LONDON CAPITAL COMPUTER COLLEGE

Diploma in Information Technology (103) – Microsoft Excel

Prerequisites: Familiarity with Windows, mouse and keyboarding skills.	**Corequisites:** A pass or higher in Certificate in Information Systems.
Aim: Excel isn't just for financial professionals. This spreadsheet and analysis program offers intuitive tools that make it easy to access, connect, and analyse critical data regardless of candidates profession. Excel is a spreadsheet program that lets users capture and analyse data. This course is designed to give candidates the skills they need to create spreadsheets in order to track financial, sales, inventory, and personal data. Candidates learn how to create basic formulas, and copy, move, and paste data while making the sheet look attractive. Candidates also learn how to create and modify charts, and save. Techniques to produce reliable Excel workbooks are also covered, including how to display, format, and edit existing worksheets and develop new ones and how to make the most of Excel by creating formulas to analyse data quickly.	
Required Materials: Recommended Learning Resources.	**Supplementary Materials:** Lecture notes and tutor extra reading recommendations.
Special Requirements: Significant hands-on labs using Microsoft Excel.	

Intended Learning Outcomes:	**Assessment Criteria:**
1 Describe why Excel is a very important tool. Identify how to enter data, save the workbook and print worksheets.	1.1 Demonstrate how to start Excel, open a workbook and Move around a worksheet using the mouse and arrow keys 1.2 Illustrate how to select a block of cells, type into worksheet cells text, values, formulas, and functions, edit and clear cell entries 1.3 Define how to save a workbook, print a worksheet, print worksheet formulas and exit Excel. 1.4 Define the difference between a workbook and a worksheet. 1.5 Illustrate how the rows and columns in a worksheet are labelled.
2 Demonstrate how to enhance worksheets. Discover how to use colour, borders, textboxes and graphics features. Illustrate how to align data and apply character formats, formatting rows, columns and worksheets.	2.1 Define how create formulas containing cell references and mathematical operators 2.2 Demonstrate how to write functions including Sum, Average, Max, and Min 2.3 Demonstrate how use Excel's AutoSum feature to automatically write Sum functions 2.4 Illustrate several ways of copying formulas from one cell to many other cells 2.5 Differentiate between absolute, mixed, and relative cell reference 2.6 Identify how adjust column widths, set a print area and move text, values, and formulas 2.7 Demonstrate how to insert and delete rows and columns 2.8 Demonstrate how to format cells 2.9 Illustrate how to create cell comments.

	3.1	Identify how to left, center and right-align text
3 Discuss absolute and relative cell referencing. Discover how to write formulas, use functions, copying and moving cell contents and format cells. Discover important concepts; good worksheet planning and documenting. .	3.2	Demonstrate how to apply currency and accounting formats to numbers
	3.3	Demonstrate how apply boldface, italics, and underlines to cells
	3.4	Define how to clear all formatting from selected cells
	3.5	Illustrate how to modify column widths and row heights
	3.6	Demonstrate how to hide and reveal rows and columns
	3.7	Evaluate how to remove worksheet gridlines
	4.1	Define a data series and data categories
4 Discover different types of charts. Illustrate how to organise data, the type of charts best suited for specific situations and how to format charts.	4.2	Demonstrate how to create an embedded chart and a chart sheet
	4.3	Demonstrate how to modify an existing chart by revising data, altering chart text, and labelling data
	4.4	Illustrate how to use colour and patterns to embellish a chart
	4.5	Define how to add a new data series to a chart
	4.6	Demonstrate how to alter a chart type and create a three dimensional chart
	4.7	Identify how to create a pie chart with a title, exploding slice, labels, and floating text
	4.8	Identify how to add texture to a chart Delete embedded charts and chart sheets.
	5.1	Demonstrate how to create and maintain a list
5 Demonstrate how to design a workbook using Excel's sorting, filtering and grouping features. Describe how to create pivot tables and pivot charts, freezing rows and columns and using folders for workbook storage.	5.2	Identify how to freeze rows and columns
	5.3	Demonstrate how to sort a list on multiple sort keys
	5.4	Demonstrate how to enter, search for, modify, and delete records in a list with a data form
	5.5	Define how to group and outline structured data
	5.6	Illustrate how to create outlines and subtotals
	5.7	Demonstrate how to create and apply conditional formatting
	5.8	Demonstrate how to create filters and advanced filters with AutoFilter
	5.9	Identify how to use worksheet labels and names in formulas
	5.10	Define how to create a pivot table and pivot chart
	5.11	Define how to create and use folders for workbook storage.
	6.1	Identify how to develop separate assumptions and output sections of a worksheet
6 Discover how to provide data validation, use the logical if function and write the index function.	6.2	Demonstrate how to use Insert Function to help write worksheet functions
	6.3	Illustrate how to provide data validation

			for selected worksheet cells
		6.4	Explain how to define and use names in functions in place of cell references
		6.5	Explain how to investigate the logical function IF
		6.6	Demonstrate how to write the index function VLOOKUP
		6.7	Illustrate how to write financial functions including PV, PMT, PPMT, and IPMT
		6.8	Identify how to write and apply the NOW date function.
		6.9	Demonstrate how to use DSUM, DAVERAGE, DMAX, DMIN, and DCOUNT functions.
		6.10	Demonstrate the implementation of the AutoFilter and Advanced Filter commands.
		6.11	Identify how to use the Subtotals command.
7	Describe how to create a workbook template, rename and colour worksheet tabs; grouping, inserting, deleting and repositioning worksheets. Demonstrate using three-dimensional formulas.	7.1	Demonstrate how to design a multiple-sheet workbook and understand when it is useful
		7.2	Illustrate how to set the default number of worksheets
		7.3	Identify how to insert, delete, and reposition worksheets in a workbook
		7.4	Define how to create a workbook template
		7.5	Demonstrate how to rename a worksheet tab and colour it
		7.6	Illustrate how to establish worksheet page settings
		7.7	Identify how to group worksheets in a workbook and enter data in multiple sheets at once
		7.8	Identify how to consolidate and summarize data using three-dimensional formulas
		7.9	Identify how to use cell Watch
		7.10	Analyse how to reference cells in other workbooks using link formulas
		7.11	Demonstrate how to maintain and update linked workbooks.
8	Describe how to protect a workbook. Identify the auditing toolbar, sharing a workbook with others and publishing workbooks to the web.	8.1	Identify how to use the Audit toolbar
		8.2	Identify how to locate a cell's precedent cells and dependent cells
		8.3	Demonstrate how to display and clear tracer arrows
		8.4	Identify how to locate and correct errors using audit tools
		8.5	Demonstrate how to share a workbook with other users
		8.6	Define how to insert comments and review others' comments
		8.7	Define how to track, accept, and reject changes made to a workbook
		8.8	Explain how to merge multiple versions of the same workbook
		8.9	Demonstrate how to protect workbooks and worksheets.

		8.10	Demonstrate how to hide worksheets.
		8.11	Demonstrate how to publish workbooks to the Web.
9 Analyse the cost given various estimated rates of interest. Describe how to create and use one-variable data tables, excel scenarios and scenario report.		9.1	Identify the relationships between volume, cost, and profit
		9.2	Explore how to use break-even analysis to determine production levels for profitability
		9.3	Explain how to create and use one-variable and two-variable data tables
		9.4	Evaluate how to create charts based on one-variable and two-variable data tables
		9.5	Demonstrate how to create Excel scenarios
		9.6	Demonstrate how to manage Excel scenarios with the Scenario Manager
		9.7	Define how to view, add, edit, and delete scenarios
		9.8	Identify how to create a scenario report
10 Define how to use Excel's solver to unravel complex tasks.		10.1	Define how to use Excel's goal-seeking tools and concisely state a goal-seeking objective
		10.2	Identify how to implement goal-seeking by using a graph
		10.3	Identify how to create goal-seeking reports
		10.4	Illustrate how to install the Excel Solver tool
		10.5	Demonstrate how to use Excel's Solver to unravel more complex problems
		10.6	Define how to create Solver answer, limit, and sensitivity reports.
11 Describe how to import text files into Excel and copying a worksheet from one workbook to another. Define using Microsoft Query to create a query to filter, sort, and retrieve data records and writing aggregate queries to summarise imported data.		11.1	Identify how to import text files into Excel with the Text Import Wizard
		11.2	Demonstrate how to move a worksheet from one workbook to another one
		11.3	Demonstrate how to import database information into Excel using the Query Wizard
		11.4	Illustrate how to use Microsoft Query to create a query to filter, sort, and retrieve database records
		11.5	Illustrate how to write a database query that joins two related database tables and returns values from each table
		11.6	Identify how to edit and save database queries
		11.7	Describe how to write an aggregate query to summarise imported data
12 Outline the Visual Basic editor, how to save macros, setting macro security levels, and creating an automatically executing macro.		12.1	Illustrate how to record a macro instruction
		12.2	Identify how to examine and use the Visual Basic Editor
		12.3	Identify how to run macro instructions using a dialog box and a command button
		12.4	Illustrate how to save a macro in your Personal Macro Workbook

	12.5	Identify how to create and modify Visual Basic Code in the Visual Basic Editor
	12.6	Identify how to use Visual Basic objects, methods, properties, and variables
	12.7	Define how to create a macro that automatically executes when you open a workbook
	12.8	Illustrate how to hide the Personal Macro Workbook
	12.9	Illustrate how to create custom functions
	12.10	Identify how to protect a worksheet to preserve its integrity.

<h2 style="text-align:center;color:maroon;">Recommended Learning Resources:</h2>
<h2 style="text-align:center;color:maroon;">Microsoft Excel</h2>

Text Books	• Microsoft® Office Excel® Step by Step by Curtis Frye. ISBN-10: 0735615187 • New Perspectives on Microsoft Office Excel 2007, Comprehensive (New Perspectives) by June Jamrich Parsons Dan Oja, Roy Ageloff and Patrick Carey. ISBN-10: 1423905857 • Microsoft Office Excel Inside Out (Paperback) by Mark Dodge and Craig Stinson. ISBN-10: 073562321X • Microsoft Office Excel Illustrated Complete (Paperback) by Elizabeth Eisner Reding and Lynn Wermers. ISBN-10: 1423905229
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	Microsoft Excel