Australian Government

Department of Education, Employment and Workplace Relations

BSBITU402A Develop and use complex spreadsheets

Revision Number: 1

BSBITU402A Develop and use complex spreadsheets

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to use spreadsheet software to complete business tasks and to produce complex documents. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of the Unit

Application of the unit	This unit applies to individuals employed in a range of work environments who require skills in the creation of 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.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to develop spreadsheet	1.1. Organise personal work environment in accordance with ***ergonomic requirements***
	1.2. Analyse task and determine specifications for spreadsheets
	1.3. Identify organisational and task requirements in relation to data entry, storage, output, reporting and presentation requirements
	1.4. Apply ***work organisation strategies*** and ***energy and resource conservation techniques*** to plan work activities
2. Develop a linked spreadsheet solution	2.1. Utilise ***spreadsheet design*** software ***functions*** and ***formulae*** to meet identified requirements
	2.2. Link spreadsheets in accordance with software procedures
	2.3. Format cells and use data attributes assigned with relative and/or absolute cell references, in accordance with the task specifications
	2.4. Test formulae to confirm output meets task requirements
3. Automate and standardise spreadsheet operation	3.1. Evaluate tasks to identify those where automation would increase efficiency
	3.2. Create, use and edit ***macros*** to fulfil the requirements of the task and automate spreadsheet operation
	3.3. Develop, edit and use ***templates*** to ensure consistency of design and layout for forms and reports, in accordance with organisational requirements
4. Use spreadsheets	4.1. Enter, check and amend data in accordance with organisational and task requirements
	4.2. ***Import and export*** data between compatible spreadsheets and adjust host documents, in accordance with software and system procedures
	4.3. Use manuals, user documentation and online help to overcome problems with spreadsheet design and production
	4.4. Preview, adjust and ***print*** spreadsheet in accordance with organisational and task requirements
	4.5. ***Name and store spreadsheet*** in accordance with organisational requirements and exit the application

ELEMENT	PERFORMANCE CRITERIA
	without data loss or damage
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 5.2. ***Create graphs*** with labels and titles from numerical data contained in a spreadsheet file 5.3. Save, view and print graph within designated time lines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- literacy skills to interpret and evaluate the purposes and uses of various features of spreadsheets and to use a variety of strategies for planning and reviewing own work
- proofreading and editing skills to check for accuracy and consistency of information by consulting additional resources
- numeracy skills to collate and present data, graphs and related references.

Required knowledge

- advanced functions of spreadsheet software applications
- impact of formatting and design on the presentation and readability of data
- key provisions of relevant legislation from all forms of government, standards and codes that may affect aspects of business operations, such as:
  - anti-discrimination legislation
  - ethical principles
  - codes of practice
  - privacy laws
  - occupational health and safety
- organisational policies and procedures.

Evidence Guide

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.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the following is essential: • developing complex spreadsheets • developing graphical representations of data contained in spreadsheets.
Context of and specific resources for assessment	Assessment must ensure: • access to office equipment and software • access to samples of data for inclusion in spreadsheets.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate • review of authenticated documents from the workplace or training environment • demonstration of techniques.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • administration units • other information and communications technology units.

Range Statement

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.	
Ergonomic requirements may include:	• avoiding radiation from computer screens • 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 strategies may include:	• exercise breaks • mix of repetitive and other activities • rest periods
Energy and resource conservation techniques may include:	• double-sided paper use • recycling used and shredded paper • re-using paper for rough drafts (observing confidentiality requirements) • using power-save options for equipment
Spreadsheet design may include:	• analysis • appropriateness • avoidance of blank rows and columns • embedding cell references in formulae • formulae • formatting and reformatting • functions • headers and footers • headings • headings and labels • identification and parameters • import and export of data • labels • linked formulae

RANGE STATEMENT	
	• multi-page documents • pivot tables • relative and absolute cell references • split screen operation
Functions may include:	• basic financial functions (if available) • date functions • logical functions (lookup, if, choose, true, false, conditions) • mathematical functions (square root, integer, absolute value, round) • simple nested functions • statistical functions (standard deviation, count, maximum, minimum)
Formulae may include:	• addition • average • comparison • division • exponentiation • multiplication • percentage • subtraction • combinations of above
Macros may include:	• printing sections of a spreadsheet
Templates may include:	• font types and sizes • forms • headers and footers • headings • page formats • reports
Importing and exporting data may include:	• proofreading • reformatting • split screen (if available)
Printing may include:	• charts • entire workbooks • selected data within a worksheet • worksheets
Naming and storing spreadsheets may include:	• authorised access • file naming conventions • filing locations

RANGE STATEMENT	
	• organisational policy for backing up files • organisational policy for filing hard copies of spreadsheets • security • storage in folders and sub-folders • storage on disk drives, CD-ROM, USB, tape back-up, server
Graphs may include:	• bar • line • pie • scatter • stack • 3D
Creating graphs may include:	• data range • keys and legends • labels and titles • naming • sizing (if possible) • using graph menu • X and Y axis

Unit Sector(s)

Unit sector	

Competency field

Competency field	Information and Communications Technology - IT Use

Co-requisite units

Co-requisite units		

Co-requisite units		