

**Centre for Statistics**  
**SRM Institute of Science and Technology**

**Workshop on Basic Statistics using Statistical Software**

**About the Course**

This workshop will enable the participants to perform basic analysis 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**

<b>Day</b>	<b>1<sup>st</sup> Session 1.00pm to 1.45 pm</b>	<b>2<sup>nd</sup> Session 2.00 pm to 2.45 pm</b>	<b>3<sup>rd</sup> Session 3.00 pm to 3.45 pm (practical session)</b>
Day 1	Introduction to statistics	Descriptive data analysis	Introduction to SPSS
Day 2	Types of sampling techniques	Sample size determination	Descriptive data analysis in SPSS
Day 3	Inferential Statistical Analysis - Introduction	Confidence interval, P-value and its importance	Graphical representation and visualization in SPSS
Day 4	Test of Hypothesis - 1	Test of Hypothesis - 2	Mean test – single and two sample
Day 5	ANOVA and Chi –square & practical	Correlation Analysis	Regression Analysis in SPSS

**Course Date**

01<sup>st</sup> February 2022 – 05<sup>th</sup> February 2022

**Participant Fee**

1000 INR/Person

**Co-ordinator**

Dr. M. Bagavandas (Head)

**Course Instructors**

Mr. A. Ramajayam

Mr. V. Raghul Gandhi

**No of Participants: 10**