



Center for Professional Development
Sri Guru Gobind Singh College of Commerce
(University of Delhi)



offers

INSTRUCTOR LED LIVE ONLINE CERTIFICATE COURSE

Data Analysis using

**13 August - 29 August, 2020
(Monday - Saturday)**

15 Sessions of 2 hours each

Timings: 4:00 - 6:00 PM

Platform: Google Meet

REGISTRATION LINK

https://docs.google.com/forms/d/e/1FAIpQLScJgrR8CEi8YIN7b5GoejTPLcdyI4oEJZwAGHlGrj-_aLNuGQ/viewform

COURSE FEE*

₹ 500

PAYMENT LINK

<https://www.sggsc.ac.in/payments>

Limited Seats! First Come, First Served

Certificate will be provided after successful completion of the course

90% attendance is required for completion

***FIRST 10 PARTICIPANTS WILL GET RS.100 CASHBACK**

CO-ORDINATORS

Dr. Rekha Sharma
Ms. Vandana Kalra

PATRON

Dr. J.B. Singh
(Principal)

FOR QUERIES, CONTACT

Ms. Sugandha Gupta(9868595311), Dr. Megha Ummat(9911156446)
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Course Content

DAY 1

Fundamentals of R, Installing R studio, Variables: Naming, Assigning values, Finding and removing variables, Expressions, Objects, Symbols, Special Values
Operators: Arithmetic, Relational, Logical, Assignment, First R program

DAY 2

Selection statements: if statement, switch statement
Control statements: for loop, while loop, repeat loop

DAY 3

Functions: In Built Functions (Mathematical, Trigonometric, Logarithmic, Date and Time, String), User defined functions

DAY 4

Data Types in R
Vectors: Class of a Vector, Elements of a Vector, Accessing Vector elements, Functions for Vectors.
Arrays: Creating an Array, Accessing Array elements, Functions for Arrays.

DAY 5

Matrices: Creating a Matrix, Accessing Matrix elements, Functions for Matrices
List: Creating a List, Accessing List Elements, Functions for Lists

DAY 6&7

Factors: Creating a Factor, Accessing Factors, Functions for Factors
DataFrames: Creating a Data Frame, Accessing Data from DataFrame, Functions for DataFrame

DAY 8

Packages: What is a Package?, Installation of a Package, Update, Remove and Check installed packages, Loading and Unloading a Package.

DAY 9&10

Data Analysis: Handling Missing Data, Import and Export of Data, Data Reshaping through Melting and Casting, Data management using apply functions.

DAY 11&12

Statistics in R: Descriptive Statistics (Measures of Central Tendency, Variability, Quantile, Skewness and Kurtosis), Creating Frequency and Contingency Tables, Correlations.

DAY 13&14

Data Visualization: Pie Chart, Bar Chart, Histogram, Line Chart, Boxplot, Scatter Plot.

DAY 15

QUIZ and Practice PROJECT