

# Certificate in Microsoft Excel and Data Analytics (Advanced)



Welcome to

# Microsoft Excel and Data Analytics (Advanced)

**Earn 14 PD Hours**

This advanced Excel certificate is designed for CPAs seeking to enhance their analytical and reporting capabilities. The program covers key topics such as text and date functions, circular references, conditional formulas, pivot tables, advanced charts, and descriptive statistics—tools essential for financial modeling, audit preparation, and data-driven decision-making.

With seven on-demand courses and practical templates, the program emphasizes real-world applications tailored to accounting and finance professionals. Upon completion, participants earn a certificate that demonstrates advanced Excel proficiency and supports continued professional growth.

## Module Topics Include:

- ▶ 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

## Module 1

### Text Functions

#### Functions and Text to Columns

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

#### Advanced Range Name Topics

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

#### Text Function Topics

- VLOOKUP with multiple columns
- Sorting and finding

## 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

#### Time Functions

- Introduction to time functions
- Time function tips and tricks

#### Circular References

- Using a circular references to average a row or column

## 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

- Introduction 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 multiple 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 central location
- Mean vs. Median income
- PERCENTILE.EXC, PERCENTRANK.EXC, RANK, LARGE, SMALL functions
- Stock, Box, and Whisker plots
- Boxplots with multiple series

### Correlation and Regression

- Simple linear regression
- Regression to the mean



ABOUT YOUR INSTRUCTOR  
**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](#).