

# Complete Data Analysis for Beginners

**Duration: 32 hours**

## Course description

If you aspire to become a data analyst but feel daunted by the technical skills required, this course is tailored for you. This course will equip you with proficiency in Excel, SQL, and Tableau - the essential tools for data analysis - enabling you to transform raw data into actionable insights that drive better business decisions. This comprehensive course covers all the key skills necessary to become a successful data analyst. The course is delivered in an engaging and easy-to-understand format, allowing you to learn at a comfortable pace and confidently apply your skills in the workplace."

## Learning objectives

This course will:

- Enhance your Excel proficiency to effectively manipulate and analyse data.
- Gain expertise in SQL queries to efficiently extract data from databases.
- Craft impressive data visualizations in Tableau to convey insights clearly.

## Audience prerequisites

- Individuals eager to master Data analysis in a short period
- Those aspiring to pursue careers in data analysis, business intelligence, or data visualization.
- Professionals aiming to upskill and enhance their current roles by learning data analysis.
- Aspiring data analysts seeking to develop skills to transform raw data into actionable insights.
- Small business owners looking to leverage data for better decision-making in their companies

## Course Content

### Module 1: Working with Excel

- Getting started with Excel

- Worksheet basics
- Values and Formulas
- Data Formats
- Basic Formula Operations
- Math Functions
- Text Functions
- Logical Functions
- Date and time Functions
- Look up Functions
- Sorting and Filtering
- Advanced Filter
- Formatting Data and Columns
- Charts in Excel
- Pivots Tables and Charts
- Analyse data in Excel
- Advance Charts
- Named Ranges
- Indirect Functions
- Shortcuts
- ChatGPT usage for Excel problems
- Integrate with ChatGPT using API Key
- Macros
- Analytics in Excel
- Infographics

## **Module 2: SQL**

- Introduction to SQL

- Database basics
- Installation and getting started
- Case studies
- Fundamental SQL statements
- Restore and back up
- Selection Commands: Filtering and Ordering
- Alias
- Commands: Aggregate and Group by
- Conditional Statements
- Joins
- Subqueries
- Views and Indexes
- Common Functions
- Performance tuning tips

### **Module 3: Tableau**

- Introduction to Tableau
- Tableau Products
- Installing Tableau Desktop and Public
- Connecting to Data
- Live vs. Extract
- Combine Data from multiple Tables
- Relationships in Tableau
- Joins and its types
- Union in Tableau
- Physical Logical layer and Data models
- Dimensions and Measures

- Discreet and continuous
- Changing the data type
- Various Charts and Usage
- Customising Charts using Marks
- Grouping and Filtering data
- Map visuals
- Calculations and Analytics
- Sets and Parameters
- Dashboard and storytelling
- Save and Share