

# **BSBITU301A** Create and use databases

**Revision Number: 1** 



#### **BSBITU301A** Create and use databases

### **Modification History**

Not applicable.

### **Unit Descriptor**

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to create simple two table relational databases with reports and queries, for the storage and retrieval of information.
	No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

## **Application of the Unit**

This unit applies to individuals employed in a range of work environments who develop and use simple databases to store and retrieve data. They may provide administrative support within an enterprise, or may be independently responsible for the storage and retrieval of data relating to their own work roles
data relating to their own work roles.

## **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Prerequisite units	

Approved Page 2 of 9

## **Employability Skills Information**

<b>Employability skills</b>	This unit contains employability skills.
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### **Elements and Performance Criteria Pre-Content**

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.

Approved Page 3 of 9

### **Elements and Performance Criteria**

ELEMENT	PERFORMANCE CRITERIA
Create a simple database	1.1.Design a simple database, with at least two tables, using a database application, basic design principles, software functions and simple formulae
	1.2. Develop a table with fields and attributes according to database usage, as well as <i>data</i> considerations and user requirements
	1.3. Create a primary key for each table
	1.4. Modify table layout and field attributes as required
	1.5. Create a relationship between the two tables
	1.6. <i>Check and amend data</i> entered, in accordance with organisational and task requirements
2. Create reports and queries	2.1. Determine information output, database tables to be used and <i>report layout</i> to meet task requirements
	2.2. Determine data groupings, search and sort criteria to meet task requirements
	2.3. Run reports and queries to check that results and formulae provide the required data
	2.4. Modify reports to include or exclude additional requirements
3. Use database	3.1.Ensure data input meets <i>designated time lines</i> and organisational requirements for speed and accuracy
	3.2. Use manuals, user documentation and online help to overcome problems with database design and production
	3.3. Preview, adjust and <i>print</i> database reports or forms in accordance with organisational and task requirements
	3.4. Name and <i>store databases</i> , in accordance with organisational requirements, and exit application without data loss or damage
	3.5. Prepare and distribute reports to appropriate person in a suitable format

Approved Page 4 of 9

### Required Skills and Knowledge

#### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- numeracy skills to create simple queries and to use simple formulae
- planning and organising skills to develop effective databases
- problem-solving skills to address inconsistencies in data and issues in database, and to query structures.

#### Required knowledge

- 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 requirements relating to data entry, storage and presentation.

Approved Page 5 of 9

### **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	<ul> <li>Evidence of the following is essential:</li> <li>creating simple databases and queries</li> <li>manipulating data using queries</li> <li>formatting data into a final version.</li> </ul>
Context of and specific resources for assessment	Assessment must ensure:      access to an actual workplace or simulated environment     access to office equipment and resources     access to sample data.
Method of assessment	<ul> <li>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</li> <li>direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate</li> <li>review of authenticated documents from the workplace or training environment</li> <li>demonstration of techniques.</li> </ul>
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.

Approved Page 6 of 9

### **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.

Database applications may include:	<ul><li>commercial database applications</li><li>organisational specific database applications</li></ul>
Basic design principles may include:	<ul> <li>naming conventions</li> <li>data layout</li> <li>formatting</li> <li>database use</li> <li>required output</li> <li>reporting and presentation requirements</li> </ul>
Software functions may include:	<ul> <li>adding, deleting, moving, re-labelling fields</li> <li>altering field widths</li> <li>calculating, using formula</li> <li>data protection</li> <li>field definitions and attributes</li> <li>formatting fields</li> <li>formatting text</li> <li>headers and footers</li> <li>inserting and deleting blank lines and spaces</li> <li>repeating (if available)</li> <li>table, form and report wizards</li> </ul>
Simple formulae may include:	<ul> <li>average</li> <li>count</li> <li>division</li> <li>maximum</li> <li>minimum</li> <li>multiplication</li> <li>subtraction</li> <li>sum</li> <li>combinations of above</li> </ul>
Data may include:	<ul><li>numbers</li><li>text</li></ul>
Checking and amending data	accuracy of data

Approved Page 7 of 9

RANGE STATEMENT	
may include:	<ul> <li>accuracy of formulae with calculator</li> <li>ensuring instructions with regard to content and format have been followed</li> <li>outcome of sorting or filtering</li> <li>proofreading</li> <li>spelling, electronically and manually</li> </ul>
Report layout may include:	<ul> <li>alignment on page</li> <li>columns</li> <li>enhancements to format - borders, patterns and colours</li> <li>enhancements to text</li> <li>formatting provided through use of a wizard or other automated process</li> <li>headers/footers</li> <li>logical ordering of data</li> <li>tables</li> </ul>
Designated time lines may include:	<ul> <li>time line agreed with internal or external client</li> <li>time line agreed with supervisor or person requiring database</li> </ul>
Printing may include:	<ul> <li>forms</li> <li>queries</li> <li>records</li> <li>reports</li> <li>tables</li> </ul>
Storing databases may include:	<ul> <li>authorised access</li> <li>filing locations</li> <li>naming conventions</li> <li>organisational policy for backing up files</li> <li>organisational policy for filing hard copies of databases</li> <li>security</li> <li>storage in electronic folders and sub-folders</li> <li>storage on disk drives, CD-ROM, back-up tapes</li> </ul>

## **Unit Sector(s)**

Unit sector	
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Approved Page 8 of 9

# **Competency field**

Competency field	Information and communications Technology - IT use
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# **Co-requisite units**

Co-requisite units		

Approved Page 9 of 9