

Extract, Transform and Load Data in Power BI

by Microsoft

About this Course

This course forms part of the Microsoft Power BI Analyst Professional Certificate. This Professional Certificate consists of a series of courses that offers a good starting point for a career in data analysis using Microsoft Power BI.

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Data Sources in Power BI

In this module, you'll set up data sources and explore the different data source capabilities in Power BI.

9 videos, 16 readings

1. [Video: Course Introduction](#)
2. **Reading:** Course Syllabus
3. **Reading:** How to be successful in this course
4. **Discussion Prompt:** Discussion prompt: What do you hope to learn?
5. **Reading:** How to open an image in a new tab
6. **Reading:** Setting up your Power BI environment
7. **Reading:** New name for Power BI datasets
8. **Reading:** How to locate your downloaded files
9. **Reading:** Additional Resources: Data sources in Power BI
10. **Video:** How combining data sources gives business insights
11. **Reading:** Data Sources supported by Power BI
12. **Video:** Setting up a flat data source
13. **Reading:** Local datasets vs. shared datasets
14. **Reading:** Exercise: Setting up an Excel data source
15. **Graded Assignment:** Self-review: Setting up an Excel data source
16. **Reading:** Exemplar: Setting up an Excel data source
17. **Video:** Storage modes in Power BI
18. **Video:** Configuring storage modes in Power BI
19. **Reading:** Walkthrough: Setting up your storage mode
20. **Discussion Prompt:** What challenges did you encounter while configuring storage modes?
21. **Graded Assignment:** Knowledge check: Basic data sources
22. **Reading:** Additional resources: Basic data sources
23. **Video:** Structured vs. unstructured data
24. **Video:** What are connectors?
25. **Video:** Triggers and actions
26. **Reading:** Exercise: Implementing triggers
27. **Graded Assignment:** Self-review: Implementing triggers
28. **Reading:** Exemplar: Implementing triggers

- 29. **Graded Assignment:** Knowledge check: Advanced data sources
- 30. **Discussion Prompt:** How can stakeholders benefit from triggers and actions?
- 31. **Video:** Module summary: Data sources in Power BI
- 32. **Reading:** Additional resources: Advanced data sources

Module 2

Transforming Data in Power BI

In this module, you'll practice cleaning and transforming data to prepare for data modeling in later courses.

13 videos, 15 readings

- 1. [Video: Why data needs to be transformed](#)
- 2. **Video:** Introduction to Power Query and its interface
- 3. **Video:** The Applied Steps list
- 4. **Reading:** Data types in Power BI
- 5. **Video:** Working with columns
- 6. **Reading:** Evaluating and changing column data types
- 7. **Reading:** Common data errors
- 8. **Video:** Dealing with errors in Power Query
- 9. **Reading:** Exercise: Preparing a dataset
- 10. **Graded Assignment:** Self-review: Preparing a dataset
- 11. **Reading:** Exemplar: Preparing a dataset
- 12. **Video:** Unpivot and pivot columns
- 13. **Reading:** Activity: Apply a pivot
- 14. **Graded Assignment:** Knowledge Check: Introduction to transforming data in Power BI
- 15. **Reading:** Additional Resources: Introduction to transforming data in Power BI
- 16. **Video:** The Importance of data combination
- 17. **Video:** Combining tables with append
- 18. **Reading:** The importance of matching column names
- 19. **Reading:** Exercise: Appending two tables
- 20. **Graded Assignment:** Self-review: Appending two tables
- 21. **Reading:** Exemplar: Appending two tables
- 22. **Graded Assignment:** Knowledge Check: Advanced data transformations in Power BI
- 23. **Reading:** Additional Resources: Advanced data transformations in Power BI
- 24. **Video:** What is a join?
- 25. **Reading:** Identifying join keys
- 26. **Video:** Join types
- 27. **Video:** Combining tables with merge
- 28. **Reading:** Exercise: Merging two data sources
- 29. **Graded Assignment:** Self-review: Merging two data sources
- 30. **Reading:** Exemplar: Merging two data sources

31. **Video:** Identifying a new potential product
32. **Graded Assignment:** Knowledge check: Transformations by combining data
33. **Video:** Module summary: Transforming data in Power BI
34. **Discussion Prompt:** What challenges might you encounter when combining data?
35. **Reading:** Additional resources: Transformations by combining data

Module 3

Advanced ETL in PowerBI

In this module, you'll gain an understanding of the load portion of the ETL process and practice data profiling and advanced queries.

12 videos, 12 readings

1. [Video: Introduction to loading data](#)
2. **Video:** The Staging Area in Power BI
3. **Reading:** End-to-end ETL process and Power BI
4. **Graded Assignment:** Knowledge Check: Loading data with Power BI
5. **Reading:** Additional Resources: Loading data with Power BI
6. **Video:** Introduction to data profiling
7. **Video:** Profiling Data in Power BI
8. **Reading:** Using the Data Profiling Tools
9. **Reading:** Exercise: Profiling a dataset
10. **Graded Assignment:** Self-review: Profiling a dataset
11. **Reading:** Exemplar: Profiling a dataset
12. **Video:** Vignette: Bad data
13. **Graded Assignment:** Knowledge Check: Data profiling in Power BI
14. **Reading:** Additional Resources: Data profiling in Power BI
15. **Ungraded Plugin:** Power BI Data Profiling: Fixing Anomalies at Adventure Works
16. **Video:** Best practices when working with Power Query
17. **Reading:** Activity: Import a dataset with best practices
18. **Video:** Introduction to dataflows
19. **Video:** Introduction to Reference Queries
20. **Video:** Reference queries and dataflows
21. **Reading:** Activity: Using reference queries
22. **Video:** Query parameters
23. **Reading:** Helper Queries
24. **Reading:** Activity: Disabling helper queries
25. **Video:** Using Advanced Editor to modify code
26. **Reading:** Global options for files
27. **Graded Assignment:** Knowledge check: Advanced queries
28. **Video:** Module Summary: Advanced ETL in PowerBI
29. **Discussion Prompt:** Which best practices did you find most useful?
30. **Reading:** Additional Resources: Advanced queries

Module 4

Graded Assessment and Course wrap up

In this module, you'll be assessed on the key skills covered in the course.

2 videos, 4 readings

1. [Video: Course Recap: Extract, transform and load data in Power BI](#)
2. **Reading:** About the final project and assessment: Extract, transform and load data in Power BI
3. **Reading:** Final Course Project: Transforming multiple data sources
4. **Reading:** Exemplar: Transforming multiple data sources
5. **Video:** Congratulations
6. **Discussion Prompt:** Reflect on learning
7. **Reading:** Next steps

Graded: Self-review: Transforming multiple data sources

Graded: Course quiz: Extract, transform and load Data in Power BI