



ECDL

SYLLABUS

ECDL MODULE ADVANCED SPREADSHEETS

Syllabus Version 2.0

Purpose

This document details the syllabus for the Advanced Spreadsheets module. The syllabus describes, through learning outcomes, the knowledge and skills that a candidate for the Advanced Spreadsheets module should possess. The syllabus also provides the basis for the theory and practice-based test in this module.

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Advanced Spreadsheets Module

This module sets out advanced skills relating to spreadsheets that can be used to perform complex calculations, carry out data analysis, produce sophisticated charts, and improve productivity.

Module Goals

Successful candidates will be able to:

- Apply advanced formatting options such as conditional formatting and customised number formatting and handle worksheets.
- Use functions such as those associated with logical, statistical, financial and mathematical operations.
- Create charts and apply advanced chart formatting features.
- Work with tables and lists to analyse, filter and sort data. Create and use scenarios.
- Validate and audit spreadsheet data.
- Enhance productivity by working with named cell ranges, macros and templates.
- Use linking, embedding and importing features to integrate data.
- Collaborate on and review spreadsheets. Apply spreadsheet security features.

CATEGORY	SKILL SET	REF.	TASK ITEM
1 Formatting	<i>1.1 Cells</i>	1.1.1	Apply an autoformat/table style to a cell range.
		1.1.2	Apply conditional formatting based on cell content.
		1.1.3	Create and apply custom number formats.
	<i>1.2 Worksheets</i>	1.2.1	Copy, move worksheets between spreadsheets.
		1.2.2	Split a window. Move, remove split bars.
		1.2.3	Hide, show rows, columns, worksheets.
2 Functions and Formulas	<i>2.1 Using Functions and Formulas</i>	2.1.1	Use date and time functions: today, now, day, month, year.
		2.1.2	Use mathematical functions: rounddown, roundup, sumif.
		2.1.3	Use statistical functions: countif, countblank, rank.
		2.1.4	Use text functions: left, right, mid, trim, concatenate.
		2.1.5	Use financial functions: fv, pv, pmt.
		2.1.6	Use lookup functions: vlookup, hlookup.
		2.1.7	Use database functions: dsum, dmin, dmax, dcount, daverage.
		2.1.8	Create a two-level nested function.

CATEGORY	SKILL SET	REF.	TASK ITEM
		2.1.9	Use a 3-D reference within a sum function.
		2.1.10	Use mixed references in formulas.
3 Charts	<i>3.1 Creating Charts</i>	3.1.1	Create a combined column and line chart.
		3.1.2	Add a secondary axis to a chart.
		3.1.3	Change the chart type for a defined data series.
		3.1.4	Add, delete a data series in a chart.
	<i>3.2 Formatting Charts</i>	3.2.1	Re-position chart title, legend, data labels.
		3.2.2	Change scale of value axis: minimum, maximum number to display, major interval.
		3.2.3	Change display units on value axis without changing data source: hundreds, thousands, millions.
		3.2.4	Format columns, bars, plot area, chart area to display an image.
4 Analysis	<i>4.1 Using Tables</i>	4.1.1	Create, modify a pivot table/datapilot.
		4.1.2	Modify the data source and refresh the pivot table/datapilot.
		4.1.3	Filter, sort data in a pivot table/datapilot.
		4.1.4	Automatically, manually group data in a pivot table/datapilot and rename groups.
		4.1.5	Use one-input, two-input data tables/multiple operations tables.
	<i>4.2 Sorting and Filtering</i>	4.2.1	Sort data by multiple columns at the same time.
		4.2.2	Create a customized list and perform a custom sort.
		4.2.3	Automatically filter a list in place.
		4.2.4	Apply advanced filter options to a list.
		4.2.5	Use automatic sub-totalling features.
		4.2.6	Expand, collapse outline detail levels.
	<i>4.3 Scenarios</i>	4.3.1	Create named scenarios.
		4.3.2	Show, edit, delete scenarios.
		4.3.3	Create a scenario summary report.

CATEGORY	SKILL SET	REF.	TASK ITEM	
5 Validating and Auditing	<i>5.1 Validating</i>	5.1.1	Set, edit validation criteria for data entry in a cell range like: whole number, decimal, list, date, time.	
		5.1.2	Enter input message and error alert.	
	<i>5.2 Auditing</i>	5.2.1	Trace precedent, dependent cells. Identify cells with missing dependents.	
		5.2.2	Show all formulas in a worksheet, rather than the resulting values.	
		5.2.3	Insert, edit, delete, show, hide comments/notes.	
	6 Enhancing Productivity	<i>6.1 Naming Cells</i>	6.1.1	Name cell ranges, delete names for cell ranges.
6.1.2			Use named cell ranges in a function.	
<i>6.2 Paste Special</i>		6.2.1	Use paste special options: add, subtract, multiply, divide.	
		6.2.2	Use paste special options: values /numbers, transpose.	
<i>6.3 Templates</i>		6.3.1	Create a spreadsheet based on an existing template.	
		6.3.2	Modify a template.	
<i>6.4 Linking, Embedding and Importing</i>		6.4.1	Insert, edit, remove a hyperlink.	
		6.4.2	Link data within a spreadsheet, between spreadsheets, between applications.	
		6.4.3	Update, break a link.	
		6.4.4	Import delimited data from a text file.	
<i>6.5 Automation</i>		6.5.1	Record a simple macro like: change page setup, apply a custom number format, apply autoformats to a cell range, insert fields in worksheet header, footer.	
		6.5.2	Run a macro.	
		6.5.3	Assign a macro to a custom button on a toolbar.	
7 Collaborative Editing		<i>7.1 Tracking and Review</i>	7.1.1	Turn on, off track changes. Track changes in a worksheet using a specified display view.
			7.1.2	Accept, reject changes in a worksheet.
	7.1.3		Compare and merge spreadsheets.	
	<i>7.2 Security</i>	7.2.1	Add, remove password protection for a spreadsheet: to open, to modify.	

CATEGORY	SKILL SET	REF.	TASK ITEM
		7.2.2	Protect, unprotect cells, worksheet with a password.
		7.2.3	Hide, unhide formulas.