



**CHRIST**  
COLLEGE (AUTONOMOUS)  
IRINJALAKUDA, KERALA  
Reaccredited by NAAC with 'A' grade

## DEPARTMENT OF STATISTICS CERTIFICATE COURSE DETAILS

NAME OF THE COURSE

STATISTICAL ANALYSIS  
USING R

COURSE CODE

CPCC02

OFFERED BY

Department of Statistics

COURSE COORDINATOR

GEETHU GOPINATH

### COURSE DETAILS

R is a programming language and a free software environment for statistical computing and graphics supported by R. This course is intended for degree students and it is offered through both online and offline mode. On successful completion students will receive a completion certificate with appropriate grade. A laptop / computer with internet connectivity is must for the course completion.

### ABOUT COLLEGE

Chirst College (Autonomous), Irinjalakuda established in the year 1956 by CMI fathers has always been a place where young generations are moulded towards a bright future. College has excellent infrastructure, with state of the art laboratories, seminar rooms and lecture halls. The campus is Wi-Fi enabled. Presently Collge is house for 4500+ students, 200 teaching staff and 45 supporting staff. The strength of the College lies in its hardworking and tech savvy teachers who are eager to involve in all matters of students. The lush green campus with gardens and open gym is moving towards the next phase on education both offline and online.

### WHAT IS THE COURSE?

The goal of this course is primarily enabling students to efficiently use the R programming language with the emphasis on problem solving and practical application. The R programming language is used for data analysis, data manipulation, graphics, statistical computing and statistical analysis. In short, R helps you analyze data sets beyond basic Excel file analysis.



## SCOPE OF THE COURSE

- This course is ideal for those who are looking for a career in data science, business analytics, machine learning etc.
- Students wishing to take an advanced degree get an in-depth knowledge in statistical analysis.
- Helps students to develop skill in programming area

## LEARNING OUTCOMES

- Understand the basics in R programming
- Import, review, manipulate and summarize datasets in R
- Create and edit visualizations with R

## COURSE OUTLINE

Self-paced programme.

Duration of the course is 3 months. Provides practical sessions.

## COURSE MODULES

- Introduction to R
- Basics of R
- Methods of data input
- Data accessing and indexing
- Descriptive statistics
- Graphics in R
- Skewness and kurtosis
- Plots to check normality
- Inferential Statistics
- ANOVA

## Importance of R Programming



**Contact: [geethugo@gmail.com](mailto:geethugo@gmail.com)**

**VALUE ADDED - CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA**