

INDIAN STATISTICAL INSTITUTE SQC & OR Unit Bangalore



Announces

3 Day Workshop on

Statistical Methods for Research

20 - 22 August, 2025



Indian Statistical Institute, 8th Mile, Mysore Road, Bangalore - 560 059, INDIA

Phone: +91 8811940517 / +91 9477049150

Web: www.isibang.ac.in

E-mail: jagadish@isibang.ac.in / moutushi@isibang.ac.in

INTRODUCTION

Statistical methods in research work play a fundamental role in design, analysis and interpretation of research studies. These methods involve the use of mathematical and statistical methods to collect, organize, summarize, analyze, and draw meaningful conclusion from the data. Statistical methods are essential to making informed decisions, drawing reliable inferences, and ensuring the validity and generalizability of research findings. To keep pace with the recent advancements in any discipline, one has to be well versed with the latest developments in statistical analysis. Keeping in view the importance of statistics in research work, workshop aims to provide knowledge on statistical methods to the PG/Research scholars/ Faculties and Industry Professionals. This workshop is planned for the PG/Research scholar/Faculties/Industry Professionals who are pursuing their research in various Universities / Colleges / Research Organizations etc.

PROGRAM HIGHLIGHTS

- This program aims to discuss the basics of research methodology,
 various statistical methods and their importance in research.
- Usage of various statistical tools and techniques required for data analysis and inference.
- Usage of software packages like R-studio and Excel in data analysis.
- · Hands-on Session in R with real-life data.

VENUE AND TIMINGS:

 The Sessions shall be held at Indian Statistical Institute, Bangalore Campus (Classroom Session)

Date: 20-22, August 2025 (3 days)

Time: 10.00 hrs to 17:30 hrs,

FACULTIES:

Faculties of SQC & OR Unit, Indian Statistical Institute Bangalore

TARGET PARTICIPANTS((#Seats: 30 on first-cum-first-serve basis):

UG/PG Students, Research Scholars, Faculties, and Industry Personnel of all disciplines from Universities/Colleges / Research Organizations are eligible to apply.

TOPICS COVERED:

Day 1: 20st August, 2025

- Introduction to Research & its Objectives.
- Research Methodology
- Introduction to Statistical Methods
- Overview of R and R Studio
- Basic Statistical Functions & Data Visualization
- Descriptive Statistics
- Hands-on Session in R

Day 2: 21st August, 2025

- Probability Distributions and its Applications
- Inferential Statistics (like Hypothesis Testing: t-tests, and ANOVA)
- Non-parametric Tests
- Hands-on Session in R

Day 3: 22rd August, 2025

- Correlation and Simple Regression Analysis
- Multiple Linear Regression
- Logistics Regression
- Hands-on Session in R

PARTICIPATION FEE:

UG/PG Students	Rs. 1000/- + GST @18%
Research Scholars/ Faculties	Rs. 2000/- + GST @18%
Industry Delegates	Rs. 3000/- + GST @18%

NOTE:

- 1. Total fees (+ Taxes) to be paid in full along with the application (Refer to Page 2 of the Registration Form for details).
- 2. The course fee covers Tea / Coffee and Lunch during the workshop
- 3. For information on Registration, refer to Page 2 of the Registration Form.
- 4. Mode of Payment: Through bank transfer only.
- **5.** Last Date of Registration (with payment): **1st August 2025** [on first-cum-first-serve basis]

WORKSHOP COORDINATOR:

Dr. Jagadish

Coordinator

SQC & OR Unit, ISI Bangalore

Mobile: +91-8811940517

Email: jagadish@isibang.a.cin_

Dr. Moutushi Chatterjee

Coordinator

SQC & OR Unit, ISI Bangalore

Mobile: +91-9477049150

Email-id: moutushi@isibang.ac.in

ACCOMODATION (For outstation participants)

Limited Guest House facilities are available on ISI Campus (Refer http://www.isibang.ac.in/guesthouse.htm). Participants who wish to avail the same on extra payment can directly contact the In-Charge, Guest House (guesthouse@isibang.ac.in, kalyan@isibang.ac.in, 9449085236) for the same after registration. Accommodation will be provided based on availability of rooms in the guesthouse.

INDIAN STATISTICAL INSTITUTE

- The Indian Statistical Institute is a quasi-central organization under the Ministry of Statistics and Program 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 up to D.Sc..; 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 of Scientists, Economists and Literary figures from all parts of the world.
- * For further details, please visit website www.isibang.ac.in / www.isical.ac.in

Role & Function of SQC & OR DIVISION, ISI

- The pioneer and leader in blending statistical theory with practice and institutionalizing the continuous improvement process into a sustaining system.
- To strengthen national economy through continual search for excellence in Quality.
- To disseminate the basic concepts and techniques for Quality Improvement by organizing Training programs, Workshops and In-house programs.
- To develop highly skilled professionals capable of self actualization.
- To help industries in their efforts to cope up with the growing challenge of global competition through Implementation of quality system based on ISO-9000 series, ISO-14000, TS-16949-2002 standards, Lean Six Sigma & World Class Manufacturing.
- ❖ To continually develop and improve methodologies through applied research efforts to attain International Standards in services provided.
- ❖ To provide solutions to the problems pertaining to the entire gamut of complex Business Decision Processes with the aid of Statistics and Operations Research.