

Advanced Excel: Pivot Tables, Solver & Data Visualization

Learn to build pivot tables, optimise decisions with Solver and Goal Seek, and visualise and analyse data in Excel.

2 Days

16 HOURS

7

MODULES

32

TOPICS

2

HANDS-ON ACTIVITIES

COURSE OVERVIEW

This course covers pivot tables and pivot charts, including grouping data and building calculated fields and items. It then addresses Solver and Goal Seek for defining objectives, constraints and what-if analysis in business scenarios, followed by chart creation, conditional formatting and advanced charting techniques such as waterfall charts and heat maps. The second part covers data analysis with Power Query and Power Pivot, advanced lookup and logical functions such as XLOOKUP and nested IF, and connecting to, extracting and automating retrieval of PI System data with macros.

WHO THIS COURSE IS FOR

Data Analysts

Business Analysts

Financial Analysts

Excel Users

Report Developers

LEARNING OBJECTIVES

- Create and modify pivot tables and pivot charts
- Group data and build calculated fields in pivot tables
- Apply Solver to solve linear and non-linear problems
- Use Goal Seek for financial projections and what-if analysis
- Build charts and apply conditional formatting for visual insights
- Clean and model data with Power Query and Power Pivot
- Apply advanced lookup functions such as VLOOKUP and XLOOKUP
- Connect to and extract data from PI systems

7 Modules, 32 Topics

DAY 1

Advanced Excel Concepts

8 hours

01

2 hours

Pivot Data

TOPICS

- Introduction to Pivot Tables
- Creating and Modifying Pivot Tables
- **Pivot Charts:** Visualizing Pivot Table Data
- Grouping Data in Pivot Tables
- Calculated Fields and Items in Pivot Tables
- Best Practices for Pivot Table Reports

02

2 hours

Solver

TOPICS

- Introduction to Excel Solver
- Defining Objectives and Constraints
- Solving Linear and Non-Linear Problems
- **Case Study:** Using Solver for Business Optimization

HANDS-ON EXERCISE

- Solver in Financial Planning

03

1.5 hours

Goal Seek

TOPICS

- Introduction to Goal Seek
- How Goal Seek Helps with What-If Analysis
- Using Goal Seek for Financial Projections
- Practical Examples of Goal Seek in Business Scenarios

04**2.5 hours**

Data Visualization

TOPICS

- Introduction to Data Visualization in Excel
- Creating Charts (Bar, Line, Pie, etc.)
- Conditional Formatting for Visual Insights
- Advanced Charting Techniques (Waterfall, Heat Maps, etc.)
- Best Practices for Effective Data Visualization

DAY 2

Advanced Excel Applications

8 hours

05**3 hours**

Data Analysis

TOPICS

Introduction to Data Analysis in Excel · Cleaning data with power query · Data Modelling using Power Pivot · Using PivotTables for Data Analysis

HANDS-ON EXERCISE

- Analyzing Business Data

06**2.5 hours**

Functions

TOPICS

Advanced IF Functions (Nested IF, IFERROR) · VLOOKUP, HLOOKUP, and XLOOKUP · Working with Logical Functions (AND, OR) · Practical Applications of Lookup Functions

07**2.5 hours**

PI Data Link

TOPICS

- Introduction to PI Data Link
- Connecting PI Data to Excel
- Extracting and Analyzing Data from PI Systems
- Automating PI Data Retrieval with Macros
- **Case Study:** Using PI Data in Business Decision-Making

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.

Visit koenig-solutions.com

✉ info@koenig-solutions.com