



Diploma in Computerised Accounting (333) – Excel Accounting

Prerequisites: Knowledge of accounting and basic computing	Corequisites: A pass or higher in Diploma in BA & Computer Systems or equivalence.
<p>Aim: The Computerised Accounting course introduces candidates to popular programs; Operating Systems, QuickBooks, Sage, and Microsoft Excel, which are in use by business offices today. In addition to a solid theoretical foundation, candidates will gain valuable, hands-on practice in real-life business applications. The objective of this course is to facilitate candidates with the skills necessary to enter the workforce effectively using the most popular accounting software application – Excel. Candidates will be taught the terms, concepts and methods to fully understand Excel accounting principles, preparing the candidate to step quickly into the accounting profession. Would you buy a car without a speedometer or a fuel gauge? You wouldn't consider it. When driving, you need to know how fast you drive and how much fuel you have left. You don't want to get a speeding ticket or run out of fuel, so you watch the gauges on your dashboard. Organisations need to keep an eye on how much cash they have on hand to meet accounts payable and other expenses. Organisations also need to measure the business performance. As they say “If you can't measure it, you can't manage it”. Excel enables organisations to measure and manage business. This course will use the Excel accounting software's sophisticated features for reviewing business accounting principles and procedures, and performing financial analysis. Candidates computerise a manual accounting system using Excel. Candidates explore invoicing customers, recording payments from customers, paying bills to outside suppliers, managing inventory, and analysing financial data to understand where to focus future efforts.</p>	
Required Materials: Recommended Learning Resources.	Supplementary Materials: Lecture notes and tutor extra reading recommendations.
Special Requirements: The course requires a combination of lectures, demonstrations and discussions.	
<p>Intended Learning Outcomes:</p> <p>1. Analysing workbook basics (starting Excel, moving around a workbook, finding help, creating a simple workbook, saving and opening workbooks, exiting the Excel program)</p> <p>2. Demonstrate how to create a chart and how to make changes to a chart after it has been created and explore all the steps necessary for creating a chart using the Chart Wizard.</p>	<p>Assessment Criteria:</p> <p>1.1 Demonstrate how Excel Works</p> <p>1.2 Using formulas and functions (formula fundamentals - cell references, formula errors; using Excel built-in formulas; naming cells and ranges)</p> <p>1.3 How to edit work data (erasing cell contents; undoing mistakes; copying, cutting and pasting; inserting and deleting cells; using find and replace; formatting workbooks - formatting manually / using pre-designed format</p> <p>1.4 Printing worksheets (page setup; page orientation; margins; header/footer; print preview)</p> <p>2.1 Excel charting terms (how Excel sees data; components of Excel charts</p> <p>2.2 Using the chart wizard (chart types, customising charts)</p> <p>2.3 Using the Microsoft Map tool (adding the map button; creating a data map; customising data maps)</p>




<p>3. Describe and analyse the several statistical functions implementation for algorithms and improved accuracy.</p>	<p>3.1 Analyse the science of statistics and review Excel statistical formulas</p> <p>3.2 Install the Analysis ToolPak and analyse statistical data analysis tools</p> <p>3.3 Explore how to apply Excel's advanced data analysis features to solve real-world business problems.</p> <p>3.4 Demonstrate how the Analysis ToolPak enables the development of complex statistical or engineering analyses.</p>
<p>4. Be able to use the financial functions that come with Excel.</p>	<p>4.1 Applying Time Value of Money concept (the concepts of (i) borrowing (ii) investment (iii) inflation</p> <p>4.2 Analyse the standard financial functions for making depreciation, loan payment, present value, future value, and rate of return calculations.</p> <p>4.3 Outline Excel's powerful pack of financial functions and formulas for Financial Modelling including depreciation, investments, NPV, interest.</p>
<p>5. Describe how Excel's standard business modelling tools work.</p>	<p>5.1 What-If Analysis with Data Tables (working with one-variable and two-variable data tables)</p> <p>5.2 What-If Analysis with Scenario Manager (Creating a Scenario; using a Scenario; Editing a Scenario; Summarising Scenarios; Merging Scenarios from other workbooks)</p> <p>5.3 Using the Goal seek command</p> <p>5.4 Solving optimisation-modelling problems/linear programming (how optimisation modelling works; solving an optimisation problem; reviewing solver reports; customising solver's operation; solver error messages)</p> <p>5.5 Explore capital budgeting analysis with inclusion of opportunity costs, working capital requirements.</p> <p>5.6 Demonstrate how to Use Excel's What-If Analysis tool</p>
<p>6. Analyse the tools and features that Excel provides for sharing data among users and between programs</p>	<p>6.1 Explore how Object Linking and Embedding (OLE) works (Creating an embedded OLE object; creating a linked OLE object; inserting OLE Objects in Excel workbooks)</p> <p>6.2 Excel tools for sharing workbooks (sharing Excel workbooks with other programs; importing a spreadsheet document; sharing Excel workbooks over a network; sharing Excel workbooks with e-mail; using email routing slips)</p> <p>6.3 Sharing Excel data over the web (creating a web page version of an Excel workbook; creating an interactive spreadsheet component)</p>

<p>7. Analyse Excel's PivotTable features and describe Excel pivot tables and their very useful and powerful feature.</p>	<p>6.4 Retrieving external data with Excel (importing textual data into Excel; using the GET External Data commands)</p> <p>7.1 Using the PivotTable wizard (starting the PivotTable Wizard; specifying PivotTable Layout)</p> <p>7.2 Editing PivotTables (pivoting a PivotTable; filtering items in a field; separating data between pages; grouping PivotTable data)</p> <p>7.3 Ways of creating PivotCharts (creating a PivotChart from an Existing PivotTable; creating a PivotChart Direct from a database)</p> <p>7.4 Demonstrate how pivot table can be used to summarize, analyze, explore and present data.</p>
<p>8. Describing the use of Small Business Financial Manager that comes with the Small Business, Professional and Premium versions of Microsoft Excel).</p>	<p>8.1 Installing and Starting the Small Business Financial Manager</p> <p>8.2 Importing the financial data stored in other accounting systems</p> <p>8.3 Using the Report Wizard to produce a financial report (report categories – Balance Sheet; Cash Flow; Change in Stockholders' Equity; Income Statement; Ratios; Sales Analysis; Trial Balance)</p> <p>8.4 Working with the Financial Analysis Tools (Using the Business Comparison Report Tool; Using the Buy vs. Lease Tool; Using the Create Projection Wizard Tool; Using the Projection Reports Tool; Using the What-if Analysis Tool; Using the Chart Wizard)</p>
<p>9. Discussing the integral part of pro-forma financial statements in business planning and the overall budgeting process.</p>	<p>9.1 Analysing the role of Financial Statements and Ratios (Income Statement; Cash Flow; Financial ratios common size ratios and intra/inter statement ratios)</p> <p>9.2 Using the Business Planning Starter Workbook (constructing pro-forma financial statements to forecast profits and losses; financial condition and cash flows)</p> <p>9.3 Exploring the Starter Workbook's calculations (analysing the <i>seven</i> parts of the business planning starter workbook (the inputs forecasts; Balance Sheet; Common Size Balance Sheet; Income Statement; Common Size Income Statement; Cash Flow Statement; Financial Ratios Table)</p>
<p>10. Describing the process of building a cost-profit-volume and break-even analysis workbook.</p>	<p>10.1 Explore cost-profit-volume and break-even analysis</p> <p>10.2 Using Excel to create cost-profit-volume and break-even analysis worksheet</p> <p>10.3 Analysing the cost-profit-volume and</p>

		break-even analysis workbook <i>six</i> parts (the Profit Volume Inputs box and the Break-Even Analysis Forecast; the Profit Volume Forecast; the Common Size Profit Volume Forecast; the Profit Volume Area and the Break-Even Analysis Line Chart Data)
	10.4	Charting Profit Volume Analysis Data (Using the profit volume area chart; using the break-even line chart)
11. Demonstrate how to use Excel to create and leverage spreadsheet models for forecasting sales and cost of sales.	11.1	Define sales and cost of sales forecasting
	11.2	Analysing sales forecasting calculations (the Sales Forecast Schedule; Sales Forecast Inputs; Cost Totals and Statistics; Sales and Gross Margin Forecast and Inventory Forecast)
12. Demonstrate using Ratio Analysis; Cash Cycle and Growth; Financial Forecasting; Rearranging Financial Statements; Capital Structure; Time Value of Money and Project Valuation; Risk and Return; Valuing a Business	12.1	Cash flow forecasting and analysis
	12.2	Constructing cash flow forecasts and analysis summaries for assets/investments and measure profitability and liquidity
	12.3	Analysing the cash flow forecast calculations (cash flow forecasting inputs; profit and loss statement; the Gain and Loss Statement; the Operating Cash Flow Statement; the Liquidation Cash Flow Statement; the Cash Flow Analysis; the Pre-tax Cash Flow Scenarios; the After-Tax Cash Flow Scenarios.
13. Describe how to build debt amortisation (Present Value of Annuity) schedules. Demonstrate analysing the Variable Rate, Annuity Due Amortisation workbook (Variable Interest Rate, Annuity Due Amortisation Inputs; Variable Interest Rate, Annuity Due Amortisation Schedule; Balloon Payment Schedule)	13.1	Analysing the <i>five</i> variables for determining the amortisation of a debt (principal; interest rate; amortisation term; debt term; debt service payment)
	13.2	Using the Debt Amortisation in Excel
	13.3	Analysing the Fixed Rate, Ordinary Annuity Amortisation workbook (Fixed Interest Rate Amortisation inputs; Fixed Interest Rate Amortisation Schedule; Balloon Payment Schedule)
	13.4	Analysing the Fixed Rate, Annuity Due Amortisation workbook (Fixed Interest Rate, Annuity Due Amortisation Inputs; Fixed Interest Rate, Annuity Due Amortisation Schedule; Balloon Payment Schedule)
	13.5	Analysing the Variable Rate, Ordinary Annuity Amortisation workbook (Variable Interest Rate Amortisation Inputs; Variable Interest Rate Amortisation Schedule)
14. Describe how to build asset depreciation schedules. Creating Straight-Line Depreciation workbook (Straight-Line Depreciation Calculation inputs; Straight-Line Depreciation Schedule)	14.1	Asset Depreciation
	14.2	Creating asset depreciation workbooks given three parameters (original cost; salvage value and estimate life)
	14.3	Creating Declining Balance Depreciation

	workbook 14.4 Create the Sum-of-the-Years' Digits Depreciation workbook 14.5 Creating the Annuity or Sinking Fund Depreciation workbook
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Recommended Learning Resources: Excel Accounting

Text Books	<ul style="list-style-type: none"> Excel for Accounting and Finance Professionals by John Masui. ISBN-10: 142691718X Excel for Accountants by Conrad Carlberg. ISBN-10: 1932925260 Building Financial Models with Microsoft Excel: A Guide for Business Professionals by K. Scott Proctor. ISBN-10: 0470481749
Study Manuals 	BCE produced study packs
CD ROM 	Power-point slides
Software 	Microsoft Excel