



# R Coding Course

A STATISTICAL CODING LANGUAGE

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# Course Plan

## For the beginners

- Introduction of R coding
- How to install R console & R studio

- How to input data
- How to get output or print()
- Data types

- Creating-

- Vector
- Matrix
- List
- Array
- Factors
- Missing object

- Explicit Coercion
- Arithmetic operations
- Arithmetic operation in vector
- Matrix operation in vector
- Binary Formats
- Subsetting of R object
- Removing NA values

- Importing Data from-

- Text
- Excell
- SPSS
- CSV

- File Connection

- Control functions

- If-else
- For loops
- While loops
- Repeat loops

- Use of break and continue functions

- Functions

- Creating functions
- Argument matching

- Use of dput() & dump() functions
- Dates and Times in R coding
- Operations on date & time

- Scoping rules of R
- Lexical & dynamic scoping
- Optimization & Visualization
- Use of apply(), lapply(), sapply(), tapply(), mapply(), split(), debugging()
- Profiling in R

- Simulation-

- Generating random numbers
- Random sampling
- Simulating linear model

- Probability calculations

**\*\*Some basic feature (statistical measure) in R coding\*\***

**Best of Luck**