

Advanced Excel: Power Query, Power Pivot & AI Tools

Learn to clean, model and analyse data in Excel using Power Query, Power Pivot, DAX and AI tools such as ChatGPT and Copilot.

4 Days

16 HOURS

67

TOPICS

COURSE OVERVIEW

This course begins by refreshing intermediate Excel concepts such as lookups, pivot tables, slicers and logical functions. It then covers connecting, transforming and cleaning data with Power Query, and building table relationships using the Excel Data Model. Learners go on to create dashboards with Power Pivot and DAX functions, and explore Excel macro recording. The final part introduces AI tools including ChatGPT and Copilot for building formulas, cleaning data, analysing data and generating dashboards within Excel.

WHO THIS COURSE IS FOR

Excel Users

Data Analysts

Business Analysts

Financial Analysts

Reporting Specialists

LEARNING OBJECTIVES

- Apply advanced Excel functions such as XLOOKUP, SUMIFS and TEXTJOIN
- Design dashboards using pivot tables, slicers and timelines
- Transform and clean data using Power Query tools
- Build table relationships with the Excel Data Model
- Create dashboards using Power Pivot and DAX functions
- Explain Excel macro recording and editing basics
- Compare ChatGPT 3.5 and ChatGPT 4 for Excel tasks
- Integrate ChatGPT and Copilot with Excel workflows

67 Topics

DAY 1

Advanced Excel

Excel Intermediate Concepts Refreshed

ADVANCE FUNCTIONS

- Lookups
- Pivot Table
- Slicers and timelines
- Conditional timelines
- Filter & sorting
- Data validation
- Designing dashboard layouts
- Excel Inbuilt AI Capabilities
- Logical Function
- IF
- sumif
- sumifs
- countifs
- countifs
- filter
- xlookup
- sumproduct
- textjoin

DAY 2

Data Cleaning & Modelling

01

Introduction to Power Excel

TOPICS

Understanding the “Power Excel” Workflow · Introduction to Power Query + Power Pivot · When to use Power Query & Power Pivot

02

Connecting & Transforming Data With Power Query

TOPICS

- Introduction
- Getting to Know Power Query in Excel
- Exploring Excel’s Power Query Editor
- Power Query Data Loading Options
- **Important:** Updating Locale Settings
- Applying Basic Table Transformations with Power Query
- **Power Query Demo:** Text Tools
- **Power Query Demo:** Number & Value Tools
- **Power Query Demo:** Date & Time Tools
- **Pro Tip:** Creating a Rolling Calendar with Power Query
- **Power Query Demo:** Generating Index & Conditional Columns
- **Power Query Demo:** Grouping & Aggregating Records
- **Power Query Demo:** Pivoting & Unpivoting Data
- Modifying Excel Workbook Queries
- Merging Queries with Power Query

Connecting & Transforming Data With Power Query (continued)

TOPICS (CONTINUED)

- Appending Queries with Power Query
- **Power Query Demo:** Connecting to a Folder of Files
- Excel Power Query Best Practices

03

Building Table Relationships with Excel Data Model

TOPICS

- Introduction
- Meet Excel's "Data Model"
- The Data Model Data vs. Diagram View
- Principles of Database Normalization
- Understanding Data Tables vs. Lookup Tables
- Benefits of Relationships vs. Merged Tables
- Creating Table Relationships in Excel's Data Model
- Modifying Data Model Table Relationships
- Managing Active vs. Inactive Table Relationships
- Understanding Relationship Cardinality

DAY 3 Creating Dashboards

TOPICS

- Creating dashboards with Power Pivot
- Creating dashboards
- Using relational data for database
- Using DAX Functions
- Introduction to Excel Macro Recording & Editing

DAY 4 Using AI Tools With Excel

TOPICS

- Introduction ChatGPT 3.5 vs ChatGPT 4
- Built In Excel AI Tools
- Getting Started With ChatGPT For Excel
- Using ChatGPT for Excel Formulas
- Data Cleaning & Transformation using ChatGPT
- Data Analysis Using Chat GPT
- Data Analysis using ChatGPT
- Creating Dashboards using AI tools
- ChatGPT and Macros
- Generating API key
- Integrating ChatGPT with MS-Excel
- How to use copilot
- Attaching data to copilot and finding solutions

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

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✉ info@koenig-solutions.com