

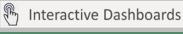
The Modern Excel
Power Query Advanced











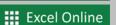




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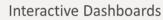






Power Query





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<u>Power Query Advanced – The Expert Skills</u>

A customizable course according to your company's requirements.

Duration

16 hours

Objectives

- 1. Introduction to Power Query
- 2. Introduction to Data Transformation in Power Query
- **Data Transformation Techniques**
- Introduction to Power Query Functions
- **Query Folding and Optimization**
- **Data Loading and Output**
- Real-world Applications and Case Studies

Pre-requisite

You must have worked on Excel for at least 12 months.





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Interactive Dashboards

Excel Online



Outline of Power Query Advanced

1. Review of Power Query Basics

1.1 Recap of Power Query Fundamentals

- Quick review of basic transformations and connections
- Overview of key concepts such as query folding

1.2 Advanced Loading Options

- Fine-tuning loading options for optimal performance
- Leveraging advanced options for data import and refresh

2. Advanced Data Transformation Techniques

2.1 Advanced Text and Numeric Transformations

- Using M language for complex text manipulations
- Advanced numerical transformations and calculations

2.2 Working with Custom Functions

- Creating and utilizing custom functions in M language
- Parameterized queries for dynamic transformations

3. Advanced Data Cleaning and Preparation

3.1 Handling Errors and Exceptions

- Implementing error handling techniques
- Dealing with common data quality issues

3.2 Advanced Filtering and Conditional Logic

- Dynamic filtering using parameters
- Implementing complex conditional transformations



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PivotChart

Power Query



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4. Advanced M Language and Expressions

4.1 Understanding M Language

- In-depth exploration of M language syntax and structure
- Writing complex M expressions for advanced transformations

4.2 M Code Profiling and Optimization

- Profiling and optimizing M code for performance
- Techniques for efficient script writing

5. Advanced Query Techniques

5.1 Advanced Joins and Merging

- Handling complex join scenarios
- Merging queries with multiple conditions

5.2 Unpivoting and Pivoting Data

- Techniques for unpivoting and pivoting data in advanced scenarios
- Dynamic unpivoting using M language

6. Advanced Data Source Connectivity

6.1 Web Scraping and API Integration

- Extracting data from websites through web scraping
- Connecting to APIs for real-time data retrieval

6.2 Custom Connectors and Extensibility

- · Creating and using custom connectors
- Extending Power Query capabilities with external libraries

7. Performance Optimization and Troubleshooting

7.1 Query Folding Optimization

- Maximizing query folding for improved performance
- Monitoring and optimizing data transformation steps



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7.2 Troubleshooting and Debugging

- Techniques for identifying and resolving errors
- Utilizing the Query Diagnostics tool

8. Real-world Applications and Case Studies

8.1 Complex Data Transformation Workflows

- Building intricate data transformation workflows
- Addressing real-world business cases

8.2 Power Query in Power BI Integration

- Leveraging Power Query in Power BI for advanced analytics
- Integrating Excel and Power BI for seamless data workflows

8.3 Q&A and Expert Panel Discussion

- Addressing participant questions and engaging in in-depth discussions
- Leveraging the expertise of the instructor and guest speakers







