10994BC Data Analysis Fundamentals using Excel

Course Duration: 2 Days

About This Course

The main purpose of the course is to give students the ability to add analysis capabilities to Excel spreadsheets and to provide students with a foundation to learn about more advanced data analytics with Excel or Power BI.

Audience Profile

This course is intended for anyone who wants to take the data analysis technologies in Excel beyond formulas and add more advanced capabilities such as dashboards, hierarchies, and relationships.

At Course Completion

After completing this course, students will be able to:
- Create an Excel report
- Create an Excel table
- Create a pivot table and pivot chart
- Create a dashboard and analyze data
- Create Hierarchies
- Create an Excel data model and connect to external data

Course Outline

Module 1: Reporting in Excel
This module explains how to create a report in Excel

Lessons
- Filtering and Formatting Data
- Charts

Lab : Create an Excel report
- Filtering Excel Data
- Formatting Excel Data
- Create excel Charts

After completing this module, students will be able to:
- Filter and format data.
- Create charts.

Module 2: Excel Tables

This module explains how to create data tables in Excel

Lessons
- Excel Data Tables
- Summarizing Data

Lab : Create an Excel Table
- Create an Excel Table
- Summarize Excel Data

After completing this module, students will be able to:
- Explain what Excel Data tables are.
- Sort, filter, and validate data.
- Summarize data.
- Format summarized data.

Module 3: Pivot Tables and Pivot Charts

This module describes pivot tables and pivot charts and how to work with them.

Lessons
- Pivot Tables
- Pivot Charts
- Editing Pivot Tables and Pivot Charts

Lab : Importing Data from a CSV File
- Creating a Pivot Table
- Creating a Pivot Chart
- Editing Pivot Tables and Pivot Charts

After completing this module, students will be able to:
- Describe pivot tables and how to create them.
- Describe the various elements of a pivot chart.
- Edit pivot tables and pivot charts.

Module 4: Dashboards
This module describes Excel dashboards, how to create them and the role in data analysis in Excel pivot tables.

Lessons
- Creating a Dashboard
- Data Analysis in Excel Pivot Tables

Lab : Create a Dashboard
- Arranging Tables and Charts
- Slicing Data
- Data Analysis

After completing this module, students will be able to:
- Describe a dashboard.
- Filter data using a slicer.
- Add calculated columns to a dashboard.
- Find anomalies.

Module 5: Hierarchies
This module describes hierarchies and time data.

Lessons
- Hierarchies
- Time Data

Lab : Creating Hierarchies
- Create a Hierarchy
- Configure Time data
- Create an Animated Time Chart

After completing this module, students will be able to:
- Describe hierarchies.
- Create levels within a hierarchy.
- Explain why time data is different and how to work with it.

Module 6: The Excel Data Model

This module explores the Excel data model and looks at ways of extending it.

Lessons

- Using an Excel Data Model
- External Data

Lab : Explore an Excel Data Model

- Add Multiple Tables
- Create Relationships
- Add External Data

After completing this module, students will be able to:

- Explain an Excel Data Model and how to use it.
- Import External Data and use it.
- Link out to external data.