1. Introduction to Data Analytics and Excel

- What is data analytics?

- Excel's role in data analysis

- Basic Excel interface and navigation

2. Data Preparation and Cleaning

- Importing data from various sources

- Data formatting and structuring

- Handling missing or inconsistent data

3. Essential Excel Functions for Data Analysis

- VLOOKUP, HLOOKUP, and INDEX-MATCH

- Text functions (LEFT, RIGHT, MID, CONCATENATE)

- Date and time functions

4. Descriptive Statistics in Excel

- Measures of central tendency (mean, median, mode)

- Measures of dispersion (range, variance, standard deviation)

- Using the Data Analysis ToolPak

5. Data Visualization Techniques

- Creating and customizing charts and graphs

- Pivot Tables and Pivot Charts

- Conditional formatting for data insights

6. Advanced Excel Features for Analysis

- Power Query for data transformation

- Power Pivot for data modeling

- DAX (Data Analysis Expressions) basics

7. Statistical Analysis in Excel

- Correlation and regression analysis

- Hypothesis testing

- Forecasting and trend analysis

8. Data Modeling and Scenario Analysis

- What-if analysis using Goal Seek and Scenario Manager

- Sensitivity analysis

- Monte Carlo simulation basics

9. Automating Analysis with Macros and VBA

- Introduction to macros

- Basic VBA programming for Excel

- Creating user-defined functions

10. Final Project and Case Studies

- Applying learned techniques to real-world datasets

- Presenting findings and insights