

KOENIG SOLUTIONS · COURSE OUTLINE

Advanced Excel Skills for Automation

Learn to automate Excel workflows using Power Query and Python, from cleaning data to building reports and charts.

16 Hours

DURATION

7

MODULES

27

TOPICS

2

HANDS-ON ACTIVITIES

COURSE OVERVIEW

This course introduces automation in Excel, starting with the role of Power Query and Python in Excel. It covers importing, cleaning and transforming data with Power Query, then merging, appending and grouping tables to build automated reports. It moves into writing Python code within Excel cells, using Python to import, clean and sort data, and to create charts. The course closes with combining Power Query and Python in a shared workflow and applying these skills to a final business task.

WHO THIS COURSE IS FOR

Excel Users

Data Analysts

Business Analysts

Report Preparers

Financial Analysts

LEARNING OBJECTIVES

- Explain the purpose of automation and its use in Excel
- Identify how Power Query and Python fit into Excel workflows
- Apply Power Query to import data from Excel, CSV and websites
- Clean and transform data using Power Query tools
- Merge, append and group tables to summarise data
- Write basic Python code and concepts within Excel cells
- Use Python to import, clean, sort and chart data
- Plan a combined Power Query and Python workflow

7 Modules, 27 Topics

01

1 hour

Introduction to Automation in Excel

TOPICS

- What is automation? Why use it in Excel?
- Simple real-life examples (like monthly reports, combining sheets)
- Introduction to Power Query and Python in Excel
- Making sure Excel is ready (Office 365 setup, enabling tools)

02

3 hours

Power Query – Getting Started

TOPICS

- What is Power Query? Why is it useful?
- How to bring data from Excel, CSV, websites, etc.
- Cleaning data (removing blanks, fixing column names, filtering)
- Changing data (split columns, replace text, format dates)
- Saving and refreshing data easily

03

3 hours

Power Query – Do More with Your Data

TOPICS

- Joining tables together (Merge)
- Stacking tables (Append)
- Grouping and summarizing data (like totals per month)
- Making queries work together

HANDS-ON TASK

- Automate a simple monthly sales report

04**2 hours**

Python in Excel – Easy Introduction

TOPICS

- What is Python? Why use it in Excel?
- How to turn on Python in Excel (Excel Labs)
- Writing simple Python in Excel cells
- Basic Python concepts (variables, lists, if statements)

05**3 hours**

Python in Excel – Work with Data

TOPICS

- Importing data into Python
- Cleaning and sorting data with Python
- Creating simple charts inside Excel using Python
- **Example:** Automate a product sales summary using Python

06**2.5 hours**

Power Query + Python – Work Together

TOPICS

- When to use Power Query, when to use Python
- **Workflow:** clean data in Power Query, analyze with Python
- Tips for saving and updating your work easily

HANDS-ON MINI PROJECT

- Clean → Analyze → Report

07**1.5 hours**

Final Project and Wrap-Up

TOPICS

- **Final project:** Solve a small business task using what you learned
- Present your solution (optional)
- Summary of what you can now do with Excel automation

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

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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✉ info@koenig-solutions.com