

Data Analytics with R – Introduction

Basic 3-Hour Online Training Module

Training Overview

Title: Data Analytics with R – Introduction

Type: Introductory Workshop

Platform: Online (Microsoft Teams)

Date: 20 February 2026 (Friday)

Time: 14:00 pm – 17:00 pm

Trainer: [Prof. Dr. Samir K.C.](#)

Fee: NPR 500 (inclusive of VAT) | Online Certificate and Resources will be provided

[Apply Now](#)

Link to apply:

https://docs.google.com/forms/d/1330cfQmxRIZIUt9LQGKUL_IuK4AiILF59Org4weh8mQ/edit

Professor [Samir KC](#), PhD, is a Senior Research Scholar at the Multidimensional Demographic Modeling (MDM) Research Group at IIASA/WIC, Austria, Professor and Leader at ADRI, Shanghai University, and CEO of PSRHUB, Nepal.

He will be joined by Jibesh Acharya, MSc (Statistics), and/or Divya Shakya, MSc (Statistics), both Statisticians at PSRHUB in Nepal, who will provide necessary support throughout the workshop.

Participants: Beginners and anyone interested in learning R (registration via Google Form)

Spots: Limited (30–50 participants)

Why This Training?

R is a powerful, flexible, and open-source tool widely used for data analysis, visualization, and statistical modelling across research, policy, and industry. This workshop is designed to introduce beginners to the world of R and ease the learning phase by providing a clear pathway.

Learning Objectives

By the end of this training, participants will be able to:

- Understand the fundamentals of R programming
- Navigate the R and R-Studio environment confidently

- Perform basic data handling, manipulation, and cleaning
- Create simple plots and charts for data visualization
- Apply basic statistical analysis to real-world data
- Understand how R-markdown and R-Shiny can be used for reporting and visualization

Training Structure & Methodology

- Introductory lecture using slides (What is R, why it matters, and what can be done with it)
- Live demonstration and guided walkthroughs
- Hands-on practical session (30-45 minutes)
- Interactive Q&A via comments (moderated)

Participants are required to have R and RStudio pre-installed before the workshop.

Key Contents

- 1. Introduction to R**
 - a. What is R? Development and global use
 - b. How R differs from Excel and SPSS
 - c. Why R is unique and powerful
- 2. Getting Started with R**
 - a. Installing R and RStudio
 - b. Understanding the R environment and interface
- 3. Working in R**
 - a. Creating projects and R scripts
 - b. Objects in R and basic operations (numbers, logical values, vectors, matrices)
- 4. Packages and Libraries**
 - a. Base R vs external packages
 - b. Installing and loading libraries
 - c. Getting help in R (including use of AI tools)
- 5. Data Handling Basics**
 - a. Reading and saving data
 - b. Basic data manipulation and exploration
 - c. Simple analysis and plotting workflow
- 6. Visualization & Reporting Concepts**
 - a. Basic plots and charts
 - b. Introduction to R Markdown (QMD – concept)

- c. Overview of R Shiny for interactive visualization
- 7. **The Way Forward**
 - a. Learning pathways and advanced/specialized R courses
 - b. Participant feedback and future course planning

Materials & Resources

Pre-workshop document: shared before the session

Presentation slides and live demonstrations: during the training

Recording: Will be shared after the completion of the training

Registration & Cost

Fee: NPR 500 (inclusive of VAT) | Online Certificate and Resources will be provided

Policy: No cancellation or refund

Platform: Microsoft Teams (link shared after registration)

What Will You Gain?

- A clear understanding of what R is and what it can do
- Confidence to begin working with R independently
- A structured roadmap for further learning in data analytics using R

NOTE: This workshop is an entry point to an open and evolving world of R.