

#### KIDS & TEENS FREELANCING TRAINING INSTITUTE

# **Data Analytics Course Outline**

#### **Module 1: What is Data Analytics?**

- Simple definition: using data to make smart decisions
- How it differs from data analysis (focus on action and strategy)
- Real-life example: Using sales data to decide what to sell next month
- Activity: Spot insights in a small sample of business data

## **Module 2: Types of Data Analytics**

- Descriptive, Diagnostic, Predictive, and Prescriptive Analytics
- Real-life example: Why sales dropped and what to do next
- Compare: Past-focused vs. future-focused analytics
- Activity: Match analytics types to real-world problems

### **Module 3: Data Sources and Data Gathering**

- Internal vs. external data sources
- Collecting data from websites, CRMs, social media, etc.
- Real-life example: Gathering customer feedback for product improvement
- Activity: Identify possible data sources for a small business

# **Module 4: Tools for Data Analytics**

- Excel, Power BI, Tableau, Google Data Studio, Python, R
- When to use what tool (visual vs. coding vs. business-friendly)
- Real-life example: Creating a dashboard to track product sales
- Activity: Try a demo in Power BI or Google Sheets

#### **Module 5: Data Preparation & Cleaning**

- Removing errors, handling missing values, normalizing data
- Importance of clean data for accurate analytics
- Real-life example: Cleaning a student attendance sheet
- Activity: Practice cleaning a messy dataset

#### **Module 6: Performing Analysis & Finding Insights**

- Using formulas, pivot tables, and dashboards
- Turning raw data into meaningful summaries
- Real-life example: Identifying the best-performing store branch
- Activity: Build a mini-report from sample data

#### **Module 7: Telling the Story – Reporting & Dashboards**

- Why storytelling matters in data analytics
- Creating visual dashboards to present findings
- Real-life example: Weekly marketing performance report
- Activity: Design a simple dashboard for a campaign

#### **Module 8: Careers & Future in Data Analytics**

- Roles: Data Analyst, BI Analyst, Data Strategist, Marketing Analyst
- Important skills: communication, Excel, BI tools, SQL
- Real-life example: Companies using analytics to beat the competition
- Activity: Draw your ideal data analytics job + skills map

#### **Bonus Materials**

- Sample data analytics dashboard templates
- Free tools and practice datasets
- Analytics vs. analysis comparison chart
- Real-world project ideas for beginners
- Certificate of Completion for Data Analytics