

Analyzing Data with Excel

Course Outline

Module 1: Data Analysis in Excel

This module looks at the classic Excel dashboard and at ways to extend it.

Lessons

- Classic Data Analysis with Excel
- Excel Pivot Tables
- Limitations of Classic Data Analysis

Lab : Building a Classic Excel Dashboard

- Formatting Data
- Building a Pivot Table
- Adding pivot charts and a slicer

After completing this module, students will be able to:

- Describe classic data analysis with Excel
- Describe Excel pivot tables
- Describe the limitations of classic data analysis with Excel

Module 2: The Excel Data Model

This module looks at the classic Excel data model and at ways to extend it.

Lessons

- Using an Excel Data Model
- DAX

Lab : Explore an Excel Data Model

- Create Calculated Columns
- Format Data Model Data
- Create Measures
- Analyze the Data

After completing this module, students will be able to:

- Describe an Excel data model
- View data within an Excel data table
- Describe DAX

Module 3: Importing Data from Files

This module looks at pre-formatting and importing CSV files.

Lessons

- Importing Data into Excel
- Shaping and Transforming Data
- Loading Data

Lab : Importing Data from a CSV File

- Import and Transform Data from a CSV File
- Add Data from a Folder

After completing this module, students will be able to:

- Import data into excel.
- Shape and transform data.
- Load data.

Module 4: Importing Data from Databases

This module looks at how to import data into Excel from a SQL Server database.

Lessons

- Available Data Sources
- Previewing, Shaping, and Transforming Data
- Table Relationships and Hierarchies
- Loading Data

Lab : Import Data from Multiple Sources

- Import Data from SQL Server
- Import Data from a CSV File
- Create a Data Table

After completing this module, students will be able to:

- Identify available data sources.
- Preview, shape, and transform data.
- Explain table relationships and hierarchies.
- Load data from various sources.

Module 5: Importing Data from Excel Reports

This module describes how to import data from a report.

Lessons

- Importing Data from Excel Reports
- Transforming Excel report Data

Lab : Importing Data from a Report

- Import Data from Excel
- Transform the Excel Data
- Load the Data into an Excel Data Model

After completing this module, students will be able to:

- Import data from Excel reports.
- Transform Excel report data.

Module 6: Creating and Formatting Measures

This module describes how to create and format measures.

Lessons

- DAX
- Measures
- Advanced DAX Functions

Lab : Creating Measures using Advanced DAX Functions

- Last year comparison
- Year to date
- Market Share

After completing this module, students will be able to:

- Explain what DAX is and when to use it.
- Describe a measure.
- Use some of the advanced functions within DAX.

Module 7: Visualizing Data in Excel

This module describes how to visualize data in Excel.

Lessons

- Pivot Charts
- Cube Functions

- Charts for Cube Functions

Lab : Data Visualization in Excel

- Create a Tabular Report
- Create a Pivot Chart
- Add Slicers to Charts

After completing this module, students will be able to:

- Create and refine a pivot chart.
- Describe cube functions and when to use them.
- Describe a number of charts for use with cube functions.

Module 8: Using Excel with Power BI

This module describes how to use Excel with Power BI.

Lessons

- Power BI
- Uploading Excel Data to Power BI
- Power BI Mobile App

Lab : Creating a Power BI Dashboard with Excel

- Uploading Excel Data
- Creating a Power BI Dashboard
- Using Power BI desktop