

BSBITU402 Develop And Use Complex Spreadsheets



Microsoft Excel 2013

Product Code: INF1168 ISBN: 978-1-925349-58-0

General Description This course has been mapped to the **BSBITU402 - Develop And Use Complex Spreadsheets** competency. It applies to individuals who require skills to create complex spreadsheets to store and retrieve data. They may work as individuals providing administrative support within an enterprise, or may be independently responsible for designing and working with spreadsheets relevant to their own work roles.

Learning Outcomes At the completion of this course you should be able to:

- create more complex formulas and functions
- work with logical function in *Excel*
- use maths functions
- use a variety of *Financial* functions
- use a variety of financial functions
- use the date and time functions to perform calculations
- use a range of lookup and reference functions
- use a range of techniques to work with worksheets
- understand and create simple PivotTables
- create and edit a PivotChart
- use and format a range of elements and features to enhance charts
- apply a variety of page setup techniques
- import data into Excel and export data from Excel
- create and use templates in Microsoft Excel
- create recorded macros in Excel
- use the macro recorder to create a variety of macros
- work safely with your computer, consider your impact on the environment and manage files and folders efficiently

Prerequisites

BSBITU402 Develop And Use Complex Spreadsheets assumes some knowledge of Microsoft Excel 2013, as well as fundamental skills in computer operations.

Topic Sheets

274 topics

Methodology

The InFocus series of publications have been written with one topic per page. Topic sheets either contain relevant reference information, or detailed step-by-step instructions designed on a real-world case study scenario. Publications can be used for instructor-led training, self-paced learning, or a combination of the two.

Formats Available A4 Black and White, A5 Black and White (quantity order only), A5 Full Colour (quantity order only), Electronic Licence

Companion Products There are a number of complementary titles in the same series as this publication. Information about other relevant publications can be found on our website at **www.watsoniapublishing.com**.

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Contents

Complex Formulas

Scoping a Formula Long-Hand Formulas

Preparing for Complex Formulas

Creating the Base Formula **Adding More Operations** Editing a Complex Formula

Adding More Complexity **Copying Nested Functions**

Switching to Manual Recalculation

Pasting Values From Formulas

Documenting Formulas

Practice Exercise

Practice Exercise Sample

Logical Functions

Understanding Logical Functions

Using IF With Text Using IF With Numbers **Nesting IF Functions** Using IFERROR

Using TRUE and FALSE

Using AND Using OR **Using NOT Practice Exercise Practice Exercise Sample**

Maths Functions

Understanding Maths Functions

Using SQRT Using ABS Using INT **Using TRUNC Using ROUND**

Using ROUNDDOWN and ROUNDUP

Using ODD and EVEN Using CEILINGMATH Using MROUND **Using PRODUCT Using SUMIF** Using SUMIFS Using SUMPRODUCT **Practice Exercise Practice Exercise Sample**

Statistical Functions

Understanding Statistical Functions Status Bar Statistics

Using COUNT and COUNTA

Using COUNTBLANK

Using COUNTIF

Using MODE Using MEDIAN

Using LARGE and SMALL

Using STDEV Using VAR

Using PMT

Practice Exercise

Practice Exercise Sample

Financial Functions

Understanding Financial Functions

Using FV Using NPV Using PV Using RATE Using EFFECT Using NOMINAL **Practice Exercise**

Practice Exercise Sample

Date and Time Functions

Understanding Date and Time

Functions Using NOW

Using HOUR and MINUTE

Using TODAY

Calculating Future Dates

Using DATE

Using Calendar Functions

Using WEEKDAY Using WEEKNUM Using WORKDAY Using EOMONTH **Practice Exercise**

Practice Exercise Sample

Lookup Functions

Understanding Data Lookup

Functions Using CHOOSE Using VLOOKUP

Using VLOOKUP for Exact Matches

Using HLOOKUP **Using INDEX** Using Match

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Using ROW and ROWS

Using COLUMN and COLUMNS

Using ADDRESS Using INDIRECT Using OFFSET Practice Exercise

Practice Exercise Sample

Worksheet Techniques

Inserting and Deleting Worksheets

Copying a Worksheet Renaming a Worksheet Moving a Worksheet Hiding a Worksheet Unhiding a Worksheet Copying a Sheet to Another

Workbook

Moving a Sheet to Another

Workbook

Changing Worksheet Tab Colours

Grouping Worksheets Hiding Rows and Columns Unhiding Rows and Columns Freezing Rows and Columns

Splitting Windows Practice Exercise

Practice Exercise Sample **Understanding Data Linking** Linking Between Worksheets Linking Between Workbooks

Updating Links Between Workbooks

Practice Exercise **Practice Exercise Sample**

PivotTables

Understanding Pivot Tables Recommended Pivot Tables Creating Your Own PivotTable Defining the PivotTable Structure

Filtering a PivotTable Clearing a Report Filter Switching PivotTable Fields Formatting a PivotTable **Understanding Slicers Creating Slicers**

Inserting a Timeline Filter

Practice Exercise **Practice Exercise Sample**

Using Compound Fields



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Counting in a PivotTable Formatting PivotTable Values Working With PivotTable Grand Working With PivotTable Subtotals Finding the Percentage of Total Finding the Difference From Grouping in PivotTable Reports **Creating Running Totals** Creating Calculated Fields **Providing Custom Names Creating Calculated Items** PivotTable Options Sorting in a PivotTable **Practice Exercise**

PivotCharts

Practice Exercise Sample

Inserting a PivotChart Defining the PivotChart Structure Changing the PivotChart Type Using the PivotChart Filter Field **Buttons** Moving PivotCharts to Chart Sheets Practice Exercise **Practice Exercise Sample**

Charting Techniques Understanding Chart Elements Adding a Chart Title **Adding Axes Titles** Repositioning the Legend **Showing Data Labels Showing Gridlines** Formatting the Chart Area Adding a Trendline Adding Error Bars Adding a Data Table **Practice Exercise Practice Exercise Sample Understanding Chart Formatting Selecting Chart Objects Using Shape Styles Changing Column Colour Schemes** Changing the Colour of a Series **Changing Line Chart Colours Using Shape Effects** Colouring the Chart Background Understanding the Format Pane Using the Format Pane **Exploding Pie Slices Changing Individual Bar Colours**

Practice Exercise Practice Exercise Sample

Page Setup

Strategies for Printing Worksheets Understanding Page Layout Using Built in Margins **Setting Custom Margins** Changing Margins by Dragging Centring on a Page **Changing Orientation** Specifying the Paper Size Setting the Print Area Clearing the Print Area **Inserting Page Breaks** Using Page Break Preview Removing Page Breaks Setting a Background Clearing the Background Settings Rows as Repeating Print **Titles Clearing Print Titles Printing Gridlines Printing Headings** Scaling to a Percentage Fit to a Specific Number of Pages **Practice Exercise**

Practice Exercise Sample Importing and Exporting

Understanding Data Importing Importing From an Earlier Version **Understanding Text File Formats** Importing Tab Delimited Text Importing Comma Delimited Text Importing Space Delimited Text **Importing Access Data** Working With Connected Data **Unlinking Connections Exporting to Microsoft Word Exporting Data as Text Practice Exercise Practice Exercise Sample**

Templates

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Recorded Macros

Understanding Excel Macros Setting Macro Security Saving a Document as Macro Enabled Recording a Simple Macro Running a Recorded Macro Relative Cell References Running a Macro With Relative References Viewing a Macro Editing a Macro Assigning a Macro to the Toolbar Running a Macro From the Toolbar Assigning a Macro to the Ribbon Assigning a Keyboard Shortcut to a Macro Deleting a Macro Copying a Macro Practice Exercise **Practice Exercise Sample**

Recorder Workshop

Preparing Data for an Application Recording a Summation Macro **Recording Consolidations Recording Divisional Macros Testing Macros** Creating Objects to Run Macros Assigning a Macro to an Object Practice Exercise **Practice Exercise Sample**

General Computer Operation

Setting Up an Ergonomic Workstation **Breaks and Exercises** Reducing Paper Wastage **Environmentally Friendly Computing Backup Procedures** Practice Exercise Practice Exercise Workspace Understanding How Help Works Accessing the Help Window Navigating the Help Window Using the Office Website for Help Using Google to Get Help Printing a Help Topic Other Sources of Assistance Practice Exercise Practice Exercise Workspace



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Unit Mapping

This unit describes the skills and knowledge required to use spreadsheet software to complete business tasks and produce complex worksheets.

	Performance Criteria	Location
1	Prepare to develop spreadsheet	
1.1	Organise personal work environment in accordance with ergonomic requirements	Chapter 17: General Computer Operation
1.2	Analyse task and determine specifications for spreadsheets	Generally assumed throughout
1.3	Identify organisational and task requirements of data entry, storage, output, reporting and presentation requirements	Generally assumed throughout
1.4	Apply work organisation strategies and energy and resource conservation techniques to plan work activities	Chapter 17: General Computer Operation
2	Develop a linked spreadsheet solution	
2.1	Utilise spreadsheet design software functions and formulae to meet identified requirements	Chapter 1: Complex Formulas, Chapter 2: Logical Functions, Chapter 3: Maths Functions, Chapter 4: Statistical Functions, Chapter 5: Financial Functions, Chapter 6: Date and Time Functions, Chapter 7: Lookup Functions, Chapter 8: Worksheet Techniques
2.2	Link spreadsheets in accordance with software procedures	Chapter 8: Worksheet Techniques, Chapter 9: PivotTables, Chapter 10: PivotCharts
2.3	Format cells and use data attributes assigned with relative and/or absolute cell references, in accordance with the task specifications	Chapter 1: Complex Formulas
2.4	Test formulae to confirm output meets task requirements	Generally assumed throughout
3	Automate and standardise spreadsheet operation	
3.1	Evaluate tasks to identify those where automation would increase efficiency	Chapter 16: Recorder Workshop
3.2	Create, use and edit macros to fulfil the requirements of task and automate spreadsheet operation	Chapter 15: Recorded Macros, Chapter 16: Recorder Workshop
3.3	Develop, edit and use templates to ensure consistency of design and layout for forms and reports, in accordance with organisational requirements	Chapter 14: Templates
4	Use spreadsheets	
4.1	Enter, check and amend data in accordance with organisational and task requirements	Generally assumed throughout, Chapter 1: Complex Formulas, Chapter 2: Logical Functions, Chapter 3: Maths Functions, Chapter 4: Statistical Functions, Chapter 5: Financial Functions, Chapter 6: Date and Time Functions, Chapter 7: Lookup Functions
4.2	Import and export data between compatible spreadsheets and adjust host documents, in accordance with software and system procedures	Chapter 13: Importing and Exporting
4.3	Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	Chapter 17: General Computer Operation
4.4	Preview, adjust and print spreadsheet in accordance with organisational and task requirements	Chapter 12: Page Setup
4.5	Name and store spreadsheet in accordance with organisational requirements and exit the application without data loss or damage	Generally assumed throughout
5	Represent numerical data in graphic form	
5.1	Determine style of graph to meet specified requirements and manipulate spreadsheet data if necessary to suit graph requirements	Chapter 11: Charting Techniques
5.2	Create graphs with labels and titles from numerical data contained in a spreadsheet file	Chapter 9: PivotTables, Chapter 11: Charting Techniques
5.3	Save, view and print graph within designated timelines	Chapter 9: PivotTables, Chapter 11: Charting Techniques



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