Introduction

In today’s corporate environment, staff often face overwhelming amounts of unstructured data stored in advanced ERPs and databases. The critical question is: how can this data be transformed into valuable insights?

The **Advanced Data Analysis Techniques** program introduces hands-on business intelligence (BI), equipping participants to clean, normalize, and interpret large data volumes. This course enables professionals to establish historical relationships, analyze current situations, and forecast strategies, applying BI across operational, tactical, and strategic business decisions.

Designed for versatility, this program caters to all departments and users involved in data cleansing, reporting, analysis, modeling, integration, and automation. Using MS Excel as a BI tool, participants will develop advanced expertise, immediately adding value to their roles and organizations.

Course Content

Data Analysis Tools and Techniques

- Consolidating data from multiple files and sheets.
- Advanced data validation methods using lists, dates, and custom rules.
- Powerful array functions for complex operations.
- Managing cells and ranges: left, right, mid, concatenate, value.
- Advanced formulas: Sumif, Sumifs, Countif, Countifs, and Sumproduct.
- Lookup techniques using Vlookup.
- Slicing dates into day names, weeks, months, and quarters.
- Text-to-columns and trimming techniques.

Mastering Data Reporting

- Creating and customizing pivot tables.
- Using advanced sorting and filtering options.
- Exploring data with drill-down features and dynamic labels.
- Applying conditional formatting to pivot tables.
- Designing reports using get-pivot-data techniques.

Data Modeling and Integration

- Data modeling using spinners, checkboxes, and list boxes.
- Creating scenario managers for dynamic decision-making.
- Integrating Excel with text files, Access, SQL, and the Internet.

Overview of Financial Modelling

- Fundamentals of financial models and flowcharting techniques.
- Key metrics for financial performance and wealth creation.
- Strategic planning and operational analysis for global entities.

Use of Time Series Analysis and Evaluating Investment Portfolios

- Building time series models using histograms and moving averages.
- Mastering exponential smoothing and regression analysis.
- Developing “What-if” scenarios with scenario and goal-seek tools.
- Portfolio management with modern portfolio theory and CAPM.

The Look and Feel

- Advanced visualization techniques for professional presentations.
- Leveraging sparklines, symbols, and unconventional chart styles.
- Formula-driven visualizations and camera tools for dynamic reporting.

Tips and Tricks

- Securing reports, worksheets, and workbooks.
- Using data entry forms, custom lists, and advanced shortcuts.
- Text-to-speech for efficient data review.
- Exploring advanced conditional formatting for data insights.