



03 Days Workshop on Data Analytics Using R

Workshop Objectives

- To acquire basic understanding of R programming, R packages, and RStudio integrated development environment (IDE)
- To learn R scripting
- To visualize data using R plotting
- To perform data analytics

Workshop Outcomes

- The participant would be able to download and use R
- The participant would be able to write basic to moderately advance scripts in R
- The participants would be able to visualize data and thereby make decisions
- The participants would be able to interpret and analyze data

Workshop Content

Day 01

- Setting up **R** environment
 - Introduction to **R**
 - Installation of **R** and **RStudio**
 - o Installation and working with **R Packages** (CRAN)
- **R** fundamentals
 - o Console window and the script editor
 - An overview of the arithmetic, relational and logical operators
 - o Working with variables
 - Data structures
 - o Decisions and loops
 - o Functions
- Importing data into **RStudio**
 - From computer hard disk
 - From websites
- Exporting data

Day 02

- Data Cleaning (dplyr and tidyr)
 - Reading frames and tables
 - o Data manipulation
 - Data visualization
 - Base plot
 - o Lattice plot
 - o ggplot2

Data analysis
Descriptive statistic
Day 03
• Data analytics
• Overview, and applications
• Graph-based analytics
• Statistical methods
 Analysis with machine learning

Program Fee

With Lodging	PKR 18,000
Without Lodging	PKR 12,000

Payment Procedure:

Payment will be accepted in form of Demand Draft/Pay Order in favor of "Sukkur IBA University Executive Development Center"

Facilitators Profile

Dr. Abdul Baseer Buriro

Assistant Professor (Electrical Engineering)

Dr. Buriro is experienced at analyzing and predicting neuroimaging (electroencephalogram, EEG) data and has been working with SIBAU for more than 10 years.

He has been a senior engineer (planning) at PTCL H/Qs Islamabad and engineer at different satellite earth stations of PTCL.