TECHNOCATION FREELANCING TRAINING INSTITUTE & SOFTWARE HOUSE

Professional Advanced Excel Course Outline

Module 1: Advanced Data Handling in Excel

- Working with Large Datasets Efficiently
- Advanced Sorting and Filtering Techniques
- Using Named Ranges and Dynamic Named Ranges
- Data Validation and Drop-Down Lists

Module 2: Advanced Formulas and Functions

- Logical Functions: `IF()`, `AND()`, `OR()`, `IFERROR()`, `IFS()`
- Lookup Functions: `VLOOKUP()`, `HLOOKUP()`, `XLOOKUP()`, `INDEX-MATCH`
- Text Functions: `LEFT()`, `RIGHT()`, `MID()`, `LEN()`, `TEXT()`, `CONCATENATE()`
- Date & Time Functions: `TODAY()`, `NOW()`, `DATEDIF()`, `EOMONTH()`, `NETWORKDAYS()`
- Array Formulas and Dynamic Arrays (`SORT()`, `FILTER()`, `SEQUENCE()`)

Module 3: Data Analysis with Excel

- Using Pivot Tables for Data Summarization
- Pivot Charts and Slicers for Interactive Reports
- Data Consolidation and Grouping
- What-If Analysis (`Goal Seek`, `Data Tables`, `Scenario Manager`)

Module 4: Advanced Charting and Visualization

- Creating and Customizing Charts (Line, Bar, Pie, Scatter, etc.)
- Using Combo Charts for Advanced Data Representation

- Conditional Formatting with Formulas
- Advanced Dashboard Design with Interactive Elements

Module 5: Power Query & Data Transformation

- Introduction to Power Query
- Importing Data from External Sources (CSV, SQL, Web)
- Data Cleaning and Transformation in Power Query
- Merging and Appending Queries

Module 6: Power Pivot and Data Modeling

- Introduction to Power Pivot and Data Models
- Creating Relationships Between Tables
- Using DAX (Data Analysis Expressions) for Advanced Calculations
- Building Interactive Reports with Power Pivot

Module 7: Automation with Macros and VBA

- Recording and Running Macros
- Introduction to VBA (Visual Basic for Applications)
- Writing Simple VBA Scripts
- Automating Repetitive Tasks in Excel

Module 8: Advanced Excel Security and Protection

- Protecting Worksheets and Workbooks
- Restricting Data Entry with Advanced Data Validation
- Using Passwords and Encryption for Security
- Tracking Changes and Version Control

Final Module: Capstone Project & Certification

- Building an Automated Excel Dashboard
- Implementing a Business Data Analysis Project
- Presenting Findings with Interactive Reports
- Course Completion Certification