

#### KIDS & TEENS FREELANCING TRAINING INSTITUTE

# **Advanced Excel Course Outline**

#### **Module 1: Introduction to Advanced Excel Features**

- What makes Excel advanced: Powerful tools for data analysis, modeling, and visualization
- Real-life example: Using Excel to track personal finances, sales, or project timelines
- Introduction to functions, formulas, and shortcuts
- Activity: Set up a simple Excel worksheet with basic functions

## **Module 2: Working with Complex Formulas and Functions**

- Learn advanced functions like VLOOKUP, HLOOKUP, INDEX, and MATCH
- Real-life example: Searching for a customer's details in a large dataset
- How to combine functions for more powerful results
- Activity: Use VLOOKUP to find specific data in a table

# **Module 3: Data Cleaning and Transformation**

- Techniques for removing duplicates, handling missing data, and formatting
- Real-life example: Preparing a messy list of contacts for a mailing campaign
- Learn to split, merge, and clean text and numbers
- Activity: Clean and organize raw data (e.g., names, addresses, or dates)

#### **Module 4: Pivot Tables and Pivot Charts**

- What is a pivot table and how does it summarize large data sets?
- Real-life example: Summarizing sales data by region and product
- How to group, filter, and analyze data dynamically
- Activity: Create a pivot table to analyze a set of sales data

# **Module 5: Advanced Data Visualization Techniques**

- How to create and format advanced charts (scatter plots, heat maps, etc.)
- Real-life example: Visualizing product sales across different months
- Introduction to using conditional formatting to highlight trends
- Activity: Create a dynamic chart to visualize sales over time

### **Module 6: Using Macros and VBA for Automation**

- Introduction to recording and running macros to automate repetitive tasks
- Real-life example: Automating monthly report generation
- Basic VBA scripting for advanced Excel automation
- Activity: Write a simple macro to automate data formatting

# **Module 7: Excel for Financial and Statistical Modeling**

- Using Excel to perform financial analysis (e.g., NPV, IRR)
- Real-life example: Analyzing investment returns or budgeting for projects
- Learn statistical functions like regression analysis, ANOVA, and correlation
- Activity: Build a financial model to predict future expenses

#### Module 8: Excel for Career Growth and Data Science

- Careers: Data Analyst, Financial Analyst, Business Analyst, Data Scientist
- How advanced Excel skills are used in business, marketing, and finance
- Real-life example: Excel in data-driven decision-making in businesses
- Activity: Create an interactive dashboard for a sales or project tracking report

#### **Bonus Materials**

- Excel tips and shortcuts cheat sheet
- Practice files with advanced Excel challenges
- Macro examples for automating daily tasks
- Access to Excel resources for further learning
- Certificate of Completion for Advanced Excel