## **DATA ANALYSIS**

Are you ready to transform raw data into meaningful insights and drive informed decision-making?

The Data Analysis Course is your gateway to mastering the art and science of extracting valuable information from data. Whether you're a beginner or looking to enhance your skills, this course is designed to empower you with the knowledge and tools needed to navigate the data-driven world.



### **Discover**

What Our School Has to Offer!



# **Course Highlights and Objectives:**

- 1. Comprehensive Curriculum:
  - Learn the fundamentals of data analysis.
  - Dive into statistical concepts and methodologies.
  - Master popular data analysis tools and techniques.

#### 2.Hands-On Experience:

- Gain practical experience through real-world projects.
- Work on industry-relevant datasets to solve complex problems.
- Develop a portfolio showcasing your analytical skills.
- 3. Expert Instructors:
  - Learn from experienced industry professionals.
  - Get personalized guidance and feedback.
  - Stay updated with the latest trends in data analysis.
- 4. Flexible Learning Options:
  - Choose between in-person and online classes.
  - Access course materials at your convenience.
  - Fit your studies around your busy schedule.
- 5. Networking Opportunities:
  - Connect with like-minded peers and professionals.
  - Participate in group projects and collaborative learning.
  - Build a strong professional network in the data analysis community.



# Techzone Academy

### Discover

What Our School Has to Offer!

# Why Choose Our Course:

- Practical Learning: Gain hands-on experience with real-world projects.
- Industry-Relevant Curriculum: Stay ahead with the latest tools and techniques.
- Expert Instructors: Learn from seasoned professionals in the field.
- Networking Opportunities: Connect with a community of likeminded individuals.
- Flexible Learning: Choose the mode of learning that suits your schedule.

# **Who Should Attend:**

- Professionals looking to enhance their data analysis skills.
- Students aspiring to pursue a career in data science or analytics.
- Business professionals seeking to make data-driven decisions.
- Anyone curious about the power of data and analytics.



## Discover

What Our School Has to Offer!



## **DURATION**

### 2 -3 Months

### Prerequisite

### Laptop:

4GB RAM at least with Core 2 Duo/Core i3 and above is good for the program

### LEARNING MODEL



TUTOR-LED PHYSICAL CLASSES



### COLLABORATIVE & INTERACTIVE LEARNING



INDIVIDUAL & GROUP BASED PROJECTS



**VIRTUAL CLASS** 



# **About Syllabus**

This course is designed to introduce students to the fundamental principles and techniques of data analysis. Students will learn how to collect, clean, and analyze data using various tools and methods. The course covers essential concepts in statistics, exploratory data analysis, and visualization. Practical applications of data analysis in real-world scenarios will be emphasized through hands-on exercises and projects.

Understand the importance of data analysis in decision-making processes. Develop proficiency in data collection, cleaning, and manipulation. Learn fundamental statistical concepts and their application in data analysis. Master exploratory data analysis techniques to uncover patterns and trends. Gain practical experience in data visualization using appropriate tools. Apply data analysis skills to solve real-world problems. Develop effective communication of data insights through reports and visualizations.

# Prerequisite

• Basic understanding of mathematics and statistics Familiarity with spreadsheet software (e.g., Microsoft Excel, Google Sheets)

# **Course Duration**

• 2 - 3 months





*What Our School Has to Offer!* 

# **SYLLABUS**

#### Week 1-2: Introduction to Data Analysis

- Overview of data analysis process
- Introduction to data types and data sources
- Introduction to data cleaning and preprocessing

#### Week 5-6: Inferential Statistics

• Hypothesis testing Confidence intervals Correlation and regression analysis

#### Week 3-4: Descriptive Statistics

 Measures of central tendency and variability Frequency distributions and histograms Probability distributions

#### Week 7-8: Exploratory Data Analysis (EDA)

- Data visualization principles
- Graphical representation of data (scatter plots, bar charts, histograms)
- Identifying outliers and anomalies

#### Week 9-10: Data Visualization Tools

- Introduction to data visualization tools (e.g., Matplotlib, Seaborn, Tableau)
- Creating effective visualizations Interactive visualizations and dashboards.



# SYLLABUS

#### Week 11-12: Real-world Applications

 Case studies and practical applications of data analysis Hands-on projects solving realworld problems.

#### Week 13: Final Project

- Students will work on a final data analysis project applying the skills learned throughout the course.
- Presentation of findings and insights.



NOTE: This syllabus is subject to change at the discretion of the instructor. Any modifications will be communicated in advance to the students.

# **ABOUT US**

We are a school for individuals looking to gain technical skills and kickstart a career in Tech. Tech Zone Academy Offers Training, Consultancy, Advisory And All Related Services In All Areas Of

Information Technology Including Computer Hardware And Software, Data

Communication, Telecommunications.

We deliver world-class software training, and tech infrastructure, to software engineers in rural and urban Africa, while deploying their skills to global technology needs.

Take your skills from beginner to industry ready in 6 – 12 months. Neither a degree nor prior tech experience is required.









### Why choose us?

# Apply Now

Limited spots available, apply now at <u>techzone.academy</u>





## Open Enrollment

for students of all backgrounds and abilities. Come visit us to learn more!