



## Analyzing Data with Excel

This course is offered in conjunction with LGIT Smart Solutions. The main purpose of the course is to give students the ability to add BI techniques to Excel data analysis. The course goes beyond the capabilities of tables and charts and uses Pivot Charts, the Excel Data Model, and Power BI.

### Objectives

After completing this course, students will be able to:

- Explore and extend a classic Excel dashboard.
- Explore and extend an Excel data model.
- Pre-format and import a .CSV file.
- Import data from a SQL Server database
- Import data from a report.
- Create measures using advanced DAX functions.
- Create data visualizations in Excel.
- Create a Power BI dashboard with Excel.

## Duration

3 days

## Audience

This course is intended for students who are experienced with analyzing data with Excel and who wish to add BI techniques.

The course will likely be attended by SQL Server report creators who are interested in alternative methods of presenting data.

## Pre-Requisites

Before attending this course, students must have:

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of relational databases.
- Extensive knowledge of Excel spreadsheets including formulas, charts, filtering, sorting, and sub-totals.
- Basic knowledge of data analytics equivalent to having attended Excel Dashboards.

## Outline

- Module 1: Data Analysis in Excel  
This module looks at the classic Excel dashboard and at ways to extend it.
  - Classic Data Analysis with Excel
  - Excel Pivot Tables
  - Limitations of Classic Data Analysis
- Module 2: The Excel Data Model  
This module looks at the classic Excel data model and at ways to extend it.
  - Using an Excel Data Model
  - DAX
- Module 3: Importing Data from Files  
This module looks at pre-formatting and importing CSV files.
  - Importing Data into Excel

- Shaping and Transforming Data
- Loading Data
- Module 4: Importing Data from Databases
  - This module looks at how to import data into Excel from a SQL Server database.
  - Available Data Sources
  - Previewing, Shaping, and Transforming Data
  - Table Relationships and Hierarchies
  - Loading Data
- Module 5: Importing Data from Excel Reports
  - This module describes how to import data from a report.
  - Importing Data from Excel Reports
  - Transforming Excel report Data
- Module 6: Creating and Formatting Measures
  - This module describes how to create and format measures.
  - DAX
  - Measures
  - Advanced DAX Functions
- Module 7: Visualizing Data in Excel
  - This module describes how to visualize data in Excel.
  - Pivot Charts
  - Cube Functions
  - Charts for Cube Functions
- Module 8: Using Excel with Power BI
  - This module describes how to use Excel with Power BI.
  - Power BI
  - Uploading Excel Data to Power BI
  - Power BI Mobile App