Certificate in
Microsoft Excel and Data Analytics (Comprehensive)

Welcome to

Microsoft Excel and Data Analytics (Comprehensive)

Earn 28 PD Hours

This comprehensive Excel certificate is designed for CPAs who want to build both foundational and advanced data analysis skills. Covering 14 on-demand courses, the program spans essential topics such as formulas, lookup functions, pivot tables, conditional logic, and descriptive statistics—equipping professionals to streamline financial reporting, enhance audit processes, and support data-driven decision-making.

With practical templates and real-world examples tailored to accounting and finance, this certificate offers a structured path to mastering Excel. Upon completion, CPAs will gain a recognized credential that demonstrates their ability to apply Excel effectively in complex, professional contexts.

Module Topics Include:

- Introduction to Formulas
- Tables
- IF Statements
- Basic Charts
- Range Names and the Auditing Tool
- VLOOKUP, HLOOKUP, CHOOSE, MATCH and INDEX Functions
- Filtering, Sorting and Removing Duplicates

- Text Functions
- Conditional Formatting
- Pivot Tables
- Advanced Charts and Controls
- Conditional Counts, Sums and Averages
- Date, Time Functions and Circular References
- Descriptive Statistics

Delivery Methods:

On Demand Learning

Key Takeaways

This certificate will provide you with:

- A thorough overview of all aspects of Excel, including practical ways to perform job functions.
- Excel templates to follow along with the course and to keep as a useful reference.
- Relevant examples designed for finance and accounting professionals.
- A resume-boosting Excel certificate upon completion of all the included courses.
- 7 on-demand Excel courses so you can complete them when it's convenient.

Who Will Benefit

This course is ideal for CPAs, accountants, and finance professionals who already use Excel but want to deepen their skills with tools and techniques tailored specifically to their field. Whether you're looking to streamline workflows, enhance data analysis, or earn a resume-boosting certificate, this program offers practical, on-demand learning designed to fit your schedule and professional needs.

Earn a Digital Badge

Our new collection of digital badges can be earned through the completion of any of our certificate programs offered in our professional development catalogue. Collect these digital badges to add to your website, social profiles, email signature and more. These badges are an easy way to visually communicate your skills and accomplishments to your peers and network. Digital badges will be awarded based on course completion requirements.

Certificate Outline

Microsoft Excel Fundamentals

Module 1

Introduction to Forumlas

Preliminaries

- Cell addresses and worksheets
- Simple formatting, formulas, and auto fill
- Quick access toolbar

The Basics of Formulas

- Logical formulas
- Order of operations
- Absolute and relative addressing
- Dynamic Spreadsheet models

Module 2

Filtering, Sorting, Duplicates

Filtering

- Basic Filtering: number, date, text, colour, and using multiple filters at once

Sorting and Removing Duplicates

- Basic Sorting: cell or font colour, alphabetically, case sensitive, custom lists,
- Removing duplicates

Module 3

Basic Charts

Fundamental Charts

- Column, Bar, Pie, Stacked and Combo Charts
- Adding labels
- Handling missing or hidden data in charts

Intermediate Charts

- Line, Stacked, Scatter, Bubble, Radar, BMI Charts
- Adding and deleting elements on charts

Module 4

Range Names and the Auditing Tool

Range Name Basics

- Creating, modifying, and applying range names
- Range name tips and tricks
- Row and columns

Advanced Range Name Topics

- Using formulas to create range names
- Naming rows or columns
- Implicit intersection
- Worksheet level names

The Auditing Tool

- Trace precedents and dependents
- Auditing tool with multiple worksheets

Module 5

VLOOKUP, HLOOKUP, CHOOSE, MATCH, and INDEX Function

VLOOKUP, HLOOKUP and CHOOSE

- VLOOKUP True/False
- HLOOKUP
- Grades & Passing1
- CHOOSE Function

MATCH and INDEX

- EX Function
- MATCH and MATCH/INDEX Combination functions
- Copying formulas involving MATCH and INDEX
- Combining VLOOKUP and MATCH functions

Module 6

Tables

Auto-Update Formulas and Charts

- Range Names
- Tables and Charts
- Sales and Bill Lookup
- CHOOSE Function

Table Filters and Slicers

- Table Filters
- Sums and Charts with Slicers

Module 7

IF, IFS, IFERROR, SWITCH and IS Functions

IF and IFS Basics

- IFS Introduction
- OR, AND, with IF statements
- Odds and Evens
- Hedging

Advanced IF and IS Applications

- Bidding
- Quarter of the year
- SWITCH function
- Audit month
- Sales and units

Certificate Outline

Microsoft Excel Advanced

Module 1

Text Functions

Functions and Text to Columns

- Introduction to text functions
- LEFT, RIGHT, MID, LEN, CONCENTRATE & TRIM
- FIND and text to columns

Text Function Topics

- VLOOKUP with mulitple columns
- Sorting and finding

Advanced Range Name Topics

- REPT, FLASH FILL, TEXT, TEXT JOIN function
- Fixing problems with invisible characters

Module 2

Date and Time Functions & Circular References

Date Functions

- Introduction to date functions
- WORKDAY, NETWORKDAY, DATEIF, EDATE, EOMONTH functions
- Static or dynamic date or time

Circular References

- Using a circular references to average a row or column

Time Functions

- Introduction to time functions
- Time function tips and tricks

Module 3

Conditional Counts, Sums, and Averages

Introduction to Functions

- COUNTIF, COUNTIFS, SUMIF, SUMIFS, AVERAGEIF, AVERAGEIFS, COUNT, COUNTA, COUNTBLANK, MAXIFS, and MINIFS functions

Database Statistical Functions

- Computed criteria
- Advanced filter

Array Formulas

- Conditional calculations with array formulas
- SUMPRODUCT function

Module 4

Conditional Formatting

Formatting

- Top/Bottom rules
- Highlight cells
- Data bars and colour scales
- Icon sets and format painter

Conditional Formatting with Formulas

- Introdution to formatting with formulas
- Real world examples

Module 5

Pivot Tables

Pivot Table Basics

- Customer/refreshing pivot tables
- Filters, labels and sorting

Advanced Pivot Tables

- Creating a pivot table from mulitple sources
- Creating separate reports from filters
- Calculated field
- Timelines, custom grouping, and GETPIVOTDATA function

Module 6

Data Analytics Advanced Charts and Control

Performance VS Target

- Band and Thermometer charts
- Sales tracking
- Conditional colours

Sparklines

- Line, Column, and Win/Loss Sparklines

Chart Controls

- Using Spinners, Scroll Bars, Checkboxes, and List Boxes to control charts

Dashboards and Dynamic Chart Labels

- Dynamic Range
- OFFSET Function
- Charting a subset of months
- Last 6 Dashboard

Mastering Charts

- Waterfall Profit/Cash, Treemap, Sunburst, Pareto, and Funnel Charts

Module 7

Descriptive Statistics

Summarizing Data with Histograms

- Types of Histograms
- Creating Histograms
- Pivot chart with Histograms

Random Samples

- Taking a random sample
- Random variables
- Forecast probabilities

Summarizing Data with Stats and Boxplots

- Measures of a cenrtal location
- Mean vs. Median income
- PERCENTILE.EXC, PERCENTRANK,EXC, RANK, LARGE, SMALL functions
- Stock, Box, and Whisker plots
- Boxplots with mutiple series

Correlation and Regression

- Simple linear regression
- Regression to the mean

Wayne Winston

Dr. Wayne Winston is a Professor Emeritus of Decision Sciences at the Kelley School of Business at Indiana University. He holds a B.S. in Mathematics from M.I.T. and a PhD in operations research from Yale. He won more than 40 teaching awards at Indiana University. He has written more than a dozen books including "Marketing Analytics", "Data Analysis and Decision Making", "Operations Research", "Practical Management Science", "Excel 2019 Data Analysis and Business Modeling", and "Mathletics." Dr. Winston has taught classes and consulted for many leading global organizations. He is also a two-time Jeopardy! champion and has consulted for the NBA's Dallas Mavericks and New York Knicks.

Have Questions? Speak to an Advisor.

To speak to one of our advisors, please fill out this form.

CPA ONTARIO