



INFocus COURSEWARE

# BSBITA401 Design Databases

Microsoft Access 2016



Product Code: INF1750

ISBN: 978-1-925526-25-7

## ❖ General Description

This course has been mapped to the **BSBITA401 - Design Databases** competency. 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.

## ❖ Learning Outcomes

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

- understand how **Access** is used and how to navigate around it
- design a relational database project
- create a relational database file with multiple tables
- modify the structure of an existing table
- set table relationships and join tables together
- add records to a new table
- add transactional records to a lookup database
- use various data validation features in **Access** to protect data
- work with the records in a database table
- export records to and import records from a wide variety of sources and applications
- create simple and effective queries
- perform more advanced queries using a variety of querying techniques
- create queries based on one or more tables
- create and use parameter queries
- create calculated queries
- create and work with aggregation queries
- create and use a series of action queries
- create meaningful reports from tables
- create and use forms
- modify and adapt an existing form according to specific needs
- create a navigation form for a database in **Access 2016**

## ❖ Prerequisites

BSBITA401 Design Databases assumes some knowledge of Microsoft Access 2016.

## ❖ Topic Sheets

251 topics

## ❖ Methodology

The InFocus series of publications have been written with one topic per page. Topic sheets either contain relevant reference information, or detailed step-by-step instructions designed on a real-world case study scenario. Publications can be used for instructor-led training, self-paced learning, or a combination of the two.

## ❖ Formats Available

A4 Black and White, A5 Black and White (quantity order only), A5 Full Colour (quantity order only), Electronic Licence

## ❖ Companion Products

There are a number of complementary titles in the same series as this publication. Information about other relevant publications can be found on our website at [www.watsoniapublishing.com](http://www.watsoniapublishing.com).



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## Unit Mapping

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.

	Performance Criteria	Location
<b>1</b>	<b>Design Databases</b>	
1.1	Review organisational and task requirements to confirm scope and functionality of database design, including data redundancy	Chapter 2: Relational Database Design
1.2	Develop a logical data model to identify and classify data into types	Chapter 2: Relational Database Design
1.3	Select appropriate software according to organisational and task requirements and required scope and functionality of database	Chapter 1: Getting to Know Access 2016
1.4	Confirm database design with appropriate person	Generally assumed throughout - can be tested through practice exercises and integration assignment
<b>2</b>	<b>Develop database</b>	
2.1	Set field attributes according to data type and link databases by a common field in accordance with software procedures	Chapter 3: Creating a Relational Database
2.2	Identify primary key to uniquely identify data	Chapter 3: Creating a Relational Database
2.3	Identify foreign keys to establish associations between data	Chapter 2: Relational Database Design, Chapter 3: Creating a Relational Database, Chapter 5: Setting Table Relationships
2.4	Use software functions and formulae to meet organisational and task requirements	Generally assumed throughout. Can be tested through practice exercises and integration assignment
2.5	Create password and access system according to organisational and task requirements	Chapter 21: Using a Navigation Form
<b>3</b>	<b>Develop queries, forms and reports</b>	
3.1	Develop queries as required by organisational and task requirements	Chapter 11: Creating Queries, Chapter 13: Multi Table Queries, Chapter 14: Parameter Queries, Chapter 15: Calculations in Queries, Chapter 16: Aggregation Queries, Chapter 17: Action Queries
3.2	Develop input screens or forms in order to access required data	Chapter 19: Creating and Using Forms, Chapter 20: Modifying Forms
3.3	Develop reports according to organisational and task requirements	Chapter 18: Creating and Using Reports
<b>4</b>	<b>Test and finalise database</b>	
4.1	Populate database with sample dataset for testing	Chapter 6: Adding Records to a Table, Chapter 7: Adding Transactional Records, Chapter 10: Importing and Exporting Records
4.2	Assess and document effectiveness of data relationships, query forms and reports	Chapter 8: Data Validation
4.3	Address any errors in database design	Generally assumed throughout. Can be tested through practise exercises and integration assignment
4.4	Name and store database in accordance with organisational requirements and exit the application without data loss or damage	Chapter 3: Creating a Relational Database
4.5	Confirm database readiness with appropriate person	Generally assumed throughout. Can be tested through practise exercises and integration assignment



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