

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

Error! Bookmark

not defined.

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: DDICAU30A

**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

Operate a Spreadsheet Application

Microsoft Excel 2003
ICAU1130B



- 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
- 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	186
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 2003 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 2003

ICAU1130B



Elements of Competency

Introduction

Starting Excel

The Excel Screen

Moving around the Sheet

Displaying other Areas

Mouse Movements

Viewing other Sheets

Personalised Menus

Menu Elements

Changing Menu Options

Menu Animations

Closing a Workbook

Dialog Boxes

Toolbars

ScreenTips

Displaying and Hiding Toolbars

Inserting Text and Numbers

Typing the Text

Column Widths

Changing Column Widths

Changing Multiple Columns

AutoFit the Selection

Typing Numbers

Saving a Workbook

The Places Bar

Alignments and Indents

Indenting

Merge and Center

Printing

Calculations

AutoSum

Filling the Formula

Formulas

Cell Editing

Exercise – Creating a Worksheet

A Budget

Remaining Calculations

Formula Summary

Manipulating Toolbars

Moving a Toolbar

Sizing a Toolbar

Closing a Toolbar

Multiple Worksheets

Using the Taskbar

Arranging Windows

A Second Worksheet

Copying Text

Using an Entry Range

Calculating across Worksheets

Creating the Difference Worksheet

Selecting Multiple Ranges

Calculating the difference in data

Filling Formulas

Completing the Third Worksheet

Functions

Function Syntax

The Average Function

The Max Function

The MIN Function

Editing Sheet Tabs

Changing a Sheet Name

Inserting a Sheet

Deleting Unwanted Sheets

Formatting

Fonts and Fonts Sizes

Fonts

Using Format, Cells

Number Formatting

Formatting a Group of Sheets

Ungrouping Sheets

Number Formatting

Conditional Formatting

Setting the Format

Borders

Pasting Formats

Cell Shading

Font Color

Formatting Exercise

Further Calculations

Collect and Paste

Pasting all Items

AutoFilling Dates

Completing the *Occupancy* Sheet

Complex Calculations

Building Formula across Sheets

Cell Addressing

Creating the Formula across Sheets

Filling the Formula

Absolute Addressing

Function Revision

The Average Function

The Max Function

The MIN Function

Creating a Summary Report

Inserting a Fourth Sheet

Creating the First Link

Changing Source Data

Recording Changes

Wrapping Text

The IF Function

AutoFill

Filling Dates

Filling Week Endings

Operate a Spreadsheet Application

Microsoft Excel 2003
ICAU1130B



Filling Text
Custom Lists
Using the Custom List
Filling Numbers
Spelling
Spelling Exercise
Print Preview
Page Break Preview
Adjusting the Page Breaks
Previewing the Workbook
Zoom
Margins and Column Widths
Column Widths in Print Preview
Page Setup
Orientation
Scaling
The Margins Tab
Headers and Footers
Built-In Headers and Footers
Custom Headers and Footers
Header Icons
Custom Footers
Sheet Options
Page Breaks and Print Areas
Inserting a Page Break
Setting a Print Area
Printing
An Invoice Exercise
Planning the Worksheet
Creating the Invoice Data
Completing the Total Column
The MONTH Function
Lists
List Overview
Extended Formatting and Formulas
Adding New Data to a List
AutoComplete
Sorting Data in a List
Sorting on Two Fields
Data Forms
Adding Records
Deleting a Record
Filtering Records
AutoFilter
Previewing/Printing Filtered Records
Totalling a Filtered List
Filtering Exercise
Using Blanks and NonBlanks
Filtering on Two Fields
Exercise - Filtering on two Fields
Custom Filters
Specifying a Custom Filter
Removing the AutoFilter
Charting
The Chart Wizard
Step 1 - The Chart Type
Step 2 - Chart Source Data

Step 3 - Chart Options
Step 4 - Chart Location
Chart Areas
Sizing and Moving a Chart
The Chart Toolbar
Changing the Chart Type
The Legend
Gridlines
Removing an Axis
Formatting the Chart
Formatting Chart Columns
Data Labels
Deleting a Data Table
Previewing the Chart and Data
Separate Chart Sheets
Colored Sheet Tabs
Chart Titles
Formatting Chart Titles
Printing Separate Chart Sheets
Revision Exercise
Columns and Rows
Inserting a Column
Updating the Chart
Deleting a Column
Deleting a Row
Inserting a Row
Updating the Chart
Moving Columns
Publishing to the Web
Previewing the Web page
Publishing a Workbook
Adding a Page Title
Publishing Worksheet Items
Interacting with the Chart

Operate a Database Application (Access 2003)

ICAU1131B



Ref No: DDICAU31A

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 194

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 2003 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 2003)



ICAU1131B

Elements of Competency

Introduction

Overview of Access
Components of a Database
Database Wizards

Getting Started

Starting Access

A Quick Database Tour

The Task Pane
The Places Bar
Database Content

The Access Screen

Menus

Menu Elements
Changing Menu Options
Standard menu settings
Resetting Menus
Menu Animations

Toolbars

ScreenTips
Displaying and Hiding Toolbars

Building a Database

Creating a New Database

The Database Window

Defining Tables

Field Names and Keys
Creating a Table

The Table Wizard

Creating a Second Table
Field Names
Creating a Table from Scratch
Data Types
Choosing a Data Type
The Field Builder
Primary Keys

Saving and Naming the Table
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

Shortcuts

Datasheet Format

Text Font and Size
Font Formatting
Colours
Gridlines
Special Effects
The Format, Datasheet dialog box

Row Height

Column Widths

Hiding a Column

Freezing Columns

Switching Views

Working with Records

Selecting Records and Fields

Moving Columns

Adding and Deleting Fields

Find and Replace

Finding Text

Replacing Text

Filtering Records

Filter by Selection

Filter by Form

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

Operate a Database Application (Access 2003)



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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

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

Using a Report Wizard

Choosing the Report Fields

Grouping Levels

Sort Order

Report Layout

The Finished Report

Editing the Report Design

Previewing a Report

Report Page Numbers

Date and Time in Reports

Formatting the Header and Footer

Forms

AutoForm

Using Form View

Using a Form Wizard

Selecting the Fields

The Completed Form

Adding a New Record

Inserting a Graphic

Moving Fields

Nudging Fields

Sizing a Field

Modifying the Toolbar

Exercises

OfficeLinks

Starting Merge It

The Mail Merge Wizard

Inserting the Merge Fields

Mailing Labels

Label Type

Label Fields