Online
Three Day Training Program on
Statistical Techniques for Business Forecasting using R (BF-07)

During March 27-29, 2025

Conducted by:
SQC & OR Unit, Mumbai
Indian Statistical Institute,
Room No 320, 3rd Floor Old C G O Building
101 Maharshi Karve Road, Mumbai 400 020:
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Introduction:

Forecasting is the process of making predictions of the future based on past and present data and analysis of trends. Today it is getting more attention due to the availability of data and computing facility. Quantitative methods are getting importance than that of Qualitative methods. However, the predictability of an event or a quantity depends on several factors such as - understanding factors that affect it, availability of historical data, pattern, and knowledge of any future events that might impact it. Hence, it requires analysis of data using statistical techniques. The program is planned to impart basic skill of forecasting using appropriate statistical techniques.

About the Institute:

The Indian Statistical Institute is a quasi-central organization under the Ministry of Statistics & Programme Implementation. It is declared by an Act of Parliament as an Institute of National Importance. Over the years the Institute has grown as a multi-disciplinary organization. It functions as a university empowered to award degrees upto Ph.D.; as a corporation in undertaking large scale projects; as a Firm of Consultants to industries to improve Quality, Reliability and Efficiency and as a Meeting place

Programme Objectives:

This program is designed to equip professionals with the knowledge on various time series and regression methods for developing forecasting models

Program Benefits:

On completion of the course, the participants will be able to
- Develop forecasting models using time series and regression techniques
- Interpret and evaluate various models for forecasting
- Hands on experience on the usage of open-source packages like R and R Studio

Course Contents:

- Descriptive statistics
- Probability and normal distribution
- Inferential Statistics
- Introduction to time series
- Understanding of trends and patterns in time series data
- Time series decomposition
- Stationary series and unit root tests
- Importance of differencing
- Exponential smoothing and Holt Winter methods
- Linear regression
- Auto correlation (ACF) and partial auto correlation functions (PACF)
- Box Jenkins methods (ARIMA models)
- Dynamic Regression and Intervention Models
- Introduction to Modeling Volatility in Time Series.

Course Prerequisite:
The program will be workshop type and will be covered using R/ R-studio. Pre course material will be sent to all the participants covering installation of R, R-studio and exercises. It is expected that the participant will install and work on R-studio before attending the session.

Target Participants:
- Professionals working in analytics field or interested in usage of various methods of forecasting
- Elementary knowledge on statistical techniques is preferable

Faculty:
Experienced faculties of SQC & OR Division having in-depth experience in data analysis and its application in various industries.

Course fee:
Rs. 5000 + 18 % Tax as per Govt. Rules. Total fees: **Rs.5900/-** (Five thousand Nine hundred) per participant. Fees can be paid only through **internet banking**. The bank details for making on-line payment are given below:

Bank Name:	STATE BANK OF INDIA
Account Name:	Indian Statistical Institute,
Account Type:	**Current**
Bank Account No:	10996682279
Branch:	MUMBAI MAIN BRANCH
Bank Address:	Mumbai Samachar Marg, Horniman Circle, Fort. Mumbai 400023
IFSC code:	SBIN0000300

Note: **Fees Will be fully refunded if ISI cancels the program only.**

Registration:
Please fill the online registration form available at site.

Registrations are purely on a '**first come, first allotted' basis**. Participants must enquire (mobile no. 9969928144 / 9869242240) for the seat availability before making the payments. Registration will be confirmed only on receipt of **filled-in nomination form** available at site through the given link and **course fees**.

Important Dates:
Last date of submission of nominations**: March 21, 2025**
Program dates: **March 27-29, 2025**
Timing: **9:30 hrs - 17:30 hrs**

Venue: Online
The program will use either **Microsoft Teams or Zoom** for online classes.