



**ICMA**INTERNATIONAL  
lead strategically

Karachi Branch Council 2022-24



Professional Training

# Business & Data Analytics

# Pro-Foundation Level

## Introduction:

BUSINESS & DATA ANALYTICS has now become the most demanding job of the 21st century. It helps businesses optimize their performances and reduce costs by identifying more efficient ways of doing business and by storing large amounts of data.

Businesses now have access to more data than ever before and they need Business and Data Analysts' to help every step of the way, from the initial capturing of data to interpreting the meaning to make the best decisions based on the results.

## Training's Pre-requisite:

1. Participants need to have a good understanding capability of corporate/business data and a creative mindset for data-driven decisions;
2. Participants should carry their own laptops for working. Training is completely practical in an office environment.

## Training's Contents:

Following concepts will be used in projects:

1. Variables
2. Data Types
3. Lists
4. For Loops
5. If, Else, Elif Statements, and Multiple Conditions
6. Dictionaries and Frequency Tables
7. Using Built-in Functions and Creating Own Functions
8. Arguments, Parameters, Debugging, and Multiple Return Statements
9. Returning Multiple Variables and Function Scopes
10. List Comprehensions and Lambda Functions
11. Map and filter
12. Best Practices for Writing Functions
13. Context Managers
14. Decorators
15. Memory and Unicode
16. Algorithms
17. Binary Search
18. Data Structures
19. Recursion and Advanced Data Structures
20. Exception Handling
21. Architecture
22. Parallel Processing
23. Cleaning and Preparing Data
24. Working with Dates and Times
25. Data Analysis

## Who can attend?

- Training is designed for every professional belonging to Finance, Audit, Supply Chain, HR & Admin, Engineering, etc. and it is related to all types of industries;
- Professionals can join all over the world. Training is hybrid i.e., onsite, as well as online via Zoom/Google Classroom.

## Training's Methodology:

1. Project-based hands-on learning;
2. Projects will be performed using real-world Datasets.

## Programme Details

### DAY & DATE:

Launching Date: Sunday, June 26, 2022



### TIMING:

12:00 pm - 02:00 pm (PST)



### VENUE:

Seminar Hall, ICMA Head Office, Gulshan-e-Iqbal, Karachi



Group Joining Link: <https://chat.whatsapp.com/F6d5eEiD0VfC54hr2mnfP>

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## Investment:

Description	Fee (PKR)	CPD: 18 HOURS
ICMA Members/ Qualified/ Students	Rs. 9,800/-	
Others	Rs. 10,800/-	

# Pro-Intermediate Level

## Introduction:

BUSINESS & DATA ANALYTICS has now become the most demanding job of the 21st century. It helps businesses optimize their performances and reduce costs by identifying more efficient ways of doing business and by storing large amounts of data.

Businesses now have access to more data than ever before and they need Business and Data Analysts' to help every step of the way, from the initial capturing of data to interpreting the meaning to make the best decisions based on the results.

## Training's Pre-requisite:

1. PRO-FOUNDATION LEVEL knowledge is required;
2. Participants need to have a good understanding capability of corporate/business data and a creative mindset for data-driven decisions;
3. Participants should carry their own laptops for working. Training is completely practical in an office environment.

## Training's Contents:

Following concepts will be used in projects:

1. Exploring Data with Pandas
2. Data Cleaning
3. Line Graphs and Time Series
4. Scatter Plots and Correlations
5. Bar Plots, Histograms, and Distributions
6. Pandas Visualizations and Grid Charts
7. Relational Plots and Multiple Variables
8. Design for an Audience
9. Storytelling Data Visualization
10. Gestalt Principles and Pre-Attentive Attributes
11. Matplotlib Styles: FiveThirtyEight Case Study

## Who can attend?

- Training is designed for every professional belonging to Finance, Audit, Supply Chain, HR & Admin, Engineering, etc. and it is related to all types of industries;
- Professionals can join all over the world. Training is hybrid i.e., onsite, as well as online via Zoom/Google Classroom.

## Training's Methodology:

1. Project-based hands-on learning;
2. Projects will be performed using real-world Datasets.

12. Data Aggregation
13. Combining Data Using Pandas
14. Transforming Data with Pandas
15. Working with Strings in Pandas
16. Working With Missing and Duplicate Data
17. Regular Expression
18. Working with Missing Data
19. Fuzzy Language in Data Analytics
20. Communicating Results
21. Business Metrics

## Programme Details

### DAY & DATE:

Launching Date: Sunday, June 26, 2022



### TIMING:

02:30 pm - 04:30 pm (PST)



### VENUE:

Seminar Hall, ICMA Head Office, Gulshan-e-Iqbal, Karachi



Group Joining Link: <https://chat.whatsapp.com/I2ckxNBz4Ad6A1cie5T8ER>

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## Investment:

Description	Fee (PKR)
ICMA Members/ Qualified/ Students	Rs. 10,800/-
Others	Rs. 11,800/-

**CPD: 18 HOURS**

# Pro-Advance Level

## Introduction:

BUSINESS & DATA ANALYTICS has now become the most demanding job of the 21st century. It helps businesses optimize their performances and reduce costs by identifying more efficient ways of doing business and by storing large amounts of data.

Businesses now have access to more data than ever before and they need Business and Data Analysts' to help every step of the way, from the initial capturing of data to interpreting the meaning to make the best decisions based on the results.

## Training's Pre-requisite:

1. PRO-INTERMEDIATE LEVEL knowledge is required;
2. Participants need to have a good understanding capability of corporate/business data and a creative mindset for data-driven decisions;
3. Participants should carry their own laptops for working. Training is completely practical in an office environment.

## Training's Contents:

Following concepts will be used in projects:

1. Introduction to the Command Line
2. The Filesystem
3. Modifying the Filesystem
4. Glob Patterns and Wildcards
5. Users and Permissions
6. Getting Help and Reading Documentation
7. File Inspection
8. Text Processing
9. Redirection and Pipelines
10. Standard Streams and File Descriptors
11. Working with Programs
12. Command Line Python Scripting

## Who can attend?

- Training is designed for every professional belonging to Finance, Audit, Supply Chain, HR & Admin, Engineering, etc. and it is related to all types of industries;
- Professionals can join all over the world. Training is hybrid i.e., onsite, as well as online via Zoom/Google Classroom.

## Training's Methodology:

1. Project-based hands-on learning;
2. Projects will be performed using real-world Datasets.

13. Working with Jupyter console
14. Piping and Redirecting Output
15. Data Munging Using the Command Line
16. Data Cleaning and Exploration Using Csvkit
17. Introduction to SQL
18. Summary Statistics
19. Group Summary Statistics
20. Subqueries
21. Joining Data in SQL
22. Intermediate Joins in SQL
23. Building and Organizing Complex Queries
24. Table Relations and Normalization

## Programme Details

### DAY & DATE:

Launching: July, 2022



### VENUE:

Seminar Hall, ICMA Head Office, Gulshan-e-Iqbal, Karachi



Group Joining Link: <https://chat.whatsapp.com/DNJtzvJFnGG7z2mHr4mdo>

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## Investment:

Description	Fee (PKR)
ICMA Members/ Qualified/ Students	Rs. 11,800/-
Others	Rs. 12,800/-

**CPD: 18 HOURS**

# Pro-Expert Level

## Introduction:

BUSINESS & DATA ANALYTICS has now become the most demanding job of the 21st century. It helps businesses optimize their performances and reduce costs by identifying more efficient ways of doing business and by storing large amounts of data.

Businesses now have access to more data than ever before and they need Business and Data Analysts' to help every step of the way, from the initial capturing of data to interpreting the meaning to make the best decisions based on the results.

## Training's Pre-requisite:

1. PRO-ADVANCE LEVEL knowledge is required;
2. Participants need to have a good understanding capability of corporate/business data and a creative mindset for data-driven decisions;
3. Participants should carry their own laptops for working. Training is completely practical in an office environment.

## Training's Contents:

Following concepts will be used in projects:

1. Sampling
2. Variables in Statistics
3. Frequency Distributions
4. Visualizing Frequency Distributions
5. Comparing Frequency Distributions
6. The Mean
7. The Weighted Mean and the Median
8. The Mode
9. Measures of Variability
10. Z-scores
11. Estimating Probabilities
12. Probability Rules
13. Solving Complex Probability Problems

## Who can attend?

- Training is designed for every professional belonging to Finance, Audit, Supply Chain, HR & Admin, Engineering, etc. and it is related to all types of industries;
- Professionals can join all over the world. Training is hybrid i.e., onsite, as well as online via Zoom/Google Classroom.

## Training's Methodology:

1. Project-based hands-on learning;
2. Projects will be performed using real-world Datasets.

14. Permutations and Combinations
15. Conditional Probability: Fundamentals
16. Conditional Probability: Intermediate
17. Bayes Theorem
18. The Naive Bayes Algorithm
19. Significance Testing
20. Chi-Squared Tests
21. Multi-Category Chi-Squared Tests
22. Introduction to Git
23. Git Remotes
24. Git Branches
25. Merge Conflicts

## Programme Details

**DAY & DATE:** Launching: July ,2022



**VENUE:** Seminar Hall, ICMA Head Office, Gulshan-e-Iqbal, Karachi



ICMA Applied D.S & A.I

**Group Joining Link:** <https://chat.whatsapp.com/EaZZzDaTpFE7ATttyUF9H0>



## Investment:

Description	Fee (PKR)
ICMA Members/ Qualified/ Students	Rs. 12,800/-
Others	Rs. 13,800/-

**CPD: 18 HOURS**

With warm regards

**Hakim Ali Jatoi, ACMA**  
Secretary & Treasurer  
Karachi Branch Council

**Mazhar Saleem Shah, FCMA**  
Vice Chairman  
Karachi Branch Council

**Azeem Hussain Siddiqui, FCMA**  
Chairman  
Karachi Branch Council

**For further details & registration, please visit the website or contact:**

Liaison Office, Karachi Branch Council 1st Floor, ST-18 / C, ICMA Pakistan Avenue, Block-6, Gulshan-e-Iqbal, Karachi  
Tel #:021-99243551 (D), 021-99243598 (Ext-213), E-mail: kbc@icmap.com.pk, www.icmainternational.com