

Data Analysis Course Syllabus

Module 1: Introduction to Data Analysis

- Understanding Data Analysis and Its Applications
- Data Types and Data Structures
- Overview of Data Analysis Tools

Module 2: Excel for Data Analysis

- Data Cleaning and Transformation
- Advanced Formulas and Functions
- Pivot Tables and Data Visualization

Module 3: SQL for Data Analysis

- Writing Queries and Joins
- Aggregations and Grouping
- Subqueries and Window Functions

Module 4: Mathematics & Statistics for Data Analysis

- Probability and Distribution
- Descriptive & Inferential Statistics
- Hypothesis Testing and Regression

Module 5: Power BI & Data Visualization

- Connecting Data Sources
- Creating Interactive Dashboards
- DAX Functions and Data Modeling

Module 6: Python for Data Analysis

- Data Manipulation with Pandas
- Data Visualization with Matplotlib & Seaborn
- Exploratory Data Analysis (EDA)