

# DATA ANALYST COURSE - 6 MONTHS

## MODULE 1: INTRODUCTION TO DATA ANALYSIS

- ✓ Role and responsibilities of a Data Analyst
- ✓ Data life cycle and analytics process
- ✓ Understanding structured vs unstructured data
- ✓ Types of analytics: descriptive, diagnostic, predictive, prescriptive

## MODULE 2: EXCEL FOR DATA ANALYSIS

- ✓ Excel interface, formulas C functions
- ✓ Data cleaning and formatting
- ✓ Conditional formatting C data validation
- ✓ PivotTables C PivotCharts
- ✓ Lookup functions (VLOOKUP, XLOOKUP, INDEX-MATCH)
- ✓ Basic statistical functions in Excel

## MODULE 3: SQL FOR DATA ANALYSIS

- ✓ Introduction to databases C SQL
- ✓ SELECT, WHERE, ORDER BY, GROUP BY
- ✓ Joins (INNER, LEFT, RIGHT, FULL)
- ✓ Aggregate functions (SUM, COUNT, AVG, MIN, MAX)
- ✓ Subqueries C Common Table Expressions (CTEs)
- ✓ Data cleaning and transformation with SQL

## MODULE 4: STATISTICS S DATA UNDERSTANDING

- ✓ Descriptive statistics (mean, median, mode, std dev)
- ✓ Probability basics
- ✓ Hypothesis testing C confidence intervals
- ✓ Correlation vs causation
- ✓ Sampling methods
- ✓ Basic regression analysis

## MODULE 5: DATA VISUALIZATION WITH POWER BI

- ✓ Connecting to different data sources
- ✓ Data modeling and relationships
- ✓ Measures vs calculated columns
- ✓ DAX basics for calculations
- ✓ Creating interactive dashboards
- ✓ Best practices for storytelling with data

## MODULE 6: PYTHON FOR DATA ANALYSIS

- ✓ Python basics: variables, loops, functions
- ✓ Data handling with Pandas
- ✓ Data visualization with Matplotlib C Seaborn
- ✓ Data cleaning C preprocessing
- ✓ Intro to NumPy for numerical operations
- ✓ Simple exploratory data analysis (EDA)

## MODULE 7: DATA CLEANING S PREPARATION

- ✓ Identifying missing values C duplicates
- ✓ Handling outliers
- ✓ Data type conversion
- ✓ Normalization C standardization
- ✓ Feature engineering basics

## MODULE 8: BUSINESS INTELLIGENCE CONCEPTS

**SQL Projects**  
**Data Analysis**



**JOB OREIENTED COURSES**

**100% JOB  
GUARANTEE**

**EXPERIENCED  
FACULTY**

**WEEKLY TEST**

**PROJECT &  
ASSIGNMENT  
WORK**

- ✓ KPI identification
- ✓ Creating performance metrics
- ✓ Dashboards for business decision-making
- ✓ Real-world BI project case study

#### **MODULE 9: ADVANCED ANALYTICS**

- ✓ Time series analysis basics
- ✓ Predictive modeling introduction
- ✓ Clustering C classification overview
- ✓ Using Excel / Python for predictive insights

#### **MODULE 10: PROJECTS S PORTFOLIO DEVELOPMENT**

- ✓ Retail sales analysis dashboard
- ✓ Customer churn analysis
- ✓ Financial performance reporting
- ✓ Social media engagement analysis

#### **MODULE 11: SOFT SKILLS FOR DATA ANALYSTS**

- ✓ Business communication for data storytelling
- ✓ Report writing C presentation skills
- ✓ Critical thinking C problem solving
- ✓ Domain knowledge awareness

#### **MODULE 12: CAREER PREPARATION**

- ✓ Resume building for data analyst roles
- ✓ Mock interviews (technical + HR)
- ✓ LinkedIn portfolio optimization
- ✓ Freelance C remote work opportunities

