

Create and Produce Spreadsheets (Excel 2013)

This workbook supports BSBITU202A Create and use spreadsheets and BSBITU304A Produce spreadsheets in the BSB07 Business Services Training Package.

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The Software Publications writing team

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BSBITU202A Create and use spreadsheets

Unit descriptor This unit describes the performance outcomes, skills and knowledge required to correctly create and use spreadsheets and charts through the use of spreadsheet software.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of unit This unit applies to individuals who perform a range of routine tasks in the workplace using a limited range of practical skills and fundamental knowledge of creating spreadsheets in a defined context under direct supervision or with limited individual responsibility.

Employability skills This unit contains employability skills.

Prerequisites There are no prerequisites for this unit.

Element	Performance Criteria	Page Reference
1 Select and prepare resources		
1.1	Adjust workspace, furniture and equipment to suit user ergonomic, work organisation and occupational health and safety (OHS) requirements	Software Publications WHS (included in exercise file download)
1.2	Use energy and resource conservation techniques to minimise wastage in accordance with organisational and statutory requirements	Software Publications WHS (included in exercise file download)
1.3	Identify spreadsheet task requirements and clarify with relevant personnel as required	19–21, 121–122
2 Create simple spreadsheets		
2.1	Ensure data is entered, checked and amended in accordance with organisational and task requirements, to maintain consistency of design and layout	21–30, 48–51, 64–70
2.2	Format spreadsheet using software functions , to adjust page and cell layout to meet information requirements, in accordance with organisational style and presentation requirements	25–27, 30, 35–44, 52–54, 91, 95–98
2.3	Ensure formulae are used and tested to confirm output meets task requirements, in consultation with appropriate personnel as required	11, 28, 33–34, 59, 61–70
2.4	Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	71–72

Element	Performance Criteria	Page Reference
3 Produce simple charts		
3.1	Select chart type and design that enables valid representation of numerical data and meets organisational and task requirements	74–76
3.2	Create chart using appropriate data range in the spreadsheet	78, 81, 84
3.3	Modify chart type and layout using formatting features	78–84
4 Finalise spreadsheets		
4.1	Ensure spreadsheet and any accompanying charts are previewed, adjusted and printed in accordance with organisational and task requirements	31, 45–47, 51, 69, 83
4.2	Ensure data input meets designated time lines and organisational requirements for speed and accuracy	xi, practice assessments
4.3	Name and store spreadsheet in accordance with organisational requirements and exit the application without data loss/damage	vii–x, xii–xiii, xv, 35, 101–103

BSBITU202A Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills to clarify requirements of spreadsheet
- editing and proofreading skills to check own work for accuracy
- keyboarding skills to enter text and numerical data
- literacy skills to read and understand organisation’s procedures, and to use basic models to produce a range of spreadsheets
- numeracy skills to create and use spreadsheet formulae.

Required knowledge

- formatting of workplace documents
- organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques
- organisational guidelines on spreadsheet manipulation and processing
- purpose and range of use of spreadsheet functions.

BSBITU202A Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Variable	Scope	Page References
Ergonomic requirements may include:	avoiding radiation from computer screens	Software Publications WHS <i>(included in exercise file download)</i>
	chair height, seat and back adjustment	
	document holder	
	footrest	
	keyboard and mouse position	
	lighting	
	noise minimisation	
	posture	
	screen position	
	workstation height and layout	
Work organisation requirements may include:	exercise breaks	
	mix of repetitive and other activities	
	rest periods	
Conservation requirements may include:	double-sided paper use	
	recycling used and shredded paper	
	re-using paper for rough drafts (observing confidentiality requirements)	
	utilising power-save options for equipment	
Spreadsheet task requirements may include:	data entry	19–21
	output	
	presentation	
	storage	
Data may include:	numbers	Throughout workbook
	text	
Checking may include:	accuracy of data	64–70
	accuracy of formulae with calculator	64
	ensuring instructions with regard to content and format have been followed	Throughout workbook
	proofreading	49
	spelling, electronically and manually	48
Formatting may include:	alignment on page	n/a
	efficiency of formulae	n/a
	enhancements to format - borders, patterns and colours	38–40
	enhancements to text	30, 35–37
	headers/footers	95–97
	use of absolute and relative cell addresses	91
	use of cell addresses in formulae	Throughout workbook

Variable	Scope	Page References
Software functions may include:	adding/deleting columns/rows	52–54
	formatting cells	38–40
	formatting text	35–37
	headers/footers	95–97
	sizing columns/rows	25–27
Formulae may include:	absolute cell referencing and/or mixed references	91
	average	61
	division	33, 93
	maximum	62
	minimum	62
	multiplication	33
	subtraction	33
	sum	28, 61
	combinations of above	Throughout workbook
Chart types may include:	area	75
	bar	74
	column	74, 78
	exploded pie	82
	line	75
	pie and 3-D pie	76, 81–82
	scatter/bubble	76
	stacked/multiple bar	n/a
	stacked, 3-D column	n/a
Features may include:	axes	80
	axis title	80
	borders	n/a
	chart title	80
	colours	79, 84
	data labels	82
	data tables	n/a
	fills	84
	gridlines	n/a
	legend	80
	lines	n/a
patterns	n/a	
Printing may include:	fit on one page	45
	fit specific number of pages	n/a
	with formulae	69
	with values	31, 46, 83
Designated time lines may include:	organisational time line e.g. financial requirements	xi, practice assessments
	time line agreed with internal/external client	
	time line agreed with supervisor/person requiring spreadsheet	

Variable	Scope	Page References
Storing data may include:	authorised access	xiii
	filing locations	vii–ix
	organisational policy for backing up files	xii
	organisational policy for filing hard copies of spreadsheets	xv
	security	101–103
	storage in electronic folders/sub-folders	Throughout workbook
	storage on CD-ROM, zip drives, USB memory	101

BSBITU202A Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> designing a minimum of two spreadsheets using cell-based formulae creating charts using relevant data knowledge of purpose and range of use of spreadsheet functions.
Context of and specific resources for assessment	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> access to an actual workplace or simulated environment access to office equipment and resources access to examples of spreadsheets and simple formulae.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate review of final spreadsheets analysis of responses to case studies and scenarios demonstration of techniques oral or written questioning to assess knowledge of spreadsheet software functions.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> general administration units other IT use units.

Employability Skills for BSB20112: Certificate II in Business

Employability Skill	Industry/enterprise requirements for this qualification include	How this Employability Skill is covered
Communication	<ul style="list-style-type: none"> communicating verbally with clients and colleagues drafting routine correspondence that meets the organisational standards of style, format and accuracy 	<p>Page 19 describes organisational requirements of documents</p> <p>A range of spreadsheets, with a variety of organisational uses, are created</p> <p>In the practice assessment pages 120–124 the learner is required to plan and create a spreadsheet using organisational standards</p>
Teamwork	<ul style="list-style-type: none"> working in a team environment to promote team commitment and cooperation 	The practice assessment requires a role play with team members on page 124.
Problem solving	<ul style="list-style-type: none"> choosing appropriate methods for communication and transferring information dealing with client enquiries and complaints 	In several exercises throughout the book the learner is expected to select formatting appropriate for the spreadsheet (including Task 2 of the practice assessment on page 121).
Initiative and enterprise	<ul style="list-style-type: none"> raising occupational health and safety issues with designated personnel 	<p>Software Publications WHS <i>(included in exercise file download)</i></p> <p>Page 120 of the practice assessment contains an exercise about communicating WHS issues.</p>
Planning and organising	<ul style="list-style-type: none"> planning and organising own work schedule for the day planning the layout of simple documents using appropriate software 	<p>Page xi covers organising and prioritising work</p> <p>Page 20 covers planning spreadsheet layouts</p> <p>The practice assessment is given a time limit</p> <p>The final practice assessment, pages 120–124, contains time management as well as planning the layout of a spreadsheet</p>
Self management	<ul style="list-style-type: none"> dealing sensitively with client needs and cultural, family and individual differences obtaining feedback on work performance and identifying opportunities for improvement 	The final practice assessment on page 124 requires feedback to be gathered and any recommended changes implemented.

Employability Skill	Industry/enterprise requirements for this qualification include	How this Employability Skill is covered
Learning	<ul style="list-style-type: none"> • encouraging, acknowledging and acting on constructive feedback from team members • using manuals, training booklets and online help to overcome difficulties 	<p>In the practice assessment, pages 120–124, the learner must perform online research or talk to colleagues to learn how to complete a task</p> <p>Also in the practice assessment, feedback is sought from both the trainer and a team member</p>
Technology	<ul style="list-style-type: none"> • selecting, maintaining and using business technology appropriate to the task 	<p>The whole book requires the learner to operate a PC running a Windows operating system and the Microsoft Excel 2013 application</p>

BSBITU304A Produce spreadsheets

Unit descriptor This unit describes the performance outcomes, skills and knowledge required to develop spreadsheets through the use of spreadsheet software. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of unit This unit applies to individuals employed in a range of environments who require skills in the creation of spreadsheets that encompass formatting, formulae and charts. They tend to be personally responsible for designing and working with spreadsheets under minimal supervision.

Employability skills This unit contains employability skills.

Prerequisites There are no prerequisites for this unit.

Element	Performance Criteria	Page Reference
1 Select and prepare resources		
1.1	Adhere to <i>ergonomic, work organisation and occupational health and safety requirements</i>	Software Publications WHS <i>(included in exercise file download)</i>
1.2	Use energy and resource <i>conservation techniques</i> to minimise wastage	Software Publications WHS <i>(included in exercise file download)</i>
1.3	Identify spreadsheet task requirements in relation to data entry, storage, output and presentation	19–21, 160–165
2 Plan spreadsheet design		
2.1	Ensure <i>spreadsheet design</i> suits the purpose, audience and information requirements of the task	95–97, 126–139, 141–144, 152–162
2.2	Ensure spreadsheet design enhances readability and appearance, and meets organisational and task requirements for style and layout	19–21, 160–165
2.3	Use style sheets and <i>automatic functions</i> to ensure <i>consistency of design and layout</i>	30–31, 35–37, 59–60, 95–97, 139, 145–146, 148, 161
3 Create spreadsheet		
3.1	Ensure <i>data</i> is entered, <i>checked</i> and amended to maintain consistency of design and layout, in accordance with organisational and task requirements	48–49, 64–70
3.2	<i>Format</i> spreadsheet using <i>software functions</i> to adjust page and cell layout to meet information requirements, in accordance with organisational style and presentation requirements	25–27, 30, 35–40, 52–54, 91, 95–97, 130, 132, 135, 152–159, 181, 186

Element	Performance Criteria	Page Reference
3.3	Ensure <i>formulae</i> are tested and used to confirm output meets task requirements, in consultation with appropriate personnel as required	17, 28, 33, 59, 61, 93–93, 132, 139
3.4	Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	71–72
4 Produce simple charts		
4.1	Select chart type and design that enables valid representation of numerical data, and meets organisational and task requirements	74–76
4.2	Create charts using appropriate data range in the spreadsheet	78, 81, 84
4.3	Modify chart type and layout using formatting features	78–84
5 Finalise spreadsheets		
5.1	Preview, adjust and <i>print</i> spreadsheet and any accompanying charts, in accordance with task requirements	31, 45–47, 51, 69, 83
5.2	Ensure data input meets <i>designated time lines</i> and organisational requirements for speed and accuracy	xi, 19
5.3	<i>Name and store spreadsheet</i> in accordance with organisational requirements and exit the application without data loss/damage	vii–x, xii–xiii, xv, 101–103

BSBITU304A Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills to clarify requirements of spreadsheet
- editing and proofreading skills to check own work for accuracy against original
- keyboarding skills to enter text and numerical data
- literacy skills to read and understand organisational procedures, and to use basic models to produce a range of spreadsheets
- mathematical and statistical skills to use spreadsheet functions such as sum, counts and averages.

Required knowledge

- formatting requirements of workplace documents
- organisational guidelines on spreadsheet design and use
- organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques.

BSBITU304A Range Statement

The Range Statement contextualises the unit of competency and provides a focus for assessment. The information provided is intended to define the scope of assessment and to assist assessors define the performance to be achieved by an individual in the workplace. The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. *Italicised* wording in the Performance Criteria is detailed as follows.

Variable	Scope	Page References			
Ergonomic requirements may include:	avoiding radiation from computer screens	Software Publications WHS <i>(included in exercise file download)</i>			
	chair height, seat and back adjustment				
	document holder				
	footrest				
	keyboard and mouse position				
	lighting				
	noise minimisation				
	posture				
	screen position				
	workstation height and layout				
Work organisation requirements may include:	exercise breaks	Software Publications WHS <i>(included in exercise file download)</i>			
	mix of repetitive and other activities				
	rest periods				
Occupational health and safety requirements may include:	inspections		Software Publications WHS <i>(included in exercise file download)</i>		
	organisational procedures regarding incidents, accidents, fire and emergencies				
	workplace meetings				
	workplace safety procedures				
other consultative activities	Software Publications WHS <i>(included in exercise file download)</i>				
Conservation requirements may include:				double-sided paper use	160–162
				recycling used and shredded paper	
		re-using paper for rough drafts (observing confidentiality requirements)			
		utilising power-save options for equipment			
Spreadsheet design may include:		appropriateness to required tasks		160–162	
		basic analysis	160–161		
		charts	Throughout workbook		
		formatting and reformatting	Throughout workbook		
		formulae	Throughout workbook		
	functions	126–139			
	headers and footers	95–97			
	headings	Throughout workbook			
	headings and labels	Throughout workbook			
	identification and parameters	162			
	import and export of data	144 (import only)			
	labels	Throughout workbook			
	macros	152–159			
	multi-page documents	141–143			
split screen operation	n/a				

Variable	Scope	Page References
Automatic functions may include:	auto date	139
	auto correct	148
	auto format	59–60
	auto text	n/a
	default settings	Throughout workbook
	headers and footers	95–97
	page numbering	97
	styles	146
	table headings	145
Consistency of design and layout may include:	borders	30–31
	bullet/number lists	n/a
	captions	n/a
	consistency with other business documents	161
	page numbers	97
	spacings	n/a
	typeface styles and point size	35–37
Data may include:	numbers	Throughout workbook
	text	
Checking may include:	accuracy of data	64–70
	accuracy of formulae with calculator	64
	ensuring instructions with regard to content and format have been followed	Throughout workbook
	proofreading	49
	spelling, electronically and manually	48
Formatting may include:	alignment on page	181
	efficiency of formulae	n/a
	enhancements to format - borders, patterns and colours	38–40
	enhancements to text	30, 35–37
	headers/footers	95–97
	use of absolute and relative cell addresses	91, 130, 132, 135, 186
	use of cell addresses in formulae	Throughout workbook
Software functions may include:	adding/deleting columns/rows	52–54
	formatting cells	38–40
	formatting text	35–37
	headers/footers	95–97
	sizing columns/rows	25–27
	using macros	152–159
	utilising shortcuts	153–154

Variable	Scope	Page References
Formulae may include:	average	61
	division	33, 93
	multiplication	33
	percentage	17, 59, 93, 132
	subtraction	33, 139
	sum	28, 61
	combinations of above	Throughout workbook
Printing may include:	charts	83
	entire workbooks	83
	selected data within a worksheet	47
	worksheets	31
Designated time lines may include:	organisational time line e.g. financial requirements	xi, 19
	time line agreed with internal/external client	
	time line agreed with supervisor/person requiring spreadsheet	
Naming and storing spreadsheet may include:	authorised access	xiii
	file naming conventions	x
	filing locations	vii–ix
	organisational policy for backing up files	xii
	organisational policy for filing hard copies of spreadsheets	xv
	security	101–103
	storage in electronic folders/sub-folders	Throughout book
	storage on CD-ROM, USB, tape back-up, server	101

BSBITU304A Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

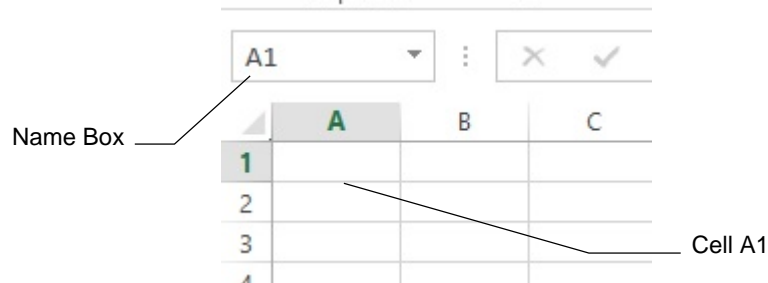
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • designing spreadsheets that address a range of data and organisational requirements • using software functions, graphics and support materials to create spreadsheets • knowledge of formatting requirements of workplace documents.
<p>Context of and specific resources for assessment</p>	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> • access to office equipment and resources • access to samples of data for inclusion in spreadsheets.
<p>Method of assessment</p>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate • review of energy and resource conservation techniques used to minimise wastage • demonstration of techniques • oral or written questioning to assess knowledge of spreadsheet software functions • review of spreadsheets produced.
<p>Guidance information for assessment</p>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> • other IT use units.

Employability Skills for BSB30112: Certificate III in Business

Employability Skill	Industry/enterprise requirements for this qualification include	How this Employability Skill is covered
Communication	<ul style="list-style-type: none"> communicating verbally with others in negotiation, training and questioning writing a range of simple documentation and communications 	Throughout this workbook, a wide range of spreadsheets are created, communicating varied information.
Teamwork	<ul style="list-style-type: none"> completing individual tasks to support team goals conveying workplace procedures and work instructions to team members 	n/a
Problem solving	<ul style="list-style-type: none"> resolving issues and conflicts with team members using manuals and other documentation to overcome problems with information technology or other office equipment 	Page xvi describes the use of manuals and solving operational problems. Pages 71–72 cover the use of the Excel Help facility.
Initiative and enterprise	<ul style="list-style-type: none"> demonstrating individual responsibility for completing tasks suggesting improvements to support the development of improved work practices and team effectiveness 	All tasks in this book are completed by the individual, demonstrating the ability to create an accurate spreadsheet single-handedly.
Planning and organising	<ul style="list-style-type: none"> contributing to planning processes with team members to meet expected outcomes gathering, organising and applying workplace information for the organisation's work processes and information systems 	Pages 160–165 contain information about advanced spreadsheet planning, including determining organisational requirements. Spreadsheet plans are created as part of practice assessment 4 and the BSBITU304A Final Assessment.
Self management	<ul style="list-style-type: none"> identifying development needs and seeking training to fill needs monitoring and recording the performance of own work area 	On page 167 the learner is introduced to the concept of evaluating their spreadsheet using an evaluation form.
Learning	<ul style="list-style-type: none"> developing a comprehensive knowledge and understanding of products and services identifying priorities and pursuing personal work goals in accordance with organisational objectives 	By working through this book the learner will develop comprehensive knowledge on how to create spreadsheets in a business environment.
Technology	<ul style="list-style-type: none"> using information communication technology to communicate with team members or clients using word processing packages, spreadsheets and/or databases to produce written correspondence and reports 	The whole book requires the learner to operate a PC running a Windows operating system and the Microsoft Excel 2013 application.

Rows, Columns and Cells

Spreadsheets are made up of rows (going across) and columns (going down). Rows are represented by numbers (1, 2, 3) and columns by letters (A, B, C). The intersection of a row and column is called a **cell**. The cell reference is made up of the column and row name, i.e. the first cell in the top left corner is called **A1**. This cell name is shown in the **Name Box**.



Cell Contents

Microsoft Excel allows you to enter data into any cell in a worksheet. Data may consist of text, numbers or a formula based on selected cells.

Various parts of a worksheet are shown below.

	A	B	C	D
	The Fashion House - Conference Budget			
		Australia	America	Britain
Air Fares		897.00	1,586.95	2,425.28
Accommodation		1,200.00	1,800.50	2,000.00
Meals		950.00	1,060.96	1,250.25
Car Rental		660.50	501.23	680.25
Travel Insurance		80.00	100.00	95.00
Total		\$3,787.50	\$5,049.64	\$6,450.78

Labels

Values

Formula: `=SUM(C4:C8)`
(i.e. adds the values in cells C4 to C8)

Labels

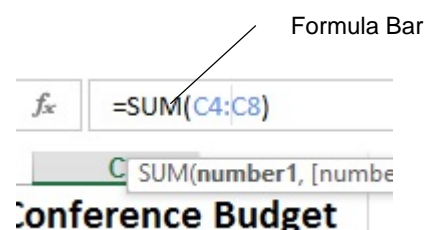
Text/numbers that are not used in a mathematical formula or equation are called labels. They help the reader understand different parts of a worksheet, i.e. column headings, row headings, title of a worksheet, etc.

Values

Data that is used to calculate results or the end result of a calculation.

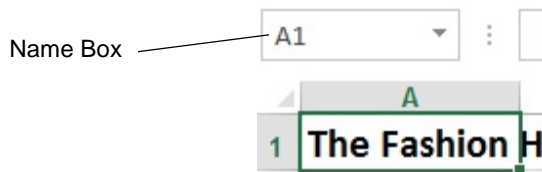
Formulas

A formula is an equation using cell references to produce a result. The result of a formula is seen in the worksheet; clicking on a cell will display the formula itself in the Formula Bar. When values change, the result of the formula will be updated automatically in the worksheet.



Exercise 6

- 1 Click in the Name Box at the top left of the worksheet.



- 2 Type: **C9**
- 3 Press Enter. The cursor will move to cell C9 within the current worksheet.
- 4 The Formula Bar displays the formula that has been used to calculate the total for the America column.
- 5 Double click on the selected cell (C9) to display the Range Finder. The Range Finder shows the cells that are included in the formula (data range).

	A	B	C	D
1	The Fashion House - Conference Budget			
2				
3		Australia	America	Britain
4	Air Fares	897.00	1,586.95	2,425.28
5	Accommodation	1,200.00	1,800.50	2,000.00
6	Meals	950.00	1,060.96	1,250.25
7	Car Rental	660.50	501.23	680.25
8	Travel Insurance	80.00	100.00	95.00
9	Total	\$3,787.50	=SUM(C4:C8)	\$6,450.78
10				
11				

- 6 Press Esc to turn off the Range Finder.

The formula used to add the total for the America column can be broken down as follows.

$$\text{Equal to } \text{=SUM(C4:C8)}$$

Labels: 'Equal to' points to the '=' sign; 'Function' points to 'SUM'; 'Range' points to 'C4:C8'.

Equal to

To determine that this is a *formula* (equation) = is placed at the beginning of a formula.

Function

A built-in formula designed for ease of use. Functions can perform tasks such as addition, calculating the average of a group of values, inserting the date, calculating angles, calculating the value of an investment over a period, etc. (SUM will add together the contents of selected cells.)

Range

Reference to cells containing values, C4:C8 (i.e. C4 to C8). The range is used instead of typing =C4+C5+C6+C7+C8 when using the SUM function.

- 7 Click on **FILE** and click on Close **Close**. If asked to save changes click on Don't Save.

Moving around a Worksheet

In the following exercise you will learn how to move the cursor around a worksheet.

Exercise 7


- 1 Click on **FILE** then click on **Open**.
- 2 Select Computer then click on the Browse button. Navigate to the folder containing your exercise files.
- 3 Select the file called **Peter Hamilton Transport**. Click on Open. Enable editing if required.
- 4 Practise cursor movements as described below. Leave the workbook open for the next exercise.


Cursor Movements

	Keyboard	Mouse
A column at a time	→ or ←	Move mouse and click
A row at a time	↑ or ↓	Move mouse and click
Beginning of a row	Home	Move mouse and click
End of a row of data	End →	Move mouse and click
Beginning of a row of data	End ←	Move mouse and click
Cell A1	Ctrl Home	Point and drag vertical scroll box up
Bottom right corner cell of data	Ctrl End	Point and drag vertical scroll box down
Next worksheet	Ctrl Page Down	Move mouse and click on sheet tab
Previous worksheet	Ctrl Page Up	Move mouse and click on sheet tab
Across one window to the right	Alt Page Down	Point and drag the horizontal scroll box right
Across one window to the left	Alt Page Up	Point and drag the horizontal scroll box left

Scroll Bars

The vertical and horizontal scroll bars at the right and bottom of the screen will move you around the worksheet area, beyond what you can initially see on your screen.

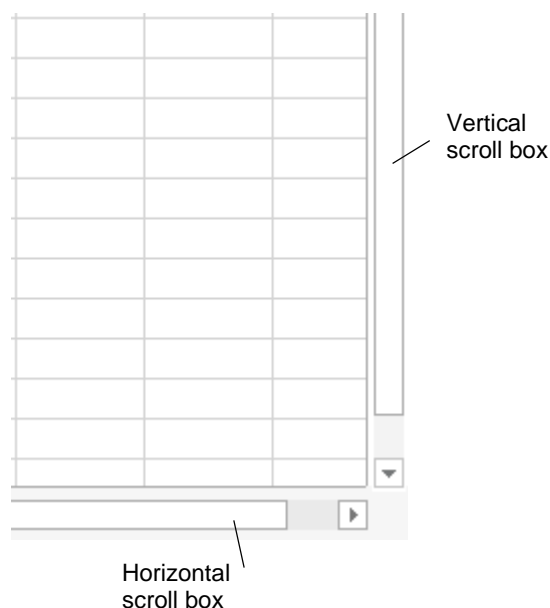
Click on the  at the bottom right of your screen, on the vertical scroll bar, to move down the worksheet.

Click on the  to move up the worksheet. Dragging the scroll box on the vertical scroll bar will move quickly up or down the worksheet.

Use the horizontal scroll box at the bottom of the screen to move to the left or right of a worksheet. Or click on

 and .

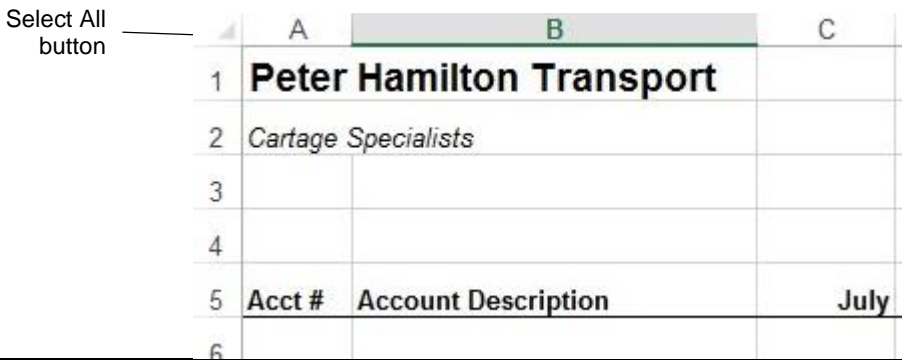
Clicking in the required cell makes the cell **active**. Data can be entered into the active cell.



Selecting Cells

Exercise 8

- 1 With the Peter Hamilton workbook still open, practise selecting using the various methods described below.

Selecting	Mouse
Single cell	Click in the centre of the cell.
Range of cells	Click in the first cell in the range and drag to the last cell in the range. Alternatively, click in the first cell, hold down the Shift key and click on the last cell.
Non-adjacent cells	Select the first range of cells then hold down the Ctrl key on the keyboard and select the second range of cells and so on.
An entire column(s)	Click on the column header B OR with the cursor in the column press Ctrl Spacebar. <i>Adjacent columns</i> Click and drag on the column headers. <i>Non-adjacent columns</i> Hold down the Ctrl key and click on each column header.
An entire row(s)	Click on the row header 2 OR with the cursor in the row press Shift Spacebar. <i>Adjacent rows</i> Click and drag on the row headers. <i>Non-adjacent rows</i> Hold down the Ctrl key and click on each row header.
Entire worksheet	Click on the Select All button above the first row header and to the left of the first column header OR press Ctrl A. 
Deselecting selected cells	Click in a blank cell outside the selected cells.

Tip

You can hold down the Shift key and use the arrow keys on the keyboard to select cells. Pressing an arrow key (with the Shift key released) will deselect cells.

- 2 Click on **FILE** and click on **Close**. If asked to save changes click on Don't Save.

Working with Dates and Times

Times and dates are stored in your spreadsheet as numbers, so they can be included in calculations.

Date and Time Functions

There are several functions which can be used to add date and time information to your spreadsheet. Two of the most commonly used are:

- **TODAY()** this adds the current date to the spreadsheet.
- **NOW()** this adds the current date and time to the spreadsheet.

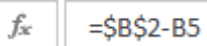
Both of these functions automatically update when the spreadsheet is opened to display current date/time information.

Note that neither of these functions take any arguments (nothing goes in the brackets after the function name); however you still need to include the empty brackets when entering the function.

Subtracting Dates

It is possible to subtract one date from another. This will give you the number of days between two dates. Remember to subtract the *older date* from the *newer date*.




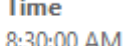

Exercise 133

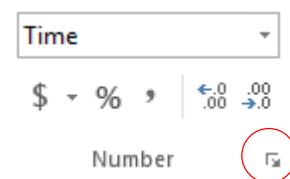
- 1 Open the file called **PhD Duration**.
- 2 Click in cell B2.
- 3 Type: =**TODAY()** and press Enter to enter today's date.
- 4 Click in cell C5. Enter a formula that subtracts the start date from today's date (don't forget to use an absolute reference). 
- 5 Copy the formula down the column.
- 6 Save and close the file.

Formatting Time

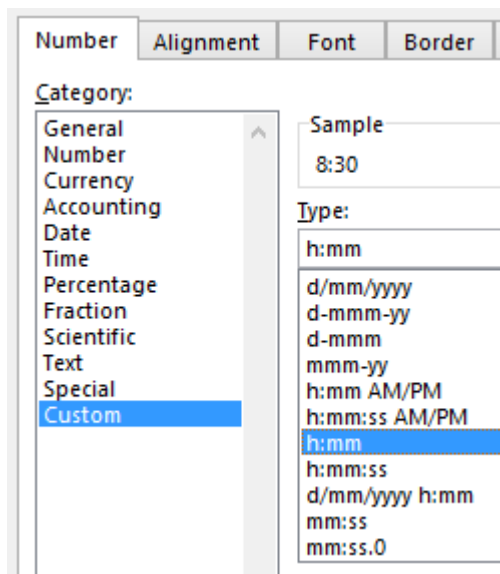
When entering a time value into a cell, you need to use a colon (:) between the hours and minutes, e.g. **8:30**. It is also preferable to use a 24-hour clock (military style time) so that one o'clock in the afternoon is entered as 13:00 hours.

Exercise 134

- 1 Open the file **Wages – Staff Hours**.
- 2 Select cells C5:D10.
- 3 Ensure the Home Ribbon is displayed. From the Number group, click on the  of the Number Format drop-down list .
- 4 Select  **Time** . This formats the cells to display hours, minutes and seconds.
- 5 With the cells still selected, click on the Number Dialog Box Launcher button .
- 6 Select Custom from the *Category:* list at the left.



- 7 Select the format h:mm from the from the *Type:* list.



- 8 Click .
- 9 Save the file and keep it open for the next exercise.

Calculating with Time

As with a date, time entered into a spreadsheet is a number and can be used in calculations. The following factors must be considered.

- Time values are calculated over a 24-hour period and are not a whole number but a fraction. To convert time into a whole number it is multiplied by 24.
- If the starting time of a job is subtracted from the finishing time and multiplied by 24 the result will be the hours as a whole number. A starting time of 8.30 am subtracted from a finishing time of 12:00 pm would be 3.5 hours.
- If time is displayed or formatted as text it cannot be used in calculations.

Calculating Hours Worked

Subtracting one time from another to calculate the amount of time something has taken, is a common use of time calculations in Excel.

Exercise 135








- 1 Using **Wages – Staff Hours**, click in cell E5 and enter the formula $=\text{(D5-C5)}*24$ (finishing time – start time multiplied by 24).
Note that the cells being subtracted are within brackets. This means that this calculation is performed first and the result is multiplied by 24.
- 2 Copy the formula down the column. Format cells E5:E10 to General if required.
- 3 Select cells G5:I10 and format to Currency.
- 4 Calculate the gross pay by multiplying the total time worked by the rate.
- 5 Calculate the tax by multiplying the gross pay by the tax rate in cell H3 (absolute reference).
- 6 Calculate the net pay by subtracting the tax from the gross pay.
- 7 Copy all formulas down the column
- 8 Save and close the file.

Working with Multiple Worksheets

Linking Data between Worksheets

It is possible for data to be copied and pasted from one worksheet to another. It is also possible for data to be linked between sheets so that when one is changed, the other worksheet is automatically updated.


Exercise 136





- 1 Open the file **ACM Customers**. Ensure the Customer sheet is displayed.
- 2 Click in cell A1, hold the Shift key down and click in cell A11 to select the range A1:A11.
- Ctrl C 3 Click on the Copy button  Copy .
- 4 Click on the **Sales** sheet tab at the bottom of the worksheet.
- Ctrl V 5 With cell A1 selected click on the Paste button  Paste . Click on the Paste Options button  (Ctrl) and click on Keep Source Column Widths .
- 6 Click on the **Customer** sheet tab and copy the range E3:E11 (Total).
- 7 Click on the **Sales** sheet tab and click in cell B3.
- 8 Click on the  at the bottom of the Paste button  Paste and click on Paste Link .
This will create a link between the original and the pasted cells. Any changes made in the Customer worksheet will automatically change in the Sales worksheet.
- 9 Apply currency format and widen the column to display the figures if required.
- 10 In the Customer worksheet edit the sales for Summers & Sons to read as follows:

Client	October	November	December
Summers & Sons	\$3,058.00	\$3,968.00	\$4,052.00
- 11 The Total will change. Click on the Sales worksheet and check that the Total has updated in that worksheet.
- 12 Save the file and keep it open.

Copying Data from another Workbook

Exercise 137

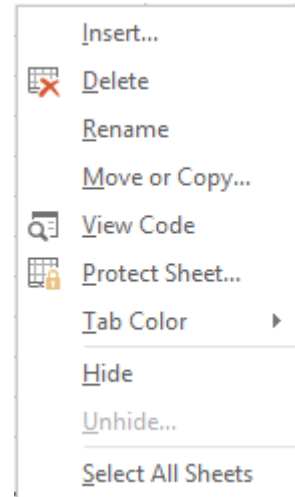
- 1 With **ACM Customers** still open, open the file **ACM Jan-March**. Ensure the Customer sheet is displayed.
- 2 Copy all data from cells A1:E11.
- 3 Display the View Ribbon and click on the Switch Windows button  Switch Windows .
- 4 Select 2 **ACM Customers.xlsx** to switch to this workbook.
- 5 Click on the **Sheet3** sheet tab and Paste the data into cell A1.

- 6 Click on  (Ctrl) and select Paste Link .
- 7 Click on  (Ctrl) again and select Keep Source Column Widths .
- 8 Save the **ACM Customers** file and leave it open for the next exercise.
- 9 Switch back to the **ACM Jan-March** file and close without saving.

Renaming a Worksheet

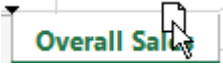
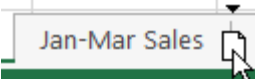
Exercise 138

- 1 Using **ACM Customers**, right click on the Sheet3 Sheet tab. A menu will display as shown at the right.
- 2 Select Rename.
- 3 With the current name highlighted type: **Jan-Mar Sales** and press Enter.
- 4 Rename the Sales sheet tab to **Overall Sales**.
- 5 Click on the **Customer** sheet tab and edit the cell in E3 to read: **Total Oct-Dec**. Widen the column.
- 6 Click on the Jan-Mar Sales worksheet and edit E3 to read: **Total Jan-Mar**. Widen the column.
- 7 Copy the Jan-Mar data in column E and paste (as a link) into the **Overall Sales** worksheet (into column C).
- 8 Apply appropriate formatting to the pasted data.
- 9 Change the header in the Overall Sales sheet to **Overall Sales**.
- 10 Widen columns as required and ensure all formatting is consistent between all of the sheets.
- 11 Save the workbook and keep it open.



Moving a Worksheet

Exercise 139

- 1 Using **ACM Customers**, click on the **Overall Sales** sheet tab. Hold down the mouse button; a sheet of paper icon will display .
- 2 Drag the mouse until the small black arrow is just past the Jan-Mar Sales Sheet tab .
- 3 Release the mouse button to complete the action.
- 4 Save the workbook and keep it open.

Inserting a Worksheet

Exercise 140

- 1 Using **ACM Customers**, right click the mouse on the **Customer** sheet tab.
- 2 Rename the worksheet to **Oct-Dec Sales**; press Enter to finish renaming.
- 3 Right click on the sheet tab again and select Insert .



- 4 Ensure the **Worksheet** option is selected and click on OK. A new worksheet will be inserted into the workbook.
- 5 Move the new worksheet to the right of the **Overall Sales** worksheet.
- 6 Rename the worksheet to **Annual Sales**.
- 7 Type in and format the headings shown below:

	A	B
1	Annual Sales	
2		
3	Financial Period	Totals
4	October-December	
5	January-March	

- 8 Format cells B4:B5 as currency.
- 9 Switch to the Oct-Dec Sales worksheet and type: **Total** in cell A12. Format to bold.
- 10 Insert a formula in E12 to add the range E4:E11.
- 11 Copy the Oct-Dec Total in E12 to the Annual Sales worksheet and paste as a link in cell B4.
- 12 Switch to the Jan-Mar Sales worksheet and add a total to cell E12.
- 13 Copy the Jan-Mar Total in E12 to the Annual Sales worksheet and paste as a link in cell B5.
- 14 Widen and format columns and cells if needed.
- 15 Switch to the Oct-Dec Sales worksheet and change the October figure for 3D Home Cladding to **\$7000.00**. The total will update.
- 16 Switch to the Annual Sales worksheet and check that the data updated there as well.
- 17 Press Ctrl Z to undo the change.
- 18 Save the file and keep it open.

Deleting a Worksheet

Exercise 141

- 1 Using **ACM Customers**, insert a new worksheet into the workbook.
- 2 Right click on the new worksheet sheet tab.
- 3 Click on **Delete** to remove the worksheet from the workbook.
- 4 Save and close the file.

Importing Data into Excel

Data can be imported from another source (such as a text file) into an Excel worksheet.

Get External Data from a Text File

Exercise 142

- 1 Open a new file in Excel and display the Data Ribbon.

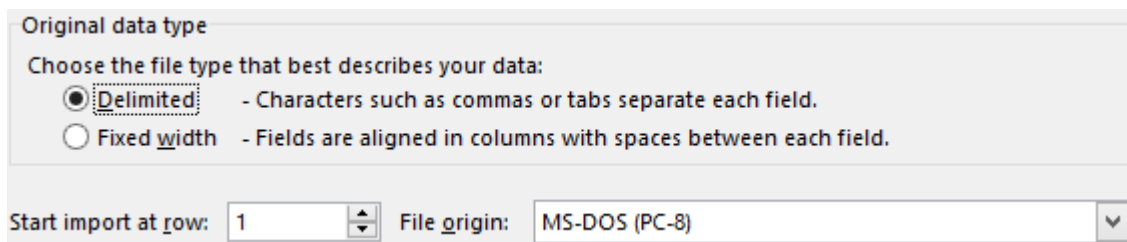


- 2 Click on the **Text** button in the Get External Data group.

- 3 Select the **Graduation List** file and click on .

- 4 Check the *Delimited* option is selected in the Original data type section.

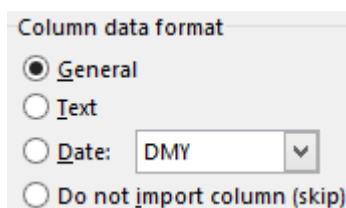
- 5 Check the *Start import at row:* option box reads 1.

The screenshot shows the 'Original data type' dialog box. It has a title bar 'Original data type' and a subtitle 'Choose the file type that best describes your data:'. There are two radio button options: 'Delimited' (selected) with the description '- Characters such as commas or tabs separate each field.' and 'Fixed width' with the description '- Fields are aligned in columns with spaces between each field.'. Below the options are two input fields: 'Start import at row:' with a dropdown menu showing '1' and 'File origin:' with a dropdown menu showing 'MS-DOS (PC-8)'.

- 6 Click on Next to move to Step 2 of 3.

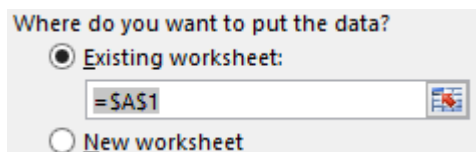
- 7 Ensure the Tab check box is selected in the *Delimiters* section .

- 8 Click on Next. Check to ensure that the General option is active in the *Column data format* section.

The screenshot shows the 'Column data format' dialog box. It has a title bar 'Column data format' and four radio button options: 'General' (selected), 'Text', 'Date:' with a dropdown menu showing 'DMY', and 'Do not import column (skip)'.

- 9 Click on Finish.

- 10 Ensure the data import starts at cell A1 of the existing worksheet.

The screenshot shows the 'Where do you want to put the data?' dialog box. It has a title bar 'Where do you want to put the data?' and two radio button options: 'Existing worksheet:' (selected) with a text input field containing '=SAS1' and a small grid icon to its right, and 'New worksheet'.

- 11 Click on OK to complete the import.

- 12 Format the headings at the top of each column and add an appropriate spreadsheet heading.

- 13 Save the file with the name **Graduation** and close.

Evidence Guide BSBITU202A Create and use spreadsheets

Elements and Performance Criteria

The elements and performance criteria are covered during assessment in the following ways.

Element	Performance Criteria	Assessment Tasks
1 Select and prepare resources		
1.1	Adjust workspace, furniture and equipment to suit user ergonomic, work organisation and occupational health and safety (OHS) requirements	Task 1
1.2	Use energy and resource conservation techniques to minimise wastage in accordance with organisational and statutory requirements	Task 1
1.3	Identify spreadsheet task requirements and clarify with relevant personnel as required	Task 2 – Part 1 Task 2 – Part 5
2 Create simple spreadsheets		
2.1	Ensure data is entered, checked and amended in accordance with organisational and task requirements, to maintain consistency of design and layout	Task 2 – Part 3 Task 2 – Part 4 Task 2 – Part 7
2.2	Format spreadsheet using software functions , to adjust page and cell layout to meet information requirements, in accordance with organisational style and presentation requirements	Task 2 – Part 4 Task 2 – Part 7
2.3	Ensure formulae are used and tested to confirm output meets task requirements, in consultation with appropriate personnel as required	Task 2 – Part 3 Task 2 – Part 4 Task 2 – Part 7
2.4	Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	Task 2 – Part 3
3 Produce simple charts		
3.1	Select chart type and design that enables valid representation of numerical data and meets organisational and task requirements	Task 2 – Part 2 Task 2 – Part 6
3.2	Create chart using appropriate data range in the spreadsheet	Task 2 – Part 4 Task 2 – Part 7
3.3	Modify chart type and layout using formatting features	Task 2 – Part 4 Task 2 – Part 7

Element	Performance Criteria	Assessment Tasks
4 Finalise spreadsheets		
4.1	Ensure spreadsheet and any accompanying charts are previewed, adjusted and printed in accordance with organisational and task requirements	Task 2 – Part 3 Task 2 – Part 4 Task 2 – Part 7
4.2	Ensure data input meets designated time lines and organisational requirements for speed and accuracy	Timelines can be applied to any/all assessment tasks
4.3	Name and store spreadsheet in accordance with organisational requirements and exit the application without data loss/damage	Task 2 – Part 4 Task 2 – Part 7

Required Skills and Knowledge

The skills and knowledge are covered during assessment in the following ways.

Required Skills	How will Evidence be Gathered?
<ul style="list-style-type: none"> communication skills to clarify requirements of spreadsheet 	Can be assessed through communication between candidate and assessor.
<ul style="list-style-type: none"> editing and proofreading skills to check own work for accuracy 	Task 2 – Part 4 Task 2 – Part 7
<ul style="list-style-type: none"> keyboarding skills to enter text and numerical data 	Task 2 – Part 4 Task 2 – Part 7
<ul style="list-style-type: none"> literacy skills to read and understand organisation's procedures, and to use basic models to produce a range of spreadsheets 	All assessment tasks
<ul style="list-style-type: none"> numeracy skills to create and use spreadsheet formulae 	Task 2 – Part 4 Task 2 – Part 7
Required Knowledge	How will Evidence be Gathered?
<ul style="list-style-type: none"> formatting of workplace documents 	Task 2 – Part 4 Task 2 – Part 7
<ul style="list-style-type: none"> organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques 	Task 1
<ul style="list-style-type: none"> organisational guidelines on spreadsheet manipulation and processing 	Task 2
<ul style="list-style-type: none"> purpose and range of use of spreadsheet functions 	Task 2 – Part 4 Task 2 – Part 7

Employability Skills BSB10112 Certificate I in Business

Employability skills for BSB10112 Certificate II in Business are assessed in the following assessment tasks.

Employability Skill	Industry/Enterprise Requirements for this Qualification Include:	Task
Communication	<ul style="list-style-type: none"> communicating verbally with clients and colleagues drafting routine correspondence that meets the organisational standards of style, format and accuracy 	Task 2 – Part 4 Task 2 – Part 7
Teamwork	<ul style="list-style-type: none"> working in a team environment to promote team commitment and cooperation 	n/a
Problem-solving	<ul style="list-style-type: none"> choosing appropriate methods for communication and transferring information dealing with client enquiries and complaints 	n/a
Initiative and enterprise	<ul style="list-style-type: none"> raising occupational health and safety issues with designated personnel 	n/a
Planning and organising	<ul style="list-style-type: none"> planning and organising own work schedule for the day planning the layout of simple documents using appropriate software 	Task 2 – Part 1 Task 2 – Part 5
Self-management	<ul style="list-style-type: none"> dealing sensitively with client needs and cultural, family and individual differences obtaining feedback on work performance and identifying opportunities for improvement 	n/a
Learning	<ul style="list-style-type: none"> encouraging, acknowledging and acting on constructive feedback from team members using manuals, training booklets and online help to overcome difficulties 	Task 2 – Part 3
Technology	<ul style="list-style-type: none"> selecting, maintaining and using business technology appropriate to the task 	Technology is used throughout assessment

Evidence Guide BSBITU304A Create and use spreadsheets

Elements and Performance Criteria

The elements and performance criteria are covered during assessment in the following ways.

Element	Performance Criteria	Assessment Tasks
1 Select and prepare resources		
1.1	Adhere to ergonomic, work organisation and occupational health and safety requirements	Task 1
1.2	Use energy and resource conservation techniques to minimise wastage	Task 1
1.3	Identify spreadsheet task requirements in relation to data entry, storage, output and presentation	Task 2
2 Plan spreadsheet design		
2.1	Ensure spreadsheet design suits the purpose, audience and information requirements of the task	Task 2
2.2	Ensure spreadsheet design enhances readability and appearance, and meets organisational and task requirements for style and layout	Task 2
2.3	Use style sheets and automatic functions to ensure consistency of design and layout	Task 2
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	Task 3 Task 4
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	Task 4
3.3	Ensure formulae are tested and used to confirm output meets task requirements, in consultation with appropriate personnel as required	Task 3 Task 4
3.4	Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	Task 3

Element	Performance Criteria	Assessment Tasks
4 Produce simple charts		
4.1	Select chart type and design that enables valid representation of numerical data, and meets organisational and task requirements	Task 2 – Part 2
4.2	Create charts using appropriate data range in the spreadsheet	Task 4 – Part 2
4.3	Modify chart type and layout using formatting features	Task 4 – Part 2
5 Finalise spreadsheets		
5.1	Preview, adjust and print spreadsheet and any accompanying charts, in accordance with task requirements	Task 4
5.2	Ensure data input meets designated time lines and organisational requirements for speed and accuracy	Time limits should be applied to the assessment tasks as detailed on page 213.
5.3	Name and store spreadsheet in accordance with organisational requirements and exit the application without data loss/damage	Task 4

Required Skills and Knowledge

The skills and knowledge are covered during assessment in the following ways.

Required Skills	How will Evidence be Gathered?
<ul style="list-style-type: none"> communication skills to clarify requirements of spreadsheet 	Can be assessed through communication between candidate and assessor.
<ul style="list-style-type: none"> editing and proofreading skills to check own work for accuracy against original 	Task 4
<ul style="list-style-type: none"> keyboarding skills to enter text and numerical data 	Task 4
<ul style="list-style-type: none"> literacy skills to read and understand organisational procedures, and to use basic models to produce a range of spreadsheets 	All assessment tasks
<ul style="list-style-type: none"> mathematical and statistical skills to use spreadsheet functions such as sum, counts and averages 	Task 4
Required Knowledge	How will Evidence be Gathered?
<ul style="list-style-type: none"> formatting requirements of workplace documents 	Task 2
<ul style="list-style-type: none"> organisational guidelines on spreadsheet design and use 	Task 2
<ul style="list-style-type: none"> organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques 	Task 1

Employability Skills BSB30112 Certificate III in Business

Employability skills for BSB30112 Certificate III in Business are assessed in the following assessment tasks.

Employability Skill	Industry/Enterprise Requirements for this Qualification Include:	Task
Communication	<ul style="list-style-type: none"> communicating verbally with others in negotiation, training and questioning writing a range of simple documentation and communications 	Can be assessed through communication between candidate and assessor.
Teamwork	<ul style="list-style-type: none"> completing individual tasks to support team goals conveying workplace procedures and work instructions to team members 	n/a
Problem-solving	<ul style="list-style-type: none"> resolving issues and conflicts with team members using manuals and other documentation to overcome problems with information technology or other office equipment 	Task 3
Initiative and enterprise	<ul style="list-style-type: none"> demonstrating individual responsibility for completing tasks suggesting improvements to support the development of improved work practices and team effectiveness 	All assessment tasks are completed individually.
Planning and organising	<ul style="list-style-type: none"> contributing to planning processes with team members to meet expected outcomes gathering, organising and applying workplace information for the organisation's work processes and information systems 	Task 2
Self-management	<ul style="list-style-type: none"> identifying development needs and seeking training to fill needs monitoring and recording the performance of own work area 	n/a
Learning	<ul style="list-style-type: none"> developing a comprehensive knowledge and understanding of products and services identifying priorities and pursuing personal work goals in accordance with organisational objectives 	n/a
Technology	<ul style="list-style-type: none"> using information communication technology to communicate with team members or clients using word processing packages, spreadsheets and/or databases to produce written correspondence and reports 	Technology is used throughout assessment

BSB Business Services Training Package Supplement

This workbook can be used by learners completing a qualification in the BSB Business Services Training Package.

BSBITU202 Create and use spreadsheets

Application

This unit describes the skills and knowledge required to correctly create and use spreadsheets and charts using spreadsheet software.

It applies to individuals who perform a range of routine tasks in the workplace using a limited range of practical skills and fundamental knowledge of creating spreadsheets in a defined context under direct supervision or with limited individual responsibility.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Elements and Performance Criteria

Element <i>Elements describe the essential outcomes.</i>	Performance Criteria <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>	Workbook page reference	Assessment Tasks
1. Select and prepare resources	1.1 Adjust workspace, furniture and equipment to suit own ergonomic, work organisation and work health and safety (WHS) requirements	Software Publications WHS <i>(included in exercise file download)</i>	Task 1
	1.2 Use energy and resource conservation techniques to minimise wastage in accordance with organisational and statutory requirements	Software Publications WHS	Task 1
	1.3 Identify spreadsheet task requirements and clarify with relevant personnel as required	19–21, 121–122	Task 2 - Part 1 Task 2 - Part 5
2. Create simple spreadsheets	2.1 Ensure data is entered, checked and amended in accordance with organisational and task requirements, to maintain consistency of design and layout	21–30, 48–51, 64–70	Task 2 – Part 3 Task 2 – Part 4 Task 2 – Part 7
	2.2 Format spreadsheet using software functions, to adjust page and cell layout to meet information requirements, in accordance with organisational style and presentation requirements	25–27, 35–44, 52–54, 91, 95–98	Task 2 – Part 4 Task 2 – Part 7
	2.3 Ensure formulae are used and tested to confirm output meets task requirements, in consultation with appropriate personnel as required	11, 28, 33–34, 59, 61–70	Task 2 – Part 3 Task 2 – Part 4 Task 2 – Part 7
	2.4 Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	71–72	Task 2 – Part 3
3. Produce simple charts	3.1 Select chart type and design that enables valid representation of numerical data and meets organisational and task requirements	74–76	Task 2 – Part 2 Task 2 – Part 6
	3.2 Create chart using appropriate data range in spreadsheet	78, 81, 84	Task 2 – Part 4 Task 2 – Part 7
	3.3 Modify chart type and layout using formatting features	78–84	Task 2 – Part 4 Task 2 – Part 7

Element <i>Elements describe the essential outcomes.</i>	Performance Criteria <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>	Workbook page reference	Assessment Tasks
4. Finalise spreadsheets	4.1 Ensure spreadsheet and any accompanying charts are previewed, adjusted and printed in accordance with organisational and task requirements	31, 44–47, 51, 69, 83	Task 2 – Part 3 Task 2 – Part 4 Task 2 – Part 7
	4.2 Ensure data input meets designated timelines and organisational requirements for speed and accuracy	xi, Practice Assessments	Timelines can be applied to any/all assessment tasks
	4.3 Name and store spreadsheet in accordance with organisational requirements and exit application without data loss/damage	vii–x, xii–xiii, xv, 35, 101–103	Task 2 – Part 4 Task 2 – Part 7

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description	Workbook page reference
Reading	2.1, 2.4, 4.1, 4.3	<ul style="list-style-type: none"> Recognises numerical and textual information within a range of resources to determine and complete work according to requirements 	Throughout workbook
Writing	2.1, 2.3, 3.2, 4.1, 4.3	<ul style="list-style-type: none"> Enters and amends routine data into software using a format appropriate to requirements 	Throughout workbook
Oral Communication	1.3, 2.3	<ul style="list-style-type: none"> Listens to short and specific instructions and uses questions to clarify understanding Uses simple mathematical language to confirm and convey requirements 	xviii, 20
Numeracy	2.1, 2.3, 3.1, 3.2	<ul style="list-style-type: none"> Uses basic mathematical skills to create and apply spreadsheet formulae 	Throughout workbook
Navigate the world of work	1.1-1.3, 2.1, 2.2, 3.1, 4.1-4.3	<ul style="list-style-type: none"> Recognises, understands and adheres to legislative and organisational requirements in undertaking own work 	Throughout workbook and Software Publications WHS
Interact with others	1.3	<ul style="list-style-type: none"> Recognises purpose of various communications directly relevant to own role and clarifies as required 	Requirements of workbook exercises can be clarified with trainer as required
Get the work done	1.3, 2.1-2.4, 3.1-3.3, 4.1-4.3	<ul style="list-style-type: none"> Uses key software features and functions in performing specific work tasks 	Throughout workbook

Assessment Requirements v1.0

Performance Evidence

Evidence of the ability to:	Assessment task
<ul style="list-style-type: none"> produce documents following correct ergonomic, conservation, organisational and statutory requirements 	Task 1, Task 2 – Part 4 and Part 7
<ul style="list-style-type: none"> consult with appropriate personnel as required 	Candidate can consult with assessor as appropriate
<ul style="list-style-type: none"> adhere to organisational style and presentation requirements 	Task 2 – Part 1, Part 4, Part 5 and Part 7
<ul style="list-style-type: none"> refer to online help function and user documentation to rectify document problems 	Task 2 – Part 3
<ul style="list-style-type: none"> create and modify simple charts 	Task 2 – Part 4 and Part 7
<ul style="list-style-type: none"> follow designated timelines and ensure high accuracy when preparing documents 	Timelines can be applied to any/all assessment tasks
<ul style="list-style-type: none"> demonstrate ability to prevent data loss and damage. 	Assessor can ask candidate to demonstrate an appropriate shutdown routine at the conclusion of the assessment

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:	Assessment task
<ul style="list-style-type: none"> demonstrate knowledge of how to format workplace documents 	Task 2 – Part 1, Part 4, Part 5 and Part 7
<ul style="list-style-type: none"> describe organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques 	Task 1
<ul style="list-style-type: none"> outline organisational guidelines on spreadsheet manipulation and processing 	Task 2 – Part 1, Part 4, Part 5 and Part 7
<ul style="list-style-type: none"> explain purpose and range of use of spreadsheet functions. 	Task 2 – Part 1, Part 4, Part 5 and Part 7

BSBITU304 Produce spreadsheets

Application

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

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.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Elements and Performance Criteria

Element <i>Elements describe the essential outcomes.</i>	Performance Criteria <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>	Workbook page reference	Assessment Tasks
1. Select and prepare resources	1.1 Adhere to ergonomic, work organisation and occupational health and safety requirements	Software Publications WHS <i>(included in exercise file download)</i>	Task 1
	1.2 Use energy and resource conservation techniques to minimise wastage	Software Publications WHS	Task 1
	1.3 Identify spreadsheet task requirements in relation to data entry, storage, output and presentation	19–21, 160–165	Task 2
2. Plan spreadsheet design	2.1 Ensure spreadsheet design suits purpose, audience and information requirements of task	95–97, 126–139, 141–144, 152–162	Task 2
	2.2 Ensure spreadsheet design enhances readability and appearance, and meets organisational and task requirements for style and layout	19–21, 160–165	Task 2
	2.3 Use style sheets and automatic functions to ensure consistency of design and layout	30–31, 35–37, 59–60, 95–97, 139, 145–146, 148, 161	Task 2
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	48–49, 64–70	Task 3 Task 4
	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	25–27, 30, 35–40, 52–54, 91, 95–97, 130, 132, 135, 152–159, 181, 186	Task 4
	3.3 Ensure formulae are tested and used to confirm output meets task requirements, in consultation with appropriate personnel as required	17, 28, 33, 59, 61, 93–93, 132, 139	Task 3 Task 4
	3.4 Use manuals, user documentation and online help to overcome problems with spreadsheet design and production	71–72	Task 3

Element <i>Elements describe the essential outcomes.</i>	Performance Criteria <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>	Workbook page reference	Assessment Tasks
4. Produce simple charts	4.1 Select chart type and design that enables valid representation of numerical data, and meets organisational and task requirements	74–76	Task 2 – Part 2
	4.2 Create charts using appropriate data range in the spreadsheet	78, 81, 84	Task 4 – Part 2
	4.3 Modify chart type and layout using formatting features	78–84	Task 4 – Part 2
5 Finalise spreadsheets	5.1 Preview, adjust and print spreadsheet and any accompanying charts, in accordance with task requirements	31, 45–47, 51, 69, 83	Task 4
	5.2 Ensure data input meets designated timelines and organisational requirements for speed and accuracy	xi, 19	Time limits should be applied to the assessment tasks as detailed on page 213.
	5.3 Name and store spreadsheet in accordance with organisational requirements and exit the application without data loss/damage	vii–x, xii–xiii, xv, 101–103	Task 4

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description	Workbook page reference
Reading	2.2, 3.1-3.4, 5.1	<ul style="list-style-type: none"> Recognises and interprets numerical and textual information to determine organisational and task requirements 	Throughout workbook
Writing	2.1, 3.1-3.3, 4.2, 4.3, 5.1-5.3	<ul style="list-style-type: none"> Inputs numerical and key reporting information when creating and finalising spreadsheets and uses format, layout, style guides and standard naming conventions to organise data according to purpose and audience 	Throughout workbook
Oral Communication	3.3	<ul style="list-style-type: none"> Participates in exchange of information to determine whether formulae utilised produce result required 	Exercise solutions can be discussed with trainer as required
Numeracy	4.1, 4.2	<ul style="list-style-type: none"> Uses mathematical equations to create simple formulae and validate numerical data 	Throughout workbook
Navigate the world of work	1.1-1.3, 2.1-2.3, 3.1-3.3, 4.1, 5.1-5.3	<ul style="list-style-type: none"> Recognises and follows explicit and implicit protocols and meets expectations associated with own role 	Throughout workbook and Software Publications WHS
Interact with others	3.3	<ul style="list-style-type: none"> Collaborates with others to achieve joint outcomes 	Workbook exercises can be discussed with classmates or workmates
Get the work done	2.1-2.3, 3.1-3.4, 4.1-4.3, 5.1-5.3	<ul style="list-style-type: none"> Uses advanced features within applications to address routine and complex work tasks 	Throughout workbook

Assessment Requirements v1.0

Performance Evidence

Evidence of the ability to:	Assessment task
<ul style="list-style-type: none">design spreadsheets that address a range of data and organisational requirements	Task 2, Task 4
<ul style="list-style-type: none">use software functions, graphics and support materials to create spreadsheets	Task 3, Task 4
<ul style="list-style-type: none">apply knowledge of formatting requirements for workplace documents	Task 2, Task 4

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:	Assessment task
<ul style="list-style-type: none">describe formatting requirements of workplace documents	Task 2
<ul style="list-style-type: none">identify organisational guidelines on spreadsheet design and use	Task 2, Task 4
<ul style="list-style-type: none">explain organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques	Task 1