



Information Technology

Microsoft Power Query Advanced

Course Introduction

Power Query is one of the most effective tools in Excel use for data discovery, transformation, and enrichment. It allows you to combine data quickly and easily from one or more structured or semi-structured sources (Excel, CSV, relational databases, SAP, online services, etc.) as well as to clean, reshape, and combine data with ease, no matter where it comes from. This training course is designed to help participants gain the necessary skills and knowledge in utilizing Power Query in mastering mastering data, and advance techniques.

Target Audience

1. Data Analyst
2. Business Intelligence Analyst
3. Financial Analyst
4. Business Analyst
5. Reporting Specialist
6. Excel Power User
7. IT Manager
8. Operations Manager
9. Database Administrator
10. Data Engineer

Learning Objectives

- Import data from external sources (ex: Access, SQL, Web, etc.).
- Utilize advanced transformation techniques and patterns to solve various data challenges

- Apply techniques in optimizing existing queries and future proof new queries
- Obtain an in-depth understanding of the M language, and advanced M Language techniques.
- Aggregate and extrapolate information from incomplete data.
- Edit query scripts using the M programming language.

Course Outline

• Day 01

What is Power Query?

- Versions of Power Query
- Power Query UI Walk Through
- When to Use Power Query

Importing Data

- Connecting to Delimited Flat Files
- Connecting to Data in Excel Workbooks
- Connecting to Data in the Current Excel Workbook
- Connecting to Non-Delimited Flat Files
- Importing from Databases
- Importing from Web Data

Formulas and Logic

- Creating Power Query Formulas
- Creating Conditional Logic

Power Query Objects

- Automating Query Refreshes

• Day 02

The M Language

- Understanding the Power Query “Mashup”
- Language (“M” Language)
- Advanced M Techniques
- Dynamically Creating a List of Headers
- Techniques to Rename Columns
- Advanced Table Append
- Managing Changes to Columns
- Creating Audit Queries and Alerts

Advanced Transformation Techniques

- Unpivoting Columns
- Pivoting Columns
- Splitting Columns into Other Columns
- Splitting Columns into Rows
- Filtering Data
- Sorting Data
- Working with Existing Columns
- Adding a Column Based on a Cell Value
- Working with Random Numbers
- Grouping and Summarizing Data
- Converting a Flat Table into Dimensions
- Ranking Data

• Day 03

Advanced Data Reshaping

- Time to Change Gears

- Pivoting Stacked Data
- Pivoting Stacked Data Revisited
- Unpivoting Subcategorized Data
- Pivoting Vertical Pairs
- Pivoting Horizontal Pairs
- Numbering Grouped Rows
- A Hacker's Approach to Numbering Group Rows
- Adding Comments to Tables

Advanced Web Techniques

- Parsing an HTML Web Page
- Parsing HTML as Text
- Basic Web Scraping
- Advanced Web Scraping
- Combining Multiple Web Pages
- Pagination and DO/WHILE

Query Optimization

- Optimizing Power Query Settings
- Leveraging Buffer Functions
- Reducing Development Lag

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
Dec. 8, 2025	Dec. 12, 2025	5 days	4250.00 \$	UAE - Dubai

