# **BRIGHT INFOTECH**



# Advance Excel Course Details

#### 1. Advanced Formulas and Functions

# Logical Functions

- o IF, AND, OR, NOT
- Nested IF Statements

#### • Lookup and Reference Functions

- VLOOKUP, HLOOKUP, INDEX, MATCH
- Using OFFSET and INDIRECT Functions

#### • Statistical Functions

- o AVERAGEIF, COUNTIF, SUMIF
- Statistical Analysis with AVERAGEIFS, COUNTIFS, SUMIFS

#### Array Formulas

- Understanding Array Formulas
- Examples of Array Formulas for Complex Calculations

# 2. Data Analysis Techniques

#### Advanced PivotTables

- o Creating Calculated Fields and Items
- Working with Multiple PivotTables
- Using Power Pivot for Data Analysis

#### Advanced Charting

- Customizing Charts (Secondary Axis, Trendlines)
- Dynamic Charts with Named Ranges
- Using PivotCharts for Interactive Data Analysis

#### • Data Analysis Tools

- Using Data Tables for Sensitivity Analysis
- Scenario Manager for What-If Analysis
- Solver Add-In for Optimization Problems

# 3. Data Cleansing and Transformation

#### Cleaning Data

- Removing Duplicates
- o Text-to-Columns for Data Splitting
- Using TRIM, CLEAN, and other Text Functions

#### Data Validation

o Creating Dynamic Dropdown Lists

- Custom Error Alerts and Input Messages
- Using Data Validation with Formulas

# 4. Advanced Data Modeling

#### • Introduction to Power Query

- Importing and Transforming Data with Power Query
- o Merging Queries and Append Operations

#### • Introduction to Power BI

- Connecting Excel to Power BI
- Creating Interactive Reports and Dashboards

#### 5. Automation with Macros and VBA

## Introduction to VBA (Visual Basic for Applications)

- o Basics of VBA Programming
- Writing and Debugging Macros
- Using Excel Objects (Workbook, Worksheet, Range)

# • Advanced VBA Programming

- Working with User Forms
- Creating Custom Functions (UDFs)
- Automating Complex Tasks with VBA

## 6. Collaboration and Data Security

#### Advanced Data Protection

- o Protecting Cells, Sheets, and Workbooks
- Password Protecting Workbooks

#### • Sharing and Collaboration

- Using SharePoint and OneDrive for Business
- o Co-authoring Workbooks in Real-Time

## 7. Excel Best Practices and Efficiency Tips

#### • Performance Optimization

- Tips for Improving Workbook Performance
- Managing Large Datasets

#### • Excel Productivity Tips

- Advanced Keyboard Shortcuts
- o Customizing the Ribbon and Quick Access Toolbar
- Using Templates for Efficiency

# 8. Real-World Applications and Projects

#### • Case Studies and Practical Examples

- Financial Modeling and Analysis
- Business Intelligence Reporting
- Project Management Dashboards

# • Capstone Project

- o Creating a Comprehensive Analysis Workbook
- o Integrating Advanced Techniques and Tools
- o Presenting Insights and Recommendations