



The Digital Skills Standard

ICDL Professional

ADVANCED

SPREADSHEETS

Syllabus 3.0



Syllabus Document



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 practice-based test in this module.

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Advanced Spreadsheets

This module sets out advanced skills that can be used to produce sophisticated reports, to perform complex mathematical and statistical calculations, and to improve productivity using a spreadsheet application.

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.
- 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 and macros.
- Use linking, embedding and importing features to integrate data.
- Compare and merge spreadsheets. Apply spreadsheet security features.

CATEGORY	SKILL SET	REF.	TASK ITEM
1 Formatting	<i>1.1 Cells</i>	1.1.1	Apply conditional formatting.
		1.1.2	Create and apply custom number formats.
		1.1.3	Split text to columns.
	<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.
		1.2.4	Save a spreadsheet as a template, modify a template.
2 Formulas and Functions	<i>2.1 Using Formulas and Functions</i>	2.1.1	Use date and time functions: today, now, day, month, year.
		2.1.2	Use logical functions: and, or, not.
		2.1.3	Use mathematical functions: rounddown, roundup, sumif.
		2.1.4	Use statistical functions: countif, countblank, rank.
		2.1.5	Use text functions: left, right, mid, trim, concatenate.
		2.1.6	Use financial functions: fv, pv, pmt.
		2.1.7	Use lookup functions: vlookup, hlookup.

CATEGORY	SKILL SET	REF.	TASK ITEM
		2.1.8	Use database functions: dsum, dmin, dmax, dcount, daverage.
		2.1.9	Create a two-level nested function.
		2.1.10	Use a 3-D reference within a sum, average, minimum, maximum function.
		2.1.11	Use mixed references in formulas.
3 Charts	<i>3.1 Creating Charts</i>	3.1.1	Create a combined chart like: column and line, column and area.
		3.1.2	Create, change, delete a sparkline.
		3.1.3	Add a secondary axis to a chart.
		3.1.4	Change the chart type for a defined data series.
		3.1.5	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, pie slices, 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, manual outline features: group, ungroup, sub-total.

CATEGORY	SKILL SET	REF.	TASK ITEM
		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.
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	Display all formulas in a worksheet, rather than the resulting values.
		5.2.3	Insert, edit, delete, show, hide comments/notes in a worksheet locally, online.
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.
		6.1.3	Activate, deactivate the group mode.
	<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 Linking, Embedding and Importing</i>	6.3.1	Insert, edit, remove a hyperlink.
		6.3.2	Link data within a spreadsheet, between spreadsheets.
		6.3.3	Update, break a link.
		6.3.4	Import delimited data from a text file.
	<i>6.4 Automation</i>	6.4.1	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.
		6.4.2	Run a macro.
		6.4.3	Assign a macro to a custom button.
7 Collaborative Editing	<i>7.1 Reviewing and Security</i>	7.1.1	Compare and merge spreadsheets.

CATEGORY	SKILL SET	REF.	TASK ITEM
		7.1.2	Add, remove password protection for a spreadsheet: to open, to modify.
		7.1.3	Protect, unprotect cells, worksheet with a password.
		7.1.4	Hide, unhide formulas.