



**Australian Government**

# **BSBITA401 Design databases**

**Release: 1**

## BSBITA401 Design databases

### Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

### Application

This unit describes the skills and knowledge required to design and develop a database (including queries, forms and reports) to meet a defined need using existing data.

It applies to individuals who may work independently or within an administrative support role, with the responsibility to use databases to store and retrieve data using commercially available database software.

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

### Unit Sector

Information and Communications Technology – IT Analysis and Design

### Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Design database	1.1 Review organisational and task requirements to confirm scope and functionality of database design, including data redundancy 1.2 Develop a logical data model to identify and classify data into types 1.3 Select appropriate software according to organisational and task requirements and required scope and functionality of database 1.4 Confirm database design with appropriate person
2. Develop database	2.1 Set field attributes according to data type and link databases by a common field in accordance with software procedures 2.2 Identify primary key to uniquely identify data

ELEMENT	PERFORMANCE CRITERIA
	2.3 Identify foreign keys to establish associations between data 2.4 Use software functions and formulae to meet organisational and task requirements 2.5 Create password and access system according to organisational and task requirements
3. Develop queries, forms and reports	3.1 Develop queries as required by organisational and task requirements 3.2 Develop input screens or forms to access required data 3.3 Develop reports according to organisational and task requirements
4. Test and finalise database	4.1 Populate database with sample dataset for testing 4.2 Assess and document effectiveness of data relationships, query forms and reports 4.3 Address any errors in database design 4.4 Name and store database in accordance with organisational requirements and exit the application without data loss or damage 4.5 Confirm database readiness with appropriate person

## 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
Reading	1.1, 1.3, 2.1-2.5, 3.1-3.3, 4.1-4.4	<ul style="list-style-type: none"> <li>Comprehends the main messages in texts of varying complexity</li> </ul>
Writing	1.2, 2.4, 2.5, 3.1-3.3, 4.1-4.5	<ul style="list-style-type: none"> <li>Uses basic models to produce a range of text types with formatting and font chosen appropriate to database design</li> <li>Uses technical information and structure appropriate to the requirements of the audience and purpose</li> </ul>
Oral Communication	1.4, 4.5	<ul style="list-style-type: none"> <li>Confirms requirements using industry-specific language</li> </ul>

Numeracy	1.2, 2.1-2.4, 3.1-3.3, 4.1-4.3	<ul style="list-style-type: none"> <li>Extracts, interprets and comprehends routine formulae and software functions to establish data relationships</li> </ul>
Navigate the world of work	4.4	<ul style="list-style-type: none"> <li>Adheres to organisational policies and procedures relevant to own role</li> </ul>
Get the work done	1.1-1.4, 2.1-2.5, 3.1-3.3, 4.1-4.4	<ul style="list-style-type: none"> <li>Develops plans to manage relatively complex, non-routine tasks according to organisational requirements</li> <li>Takes responsibility for the outcomes of routine decisions related directly to own role</li> <li>Understands the purposes, specific functions and key features of common digital systems and tools and operates them effectively to design, develop and test database functions</li> <li>Recognises and takes responsibility for addressing predictable database problems in familiar work contexts</li> </ul>

## Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBITA401 Design databases	BSBITA401A Design databases	Updated to meet Standards for Training Packages	Equivalent unit

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>