

## Department of Computing Sciences: Short Learning Programmes Outlines

### Introduction to Computers

#### Overview

In this one-day course, you will be introduced to the basics of computer hardware, the Windows environment, email and the Internet as well as introduced to the tools you will use such as the keyboard and mouse. You will also learn to manage files and folders in File Explorer. The course is aimed at beginners with little to no experience with computers. It is highly recommended that new users attend this course before attending any of the application courses.

#### Duration

1 day

#### Pre-requisites

None.

#### Learning Outcomes

- Log on
- Use a Mouse & Keyboard
- Explore Windows
- Start & Close Programs
- Size and Move Windows
- Use Tabs, Ribbons, Dialog Boxes and Scroll Bars
- Cut, Copy & Paste commands
- Basic concepts of Microsoft Word
- Create, Save, Open and Close documents
- Edit documents and basic formatting
- Email concepts
- Internet basics
- Search Engines on the Internet
- Use File Explorer
- Create Folders
- Move, Copy, Rename and Delete Files & Folders
- Understand the Recycle Bin
- Search for Files

### Introduction to Microsoft PowerPoint

#### Overview

You will learn to create effective presentations using PowerPoint. All new PowerPoint users and experienced PowerPoint users that have had no formal training on the package will benefit from attending this course.

It is strongly recommended that users who are new to computers in general attend the Introduction to Computers course before attending this training.

#### Duration

1 day

#### Pre-requisites

A basic knowledge of computers such as the skills gained by attending the Introduction to Computers course is essential.

Users should be comfortable in the Windows environment, have a reasonable knowledge of keyboard and mouse use and know how to copy, save and open files in different folders and subfolders.

#### Learning Outcomes

- Create a presentation
- Use Themes
- Add slides using different layouts
- Work with views
- Edit and format text
- Copy, move and delete slides
- Insert and manipulate pictures
- Use tables
- Use shapes
- Create and modify charts
- Use SmartArt Graphics
- Slide masters and custom layouts
- Enhanced handouts and speaker notes
- Print slides, handouts and notes pages
- Apply transition and animation effects to a presentation
- Customising animation effects
- Adding audio and video content
- Inserting hyperlinks and equations
- Capturing screen shots and screen clippings
- Play slideshows

## Introduction to Microsoft Word

### Overview

This one-day course helps you to develop the skills necessary to create simple documents using Microsoft Word. It is recommended that all new Word users and experienced Word users that have had no formal training on the package attend this course.

It is strongly recommended that users who are new to computers in general attend the Introduction to Computers course before attending this training.

### Duration

1 day

### Pre-requisites

A basic knowledge of computers such as the skills gained by attending the Introduction to Computers course is essential.

Users should be comfortable in the Windows environment, have a reasonable knowledge of keyboard and mouse use and know how to copy, save and open files in different folders.

### Learning Outcomes

- Create new documents
- Save and retrieve documents
- Navigate the Word window
- Understand and use the Ribbon
- Enter, edit and format text
- Use Word Themes
- Work with Styles
- Spell & grammar check a document
- Use the Thesaurus
- Create simple tables
- Format tables
- Insert pictures
- Work with SmartArt Graphics
- Print documents
- Use the Word Help system

## Intermediate Microsoft Word

### Overview

This course builds on your existing skills so that you become more effective in using Word. The focus is the use of features that make it easy to work with long, complex documents, such as templates and styles, table of contents, varying page layouts and document sectioning. This course will be of particular benefit to those needing to type longer documents, particularly academic papers and business reports. Other functionality covered includes the use of the Review features as well as Mail Merging.

### Duration

1 day

### Pre-requisites

Users must be comfortable working in Word. The ability to create and save Word documents is essential and a working knowledge of the skills covered on the Word Introduction course such as basic formatting and editing of text, using Styles and selecting of text is required as this course assumes knowledge of the beginning level features.

### Learning Outcomes

- Use templates and styles for efficient formatting
- Use section breaks
- Set up page layouts
- Work with columns
- Work with page formatting
- Insert headers, footers and page numbering
- Format graphics in a document
- Use WordArt, Drop Caps & symbols
- More advanced Table features & formatting
- Tabs
- Generate automatic tables of contents
- Insert references such as footnotes and endnotes
- Add Comments
- Track changes
- Use Mail Merge

## Introduction to Microsoft Excel

### Overview

This course shows you how to create workbooks, enter and edit data and perform simple calculations. All users unfamiliar with creating formulas and using functions to perform calculations must attend this course before attending the Intermediate Excel course.

### Duration

1 day

### Pre-requisites

A basic knowledge of computers such as the skills gained by attending the Introduction to Computers course is essential.

Users should be comfortable in the Windows environment, have a reasonable knowledge of keyboard and mouse use and know how to copy, save and open files in different folders.

### Learning Outcomes

- Use the Excel environment
- Save and retrieve files
- Enter, edit and delete data
- Select ranges
- Create, copy and move formulas
- Use Relative referencing
- Use Absolute and Mixed Referencing
- Create calculations using formulas and basic functions
- Format text and numbers
- Adjust column widths and row heights
- Apply borders and shading
- Hide and unhide columns and rows
- Work with headers and footers
- Set page layout options
- Plan and create a chart
- Move and resize a chart
- Format a chart

## Intermediate Microsoft Excel

### Overview

This course builds on your existing skills to increase your knowledge of Excel functionality and help you become more effective in your use of workbooks.

### Duration

1 day

### Pre-requisites

Users must be comfortable working in Excel. The ability to create and save Excel workbooks is essential and a working knowledge of the skills covered on the Excel Introduction course is a requirement. The ability to create calculations using formulas and functions with cell references is essential.

### Learning Outcomes

- Named ranges
- Freeze windows and split panes
- Create, group and ungroup multiple worksheets
- Consolidate data using 3-D referencing
- Create formulas using data from multiple files
- Data validation and workbook protection
- Sort and filter data
- More advanced functions - ISNA
- Logical functions including, AND, OR, IF
- Use nested IF functions
- Lookup functions - VLOOKUP

## Advanced Microsoft Excel

### Overview

This course builds on your existing skills to increase your knowledge of Excel functionality and become a power user in Excel.

### Duration

1 day

### Pre-requisites

Users must have a strong understanding of effectively using formulas and functions in Excel. A working knowledge of the skills taught in the Introduction and Intermediate levels courses is essential.

### Learning Outcomes

- Using Program Options
- Conditional Formatting
- Data Validation
- Advanced functions: Text, Date & Time, Index & Match, Financial
- PivotTables, PivotCharts and PowerPivot
- Forms and form controls
- Tracing precedents and dependents
- Using External Data
- Data Analysis and BI
- Advanced Charting
- Track Changes & Versioning
- The basics of working with Macros

## Introduction to Microsoft Access

### Overview

In this course you will learn to create a database application that allows users to enter, store and organise a collection of information. This is a hands-on course, where you will learn the concepts through practical examples. It should be noted that this course concentrates specifically on the theory and practice of designing and implementing a well-designed, effective database in Access.

### Duration

2 days

### Pre-requisites

A basic understanding of computers and an understanding of working with formulas and functions in MS Excel is strongly recommended. Users should preferably have a basic understanding of the use of databases and how this would benefit them in their working environment.

This course is aimed at users who will be responsible for designing and changing the design of Access databases. It is not necessary for data capturers to attend this course.

### Learning Outcomes

- Database concepts and terminology
- Database planning and design
- Create tables
- Data types and Field Properties
- Defining Relationships between tables
- Primary keys and referential integrity
- Modifying a table
- Entering data
- Finding and editing records
- Filtering and sorting records
- Create and use select queries
- Create and use forms
- Work with Form design
- Create and use reports
- Work with Report design
- Print data from different views

## Intermediate Microsoft Access

### Overview

This hands-on course is designed to build on a basic knowledge of the product and teach you how to perform many typical database operations and solve problems. You will learn how to build action queries that update the database, parameter queries, queries with calculations, forms and reports that require multiple tables and sub-forms/sub-reports. Most importantly, database design concepts will be used throughout. Exercises are designed to impart relevant skills and knowledge by having participants work through real-life examples and scenarios.

### Duration

2 days

### Pre-requisites

This course takes a thorough understanding of all concepts covered on the Introduction to Access course for granted. To benefit fully from attending this training, users need to be proficient in the basic Access database design skills such as the ability to create tables, queries, forms and reports; set field and control properties; define relationships; work with referential integrity and modify the design of tables, queries, forms and reports.

It is not recommended that users attend this training directly after attending the Beginning access course. They will benefit more if they have had a chance to gain more practical, work-related experience using the beginning level features.

### Learning Outcomes

- General Table Design
- More Field Properties
- Relationship Types
- Use Lookups for Referential Integrity
- Simple Query Syntax
- View The SQL Syntax of a Query
- Join Tables in a Query
- Add a Calculated Field to a Query
- Calculate Summary Information
- Create Parameter Queries
- Create Action Queries (Update, Delete, Make Table, Append and Crosstab)
- Query Properties
- Import Data from another Data Source (Text and spreadsheet)
- Import an Object from Another Access Database
- Export Data to another Data Source (Text and spreadsheet)
- Form Sections
- Combo and List Boxes
- Control Properties
- Calculated fields on forms
- Subforms
- Report Sections
- Calculated fields in Reports
- Summary Calculations in Reports

## Introduction to Web Design – Understanding HTML and CSS

### Overview

In this course you will learn current best practices for creating web pages. The pages are built using HTML tags, and formatted with external style sheets (CSS).

### Duration

2 days

### Pre-requisites

A reasonable understanding of computers and file management as well as a sound knowledge of and experience with working in MS Word is vital. The ability to use other MS Office programs would also be advantageous.

### Learning Outcomes

- Understand HTML page structure
- Use the HTML tags
- Create hyperlinks between pages, on the same page, to email and to other web sites
- Add text and images to web pages
- Create list structures
- Format pages using external style sheets
- Use a range of style properties
- Use style sheets to create dynamic navigation menus
- Effective page layout techniques
- Using HTML 5
- Using pseudo-classes
- Create and modify tables for tabular data

## Advanced Web Design

### Overview

This course follows a user-centred planning process and applies effective design principles and guidelines that will help you to maximise the opportunities and minimise the problems that come with designing for the interactive technology of the web.

### Duration

2 days

### Pre-requisites

Users must be able to create simple web pages using HTML and external style sheets. A thorough knowledge of the skills covered on the Introduction to Web Design course is essential.

### Learning Outcomes

- User-centred design process
- Principles of information, interaction and presentation design for the web
- Flexible design methods
- Effective page layout techniques
- Dynamic effects using style sheets

## Creating Web Sites using WordPress

### Overview

On completion of the course delegates will be able to create and manage a WordPress website without the need to learn how to program in HTML.

***PLEASE NOTE:** This course will teach you how to create and manage a WordPress based website only. If you want to management an existing company webpage or develop a website with a registered URL address, you will need to attend the Introduction to Web Design course instead.*

### Duration

2 days

### Pre-requisites

Users must be computer literate with an understanding of file management and the internet. Including using web addresses, and hyperlinks.

### Learning Outcomes

- WordPress terminology
- The difference between WordPress.com and WordPress.org
- How to register and set up an account
- Keeping your site private
- Selecting a Theme
- Customising your site
- Adding different types of content
- Organising pages and posts
- Creating menus
- Using widgets
- Adding social media links
- Publishing your site
- Editing content
- Controlling access

## Business Process management

### Overview

On completion of the course delegates will be able to apply the business process management principles to scope, plan and execute BPM projects.

Bookings for this course are by request only and we require a minimum of 6 delegates to run the training.

### Duration

3 days

### Pre-requisites

Users must be computer literate and have a Business Management diploma or degree or a minimum of 3 years working experience in business management.

### Learning Outcomes

- Describe the role of Business Process Management (BPM) in business improvements.
- Explain and apply a methodology for BPM
- Compare business process architectures and business process frameworks
- Compare process measurement models (eg CMMI; Balanced Scorecard)
- Be able to use a BPM tool (such as ARIS, Visio or System Architect) to design, draw and implement business models
- Identify key features of professional BP modelling tools