



Microsoft Excel 2016

Product Code: INF1746

ISBN: 978-1-925526-21-9

General Description This publication has been mapped to the *BSBITU304 - Produce Spreadsheets* competency. It applies to individuals employed in a range of environments who tend to be personally responsible for designing and working with spreadsheets under minimal supervision.

LearningOutcomes

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

- understand some of the key underlying concepts of spreadsheets
- understand points to consider to avoid problems in your worksheets
- navigate your way around Microsoft Excel 2016
- create and work with a new workbook
- understand and work with ranges in a worksheet
- understand, create and work with formulas and functions
- copy and paste data in Excel
- make changes to data in a workbook
- understand and use formula cell referencing
- use font formatting techniques
- understand and use the number formatting features in Excel
- apply conditional formatting to ranges in a worksheet
- work with elements that make up the structure of a worksheet
- align the contents of cells in a number of ways
- save workbooks in a variety of formats
- print your workbook data
- apply a variety of page setup techniques
- create and work with headers and footers
- create effective charts in Microsoft Excel
- use a range of elements and features to enhance charts
- work safely with your computer, consider your impact on the environment and manage files and folders efficiently
- obtain help for *Excel* whenever you need it

Prerequisites

BSBITU304 Produce Spreadsheets assumes little or no knowledge of Microsoft Excel 2016. However, it would be beneficial to have a general understanding of personal computers and the Windows operating system environment.

Topic Sheets

252 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



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#### **Contents**

#### **Spreadsheets**

How Spreadsheets Work
The Characteristics of a Spreadsheet
What a Spreadsheet Can Do
The Appropriateness of Spreadsheets
Challenge Exercise
Challenge Exercise Workspace

### A Guide to Brilliant Spreadsheets

Meeting Organisational
Requirements
Good Planning Is Essential
Organisation and Design
Writing Effective Formulas
Documented and Easy to Use
The Appropriateness of Spreadsheets

### **Getting to Know Excel 2016**

Starting Excel From the Desktop Understanding the Excel Start Screen The Excel Workbook Screen How Excel 2016 Works Using the Ribbon Using Ribbon Key Tips Showing and Collapsing the Ribbon Understanding the Backstage View Accessing the Backstage View **Using Shortcut Menus Understanding Dialog Boxes** Launching Dialog Boxes **Understanding the Quick Access** Adding Commands to the QAT Understanding the Status Bar Exiting Safely From Excel 2016 Challenge Exercise Challenge Exercise Workspace

### **Creating a New Workbook**

Understanding Workbooks
Using the Blank Workbook Template
Typing Text
Typing Numbers
Typing Dates
Understanding the Fill Handle
Typing Formulas
Easy Formulas
Saving a New Workbook on Your
Computer

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## **Selecting Ranges**

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## **Formulas and Functions**

Understanding Formulas
Creating Formulas That Add
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Formulas That Multiply and Divide
Understanding Functions
Using the SUM Function to Add
Summing Non-Contiguous Ranges
Calculating an Average
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Challenge Exercise
Challenge Exercise Sample

## **Copying Data**

Using Fill for Quick Copying
Copying From One Cell to Another
Copying From One Cell to a Range
Copying From One Range to Another
Copying Relative Formulas
Copying to a Non-Contiguous Range
Copying to Another Worksheet
Copying to Another Workbook
Challenge Exercise
Challenge Exercise Sample

## **Editing in a Workbook**

Understanding Data Editing Overwriting Cell Contents

Editing Longer Cells
Editing Formulas
Clearing Cells
Deleting Data
Using Undo and Redo
Challenge Exercise
Challenge Exercise Sample

### **Formula Referencing**

Absolute Versus Relative Referencing Relative Formulas Problems With Relative Formulas Creating Absolute References Creating Mixed References Challenge Exercise Challenge Exercise Sample

#### **Font Formatting**

**Understanding Font Formatting** Working With Live Preview **Changing Fonts** Changing Font Size **Growing and Shrinking Fonts** Making Cells Bold **Italicising Text Underlining Text Changing Font Colours Changing Background Colours** Using the Format Painter Applying Strikethrough **Subscripting Text** Superscripting Text Challenge Exercise Challenge Exercise Sample

## **Number Formatting**

Understanding Number Formatting
Applying General Formatting
Formatting for Money
Formatting Percentages
Formatting as Fractions
Formatting as Dates
Using the Thousands Separator
Increasing and Decreasing Decimals
Challenge Exercise
Challenge Exercise Sample

## **Conditional Formatting**

Understanding Conditional Formatting



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Formatting Cells Containing Values
Clearing Conditional Formatting
More Cell Formatting Options
Top Ten Items
More Top and Bottom Formatting
Options
Working With Data Bars
Working With Colour Scales
Working With Icon Sets
Understanding Sparklines
Creating Sparklines
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Challenge Exercise
Challenge Exercise Sample

## **Working With a Worksheet**

Understanding Worksheets
Changing the Worksheet View
Worksheet Zooming
Inserting Cells Into a Worksheet
Deleting Cells From a Worksheet
Inserting Columns Into a Worksheet
Deleting Rows and Columns
Challenge Exercise
Challenge Exercise Sample

### **Cell Alignment**

Understanding Cell Alignment
Aligning Right
Aligning Left
Aligning Top
Aligning Bottom
Aligning to the Middle
Challenge Exercise
Challenge Exercise Sample

## **Saving Workbooks**

Understanding the Windows Filing Structure
Understanding Naming Conventions
Understanding Version Compatibility
Saving With a Different Name
Saving in Another Location
Saving in Another Version
Saving as a Template
Saving as Macro Enabled
Challenge Exercise
Challenge Exercise Sample

#### **Printing**

Understanding Printing
Previewing Before You Print

Selecting a Printer

Using Built in Margins

Centring on a Page

## **Page Setup**

Changing Orientation
Specifying the Paper Size
Setting the Print Area
Inserting Page Breaks
Using Page Break Preview
Setting a Background
Settings Rows as Repeating Print
Titles
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Challenge Exercise
Challenge Exercise Sample

#### **Headers and Footers**

Understanding Headers and Footers Adding a Quick Header Adding a Quick Footer Switching Between Headers and Footers Challenge Exercise Challenge Exercise Data

## **Creating Charts**

**Understanding the Charting Process** Choosing the Right Chart Using a Recommended Chart Creating a New Chart From Scratch Working With an Embedded Chart Resizing a Chart Repositioning a Chart Printing an Embedded Chart Creating a Chart Sheet Changing the Chart Type Changing the Chart Layout Changing the Chart Style Printing a Chart Sheet Embedding a Chart Into a Worksheet Deleting a Chart Challenge Exercise Challenge Exercise Sample

### **Chart Elements**

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
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#### **General Computer Operation**

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Setting Up an Ergonomic
Workstation
Breaks and Exercises
Reducing Paper Wastage
Environmentally Friendly Computing
Backup Procedures
Challenge Exercise
Challenge Exercise Workspace

### **Getting Help**

Understanding How Help Works
Using Tell Me
Accessing the Help Window
Navigating the Help Window
Using Google to Get Help
Printing a Help Topic
Other Sources of Assistance
Challenge Exercise
Challenge Exercise Workspace

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## **Unit Mapping**

This unit describes the skills and knowledge required to develop spreadsheets through the use of spreadsheet software.

	Performance Criteria	Location
1	Select and prepare resources	
1.1	Adhere to ergonomic, work organisation and occupational health and safety requirements	Chapter 21: General Computer Operation
1.2	Use energy and resource conservation techniques to minimise wastage	Chapter 21: General Computer Operation
1.3	Identify spreadsheet task requirements in relation to data entry, storage, output and presentation	Generally assumed throughout, Chapter 1: Spreadsheets
2	Plan spreadsheet design	
2.1	Ensure spreadsheet design suits the purpose, audience and information requirements of task	Chapter 1: Spreadsheets
2.2	Ensure spreadsheet design enhances readability and appearance, and meets organisational and task requirements for style and layout	Chapter 1: Spreadsheets, Chapter 4: Creating a New Workbook, Chapter 10: Font Formatting, Chapter 11: Number Formatting, Chapter 12: Conditional Formatting, Chapter 13: Working With a Worksheet, Chapter 14: Cell Alignment, Chapter 15: Saving Workbooks, Chapter 16: Printing, Chapter 17: Page Setup, Chapter 18: Headers and Footers
2.3	Use style sheets and automatic functions to ensure consistency of design and layout	Chapter 13: Working With a Worksheet, Chapter 14: Cell Alignment, Chapter 15: Saving Workbooks, Chapter 12: Conditional Formatting, Chapter 11: Number Formatting, Chapter 10: Font Formatting, Chapter 16: Printing, Chapter 17: Page Setup, Chapter 18: Headers and Footers
3	Create spreadsheet	
3.1	Ensure data is entered, checked and amended to maintain consistency of design and layout, in accordance with organisational and task requirements	Chapter 4: Creating a New Workbook
3.2	Format spreadsheet using software functions to adjust page and cell layout to meet information requirements, in accordance with organisational style and presentation requirements	Chapter 10: Font Formatting, Chapter 11: Number Formatting, Chapter 12: Conditional Formatting, Chapter 13: Working With a Worksheet, Chapter 14: Cell Alignment, Chapter 15: Saving Workbooks
3.3	Ensure formulae are tested and used to confirm output meets task requirements, in consultation with appropriate personnel as required	Chapter 4: Creating a New Workbook, Chapter 5: Selecting Ranges, Chapter 6: Formulas and Functions, Chapter 7: Copying Data, Chapter 8: Editing in a Workbook, Chapter 9: Formula Referencing
3.4	Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	Chapter 22: Getting Help
4	Produce simple charts	
4.1	Select chart type and design that enables valid representation of numerical data, and meets organisational and task requirements	Chapter 19: Creating Charts, Chapter 20: Chart Elements
4.2	Create charts using appropriate data range in spreadsheet	Chapter 19: Creating Charts, Chapter 20: Chart Elements
4.3	Modify chart type and layout using formatting features	Chapter 19: Creating Charts, Chapter 20: Chart Elements
5	Finalise spreadsheets	
5.1	Preview, adjust and print spreadsheets and any accompanying charts, in accordance with task requirements	Chapter 19: Creating Charts, Chapter 20: Chart Elements, Chapter 16: Printing, Chapter 17: Page Setup, Chapter 18: Headers and Footers
5.2	Ensure data input meets designated timelines and organisational requirements for speed and accuracy	Generally assumed throughout
5.3	Name and store spreadsheet in accordance with organisational requirements and exit the application without data loss/damage	Chapter 21: General Computer Operation, Chapter 13: Working With a Worksheet, Chapter 14: Cell Alignment, Chapter 15: Saving Workbooks



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