

Operate Computer Hardware

ICAU2005B



Ref No: DDICAU05A

Elements of Competency

Identify computer hardware components

- Identify *external hardware* components and peripherals
- Identify *internal hardware* components

Understand the inter relationship between computer hardware and software

- Describe the functions of computer *hardware* and associated *OH&S standards* and *environmental considerations* around *hardware* use and disposal
- Describe the function of a computer operating system
- Describe the boot process
- State the relationship between an application program, the operating system and *hardware*
- State the general differences between the different *computer platforms* and their respective operating systems
- Draw a simple block (schematic) diagram showing the interconnection of the various components of a computer

Use computer input equipment

- Follow *OH&S standards* and *organisational policies* and procedures when using computer input equipment

Number of Pages

45

Audience

This manual is aimed at people who are studying the Certificate II in Information & Communications Technology ICA20105. It covers the core unit of ICAU2005B Operate Computer Hardware. This manual is a learning resource and is not an assessment tool.

Prerequisites

It is assumed that participants using this manual have a basic knowledge of the use of a mouse and keyboard.

Course Length

In a training environment this manual is suitable for approximately 8 hours.

Course Structure

The course contains instructor lead exercises as well as examples completed at the students' own pace.

Operate Computer Hardware

ICAU2005B



Elements of Competency

Prerequisites

Who should use this Manual?

Computer Hardware

Internal Hardware

Power Supply

Motherboard

The Central Processing Unit (CPU)

Random Access Memory (RAM)

Video Cards

Sound Cards

Network Interface Card

(NIC)

Hard Disk Drives

CD-ROM/DVD-ROM

Drives

External Hardware

System Case

Keyboards

Mouse

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Monitor

USB: Universal Serial Bus

Hardware Peripherals

Printers

Speakers

Modems

Cabling

USB Flash Drive

Palm Pilots

Uninterruptible Power

Supply (UPS)

Apple MAC Hardware

Operating Systems

How They Work

Operating system types

The computer boot

process

Organisational Usage

Occupational Health and

Safety (OH&S)

Hardware Maintenance

Software Maintenance

Policy

Environmental

Considerations

Ref No: DDICAU307

**Elements of
Competency**

Create spreadsheets

- Open spreadsheet application and create/open spreadsheet file and enter numbers, text and symbols into cells according to information requirements
- Enter simple formulas using cell referencing where required
- Correct formulas when error messages occur
- Use a range of common *tools* during spreadsheet development
- *Edit* columns and rows within the spreadsheet
- Use the autofill function to increment *data* where required
- Save spreadsheet to correct directory or folder

Customise basic settings

- Adjust page layout to meet user requirements or special needs
- Open and view different toolbars
- Change font settings so they are appropriate for the purpose of the document
- Change alignment options and line spacing according to spreadsheet formatting features
- Format cell to display different styles as required
- Modify margin sizes to suit the purpose of the spreadsheets
- View multiple spreadsheets concurrently

Format spreadsheet

- Use formatting features as required
- Copy selected formatting features from another cell in the spreadsheet or from another active spreadsheet
- Use formatting tools as required within the spreadsheet
- Align information in a selected cell as required
- Insert headers and footers using formatting features
- Save spreadsheet in another format
- Save and close spreadsheet to disk

Incorporate object and chart in spreadsheet

- Import an object into an active spreadsheet
- Manipulate imported object by using formatting features
- Create a chart using selected data in the spreadsheet
- Display selected data in a different chart
- Modify chart using formatting features

Print spreadsheet

- Preview spreadsheet in print preview mode

Operate a Spreadsheet Application

Microsoft Excel 2007
ICAU1130B



- Select basic printer options
- Print spreadsheet or selected part of spreadsheet
- Submit the spreadsheet to the appropriate person for approval or feedback

Number of Pages 238

Audience This manual is aimed at people who are studying the Certificate I in Information & Communications Technology ICA10105. It covers the elective unit of ICAU1130B Operate a Spreadsheet application (Excel 2007 Introduction). This manual is a learning resource and is not an assessment tool.

Prerequisites Basic Computer skills. Knowledge of Excel is not necessary.

Course Length In a training environment this manual is suitable for approximately 2 days.

Course Structure The course contains instructor lead exercises as well as examples completed at the students' own pace.

Operate a Spreadsheet Application

Microsoft Excel 2007
ICAU1130B



Introduction

Course Objectives

Starting Excel

The Excel Screen

The Ribbon

The Office Button

Moving around a Sheet

Displaying other Areas

Mouse Movements

Viewing other Sheets

Selecting Cells

Inserting Text and Numbers

Typing Text

Adjusting Column Widths

Typing Numbers

Saving a Workbook

File Properties

Opening a Workbook

Printing

Alignments and Indents

Indenting

Center

Merge and Center

Calculations

BODMAS

AutoSum

Filling the Formula

Formulas

Cell Editing

Revision Exercise

Revision Exercise

Creating Formulas

Multiple Worksheets

Copying Sheet Contents

Data Entry Ranges

Calculating across Worksheets

Linking Formulas

Copying Formulas

Absolute Cell Referencing

Functions

Function Syntax

The AVERAGE Function

The MAX Function

The MIN Function

The IF Function

Financial Functions

Date Functions

AutoCalculate

Revision Exercise

Creating a Worksheet

Formatting

Fonts and Font Size

Number Formatting

Formatting a Group of Sheets

Borders

Format Painter

Cell Shading

Font Color

Inserting Images

Proofing

Spelling

AutoCorrect

Find and Replace

Comments

Sorting

Working with Worksheets

Renaming Sheets

Inserting a Sheet

Deleting Sheets

Editing a Worksheet

Range Names

Defining Range Names

Names in Formulas

Navigating with Names

Using Named Constants

Documenting Range Names

Conditional Formatting

AutoFill

Filling Dates

Filling Text

Custom Lists

Print Preview

Page Break Preview

Previewing the Workbook

Zoom

Margins and Column Widths

Column Widths in Print Preview

Page Layout View

Page Setup

Orientation

Scaling

Margin Settings

Headers and Footers

Custom Headers and Footers

Page Breaks and Print Areas

Inserting a Page Break

Removing a Page Break

Setting a Print Area

Operate a Spreadsheet Application

Microsoft Excel 2007
ICAU1130B



Removing a Print Area

Printing

Tables

Extended Formatting and Formulas

Adding Records

Sorting Data

Using a Data Form

Filtering Records

Custom Filters

Subtotals

Outline Symbols

Using other Functions

Using Page Breaks

Removing Subtotals

Outlining

Hiding Detail

Grouping Rows

Charts

Creating a Chart

Changing the Chart Type

The Legend

Gridlines

Formatting Charts

Previewing a Chart

Separate Chart Sheets

Coloured Sheet Tabs

Printing Separate Chart Sheets

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Operate a Database Application (Access 2007)



ICAU1131B

Ref No: DDICAU317

Elements of Competency

Create database

- Open a database application and design a two-table simple relational database incorporating basic design principles
- Develop a table with fields and attributes according to database usage, as well as user requirements
- Create a primary key and establish an index for each table
- Modify table layout and field attributes as required
- Create a relationship between the two tables
- Add and modify data in a table according to information requirements
- Add and delete records as required
- Save and close down database to disk

Customise basic settings

- Adjust page layout to meet user requirements
- Open and view different toolbars
- Format font as appropriate for the purpose of the database entries

Create reports

- Design reports to present data in a logical sequence
- Modify reports to include/exclude additional requirements
- Distribute reports to appropriate person in a suitable format

Create forms

- Use a wizard to create a simple form
- Open existing database and modify records through a simple form
- Rearrange objects within the form to accommodate information requirements

Retrieve information

- Access existing database and locate required records
- Create simple query and retrieve required information
- Develop query with multiple criteria and retrieve required information
- Select data and display appropriately

Number of Pages

221

Audience

This manual is aimed at people who are studying the Certificate I in Information & Communications Technology ICA10105. It covers the elective unit of ICAU1131B Operate a Database Application (Access 2007 Introduction). This manual is a learning resource and is not an assessment tool.

Prerequisites

Basic Computer skills. Knowledge of Access is not necessary.

Course Length

In a training environment this manual is suitable for approximately two days.

Course Structure

The course contains instructor lead exercises as well as examples completed at the students' own pace. A course disk contains the necessary files to complete the manual.

Operate a Database Application (Access 2007)



ICAU1131B

Introduction

Overview of Access
Components of a Database
Database Wizards/Templates

Getting Started

Starting Access

A Quick Database Tour

Getting Started with Microsoft Access
The My Places Bar
Ribbon
Contextual Command Tabs
Office Button
Quick Access Toolbar
Galleries
Navigation Pane
Mini Toolbar
Tabbed documents
ScreenTips

Building a Database

Creating a New Database

Defining Tables
Field Names and Keys
Creating a Table
Table Template
Creating a Second Table
Field Names
Creating a Table from Scratch
Data Types
Choosing a Data Type
Description Field
Adding Additional Fields
Primary Keys
Creating Tables – a Summary

Working with Tables

Copying a Table
Renaming a Table
Deleting a Table
Modifying the Table Structure
Renaming a Field
Moving and Copying Fields
Deleting a Field
Inserting a Field
Things to Watch Out For!

Exercise

Working with Data

Adding Records

Using Datasheet View
Navigating in a Datasheet
Navigation Buttons
Selecting Records and Fields
Shortcuts

Datasheet Format

Text Font and Size

Font Formatting

Colours

Gridlines

The Format, Datasheet dialog box

Row Height

Column Widths

Hiding a Column

Freezing Columns

Switching Views

Moving Columns

Adding and Deleting Fields

Find and Replace

Finding Text

Replacing Text

Filtering Records

Auto Filter

Sorting Data

Multiple Sort Columns

Exercise

Relational Databases

Table Relationships

Creating a Lookup
Defining Relationships
Adding a Relationship
Join Type
Join Properties
Creating a Value List

Exercise

Using the Database

An Existing Database

Viewing Relationships

Printing Relationships

Subdatasheets

Expanding a subdatasheet
Collapsing a subdatasheet
Nested subdatasheets

Extracting Information

Querying a Table

Creating a Query
Using a Query Wizard
Customising a Query
Sorting Records
Sorting in Descending Order
Removing a Sort Order

A Second Query

Customising the Query Results
Adding a Field
Saving a Query

Queries from Scratch

Adding a Table to a Query
Adding Fields
Saving the Query
Modifying a Query

Operate a Database Application (Access 2007)



ICAU1131B

Exercise

Summary Queries

Summary Options

The Show Field

Calculations in a Query

Typing an Expression

Query Criteria

Typing Criteria

Criteria Exercises

“OR” Criteria

“AND” Criteria

Reports

AutoReports

Previewing the Report

Viewing Multiple Pages

Using a Report Wizard

Choosing the Report Fields

Grouping Levels

Sort Order

Report Layout

The Finished Report

Editing the Report Design

Previewing a Report

Distribute a Report

Forms

AutoForm

Using Form View

Using a Form Wizard

Selecting the Fields

The Completed Form

Adding a New Record

Editing the Form

Exercises

Office Links

Starting Merge It

The Mail Merge Wizard

Inserting the Merge Fields

Mailing Labels

Label Type

Label Fields

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