

# Competency Profile

## Microsoft Excel

**BTC:** CAP 142 – MS Excel (5 credits)

**WCC:** BIS 141 – Spreadsheets I (3 credits)

Introductory course in Excel spreadsheet applications. Covers basics of spreadsheet creation, formatting and editing, introduces numeric data analysis tools (functions), graphs, tables and charts. Students will demonstrate efficient use of a spreadsheet program to solve business problems using formulas, functions, lists, charts and macros.



### 1. Creating and Manipulating Data

- 1.1 Insert data by using AutoFill
  - Fill a series & copy a series
- 1.2 Ensure data integrity
  - Restrict data using data validation
  - Remove duplicate rows from spreadsheets
- 1.3 Modify cell contents and formats
  - Cut, copy & paste data & cell contents
- 1.4 Change Worksheet Views
  - Change views within a single window
  - Split windows
  - Open & arrange new windows
- 1.5 Manage worksheets
  - Copy worksheets
  - Reposition worksheets within workbooks
  - Rename worksheets
  - Hide & unhide worksheets
  - Insert & delete worksheets

### 2. Formatting Data and Content

- 2.1 Format worksheets
  - Use themes to format worksheets
  - Show & hide gridlines & headers
  - Add color to worksheet tabs
  - Format worksheet backgrounds
- 2.2 Insert and modify rows & columns
  - Insert & delete cells, rows & columns
  - Format rows & columns
  - Hide & unhide rows & columns
  - Modify row height & column width
- 2.3 Format cells & cell content
  - Apply number formats
  - Create custom cell formats
  - Apply & modify cell styles
  - Format text in cells
  - Convert text to columns
  - Merge & split cells
  - Add & remove cell borders
  - Insert, modify & remove hyperlinks
- 2.4 Format data as a table
  - Apply Quick Styles to tables
  - Add rows to a table
  - Insert & delete rows & columns in tables

### 3. Working with Visual Content

- 3.1 Insert illustrations
  - Create SmartArt graphics
  - Add pictures from files & clip art
  - Add shapes to a document
- 3.2 Format illustrations
  - Use Quick Styles
  - Change text wrapping style
  - Size, crop, scale, & rotate images
  - Apply contrast, brightness, & coloration
  - Include text in SmartArt graphics & shapes
  - Reduce picture file size
- 3.3 Format text graphically
  - Add & edit WordArt
  - Create Pull Quotes
  - Create & revise drop caps
- 3.4 Insert and modify text boxes
  - Create text boxes
  - Design appearance of text boxes
  - Connect text boxes with a link

*See page two for skill areas 4, & 5*

#### 4. Presenting Data Visually

- 4.1 Create & format charts
  - Select appropriate data sources for charts
  - Select appropriate chart types to represent data sources
  - Format charts using Quick Styles
- 4.2 Modify charts
  - Add & remove chart elements
  - Move & size charts
  - Change chart types
- 4.3 Apply conditional formatting
  - Manage conditional formats by using the Conditional Formatting Rules Manager
  - Allow more than one rule to be true
  - Apply conditional formats
- 4.4 Insert & modify illustrations
  - Insert & modify pictures from files (not clip art files)
  - Insert & modify SmartArt graphics
  - Insert & modify shapes
- 4.5 Outline data
  - Group & ungroup data
  - Subtotal data
- 4.6 Sort and filter data
  - Sort data using single or multiple criteria
  - Filter data using AutoFilter
  - Filter & sort data using conditional formatting
  - Filter & sort data using cell attributes



#### 5. Collaborating & Securing Data

- 5.1 Manage changes to workbooks
  - Insert, display, modify, & resolve tracked changes
  - Insert, display, modify & delete comments
- 5.2 Protect and share workbooks
  - Protect workbooks & worksheets
  - Enable workbooks to be changed by multiple users
- 5.3 Prepare workbooks for distribution
  - Remove private & other inappropriate information data from workbooks
  - Restrict permissions to a workbook
  - Add keywords & other information to workbook properties
  - Add digital signatures
  - Mark workbooks as final
- 5.4 Save workbooks
  - Save workbooks for use in a previous version of Excel
  - Using the correct format, save a workbook as template, a Web page, a macro-enabled document, or another appropriate format
- 5.5 Set print options for printing data, worksheets & workbooks
  - Define the area of a worksheet to be printed
  - Insert & move a page break
  - Set margins
  - Add & modify headers & footers
  - Change the orientation of a worksheet
  - Scale worksheet content to fit a printed page

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**Assessment:** Using SAM/MCAS or other comparable exam, students pass certification at 80% or better.

#### College Textbooks:

-  WCC: Microsoft Office Excel 2007; Wiley Publishers
-  BTC: Microsoft Office Excel 2007; Wiley Publishers