Centre for Statistics
SRM Institute of Science and Technology
Workshop on Basic Statistics with R Programming

About the Course

This workshop will enable the participants to perform basic analyses of their own data, and to interpret, predict, communicate and publish the results.

The main focus of the course will be on both descriptive and inferential statistical techniques, with emphasis on selection of appropriate application and interpretation of results.

Course Content

- Descriptive Statistics
    - Types of data, Measures of Central tendency, Measures of dispersion

- Sampling Methods
    - Overview and types of sampling techniques
    - Sample size determination.

- Statistical Inference I
    - Estimation of mean and proportions,
    - Confidence interval, P- Value and its importance

- Statistical Inference II
    - Test of hypothesis

- ANOVA and Chi-square analysis

- Correlation and Regression analysis

Course Schedule

Day	1st Session 2.00pm to 2.45 pm	2nd Session 3.00 pm to 3.45 pm	3rd Session 4.00 pm to 4.45 pm (practical session)
Day 1	Introduction to statistics	Descriptive data analysis	Introduction to R programming
Day 2	Types of sampling techniques	Sample size determination	Descriptive data analysis in R
Day 3	Inferential Statistical Analysis - Introduction	Confidence interval, P-value and its importance	Graphical representation and visualization in R
Day 4	Test of Hypothesis - 1	Test of Hypothesis - 2	Mean test – single and two sample
Day 5	ANOVA	Chi-Square analysis	ANOVA and Chi –square practical
Day 6	Correlation Analysis	Regression Analysis	Correlation and regression practical

Online interactive sessions will be held in "Zoom"

Course Date

14th Sep 2020 – 19th Sep 2020

Venue

University Building, 13th floor, Seminar Hall I

Participant Fee

1000 INR/Person

Co-ordinator

Dr. M. Bagavandas (Head)

Course Instructors

Dr. Dhivya. K

Mr. G. Saravanan

No of Participants: 26