox"/> Present data visually                 |
| <input type="checkbox"/> Format cells and worksheets      | <input type="checkbox"/> Share worksheet data with other users |
| <input type="checkbox"/> Manage worksheets and workbooks  | <input type="checkbox"/> Analyze and organize data             |

Courseware Description

Course Design

Course Objectives

Conventions and Graphics

### **Lesson 1: Advanced Functions and PivotTables**

Lesson Objectives

What are Functions?

- Using the Correct Syntax for Functions

- Inserting Functions

Using Array Formulas

Using Lookup Functions

- CHOOSE Function

- INDEX Function

- LOOKUP Function

- HLOOKUP and VLOOKUP Functions

Date and Time Functions

Transpose Function

Creating and Managing Pivot Tables

- Creating a Pivot Table

- Format Pivot Table Data

- Customizing PivotTables

Using the Data Slicer with a PivotTable

- Group Pivot Table Data

- Calculated Fields and Items

PowerPivot

- Activating PowerPivot

- Connecting PowerPivot to Data Source

- PowerPivot Calculated Fields

- Manage Table Relationships

Lesson Summary

Review Questions

### **Lesson 2: Advanced Charts, Conditional Formatting, and Checking Formulas**

Lesson Objectives

Advanced Chart Elements

- Formatting a Simple Chart

- Add a Secondary Vertical Axis

- Dynamic Charts

- Animated Charts

- Custom Chart Templates

- Chart Trendline

Conditional Formatting

- Basic Conditional Formatting

- Manage Conditional Formatting Rules

- Custom Conditional Formatting

- Using a Formula

- Custom Conditional Formatting

- Using a Function

Checking for Formula Errors

- Using the Error Checking Tool

- Tracing Formula Errors

- Evaluate Formulas

- Manual Checking and Displaying Formulas

Lesson Summary

Review Questions

### **Lesson 3: Filtering and Sharing Workbooks**

Lesson Objectives

Advanced Filtering

- Using Advanced Filters

- Using Comparison Operators

Workgroup Functions

- Creating a Shared Workbook

- Resolving Shared Workbook Conflicts

- Tracking Changes

- Showing the History of Changes

- Merging Workbooks

- Removing Shared Use of Workbooks

- Mark as Final

Using Comments

Internationalization

- Using International Currency and Number Formats

- Using International Currency Symbols

- Using Custom and International Date and Time Formats

Using Accessibility Checker Tool

+Body and +Heading Fonts

Modify Tab Order

Lesson Summary

Review Questions

### **Lesson 4: Custom Formatting and What-If Analysis**

Lesson Objectives

Using Custom Cell Formats

- Using Custom Number Formats

- Using Custom Accounting Formats

- Using Custom Text Formats

- Using Custom Date and Time Formats

User Defined Styles

- Creating and Modifying Cell Styles?

- Custom Color Formats

What-If Analysis

- Manual What-If Analysis

- Using the Goal Seek Tool

- Working with Scenarios

- Using Cell Watch

Fill Series

Lesson Summary

Review Questions

### **Lesson 5: Pivot Charts and Advanced Formulas**

Lesson Objectives

Pivot Charts

- Creating a PivotChart

- Changing Pivot Chart Options

- Pivot Chart Styles

Using Advanced Functions and Features

- Financial Functions

- Nesting Functions

- Conditional Logic Functions

- Conditional Summary Functions

Opening a Workspace

Linking External Workbooks

- Referencing Other Worksheets in Formulas

- Linking Other Workbooks

- Modifying Workbook Links

- Removing Workbook Links

Consolidating Data

Lesson Summary

Review Questions

### **Lesson 6: Protecting and Configuring Workbooks**

Lesson Objectives

Working with Templates

- Creating a Template

- Modifying Templates

- Copying Styles

- Deleting Templates

Protecting Your Workbook

- Using Passwords

- Protecting the Worksheet

- Allow Ranges for Editing

- Protecting the Workbook

- Structure

- Protecting Workbook Files

Form Fields

Copy Macros

Workbook Properties

- Accessing Workbook Properties

- Using the Document Inspector

Changing Excel Formula Calculation Options

Lesson Summary

Review Questions

### **Appendices**

Appendix A: Courseware Mapping

Appendix B: Glossary of Terms

Appendix C: Index