

# Statistics with R Programming - Course Structure

Day	Resource Person	Morning Session	After noon session
24-06-2019	<b>Dr. V. V. Hara Gopal</b> Prof. of Statistics, Dept. of Mathematics BITS Pilani, Hyderabad	Introduction, various features of R, introduction to R Studio, the statistical packages, familiarity with different data types and functions, R Studio like code editor, visualization and debugging tools, learn about R-bind	R-Packages, Matrices and Vectors, reading data from external files, Generating plots <b>Practical session of day 1.</b>
25-06-2019		Understanding what is Simple Linear Regression, the various equations of Line, Slope, Y-Intercept Regression Line, deploying analysis using Regression, the least square criterion, interpreting the results, standard error to estimate and measure of variation.	Scatter Plots, Two variable Relationship, Simple Linear Regression analysis, Line of best fit, Deep understanding of the measure of variation, the concept of co-efficient of determination, F-Test, the test statistic with an F-distribution, advanced regression in R, prediction linear regression.
26-06-2019	<b>Mr.T.Venkateswara Rao</b> Former Adviser of APSSDC	Connecting to various databases from the R environment, deploying the ODBC tables for reading the data, visualization of the performance of the algorithm using Confusion Matrix.	Creating an integrated environment for deploying R on Hadoop platform, working with R Hadoop, RMR package and R Hadoop Integrated Programming Environment, R programming for Map Reduce jobs and Hadoop execution.
27-06-2019	<b>Dr. S.Sagar Imambi</b> Professor , KL University	Advanced Statistical Modelling using R for people with Non Statistics Background Parametric and Non Parametric tests, Chi Square test, ANOVA, Univariate Analysis, BIVARIATE Analysis, Correlation,	Distributions, hypothesis testing Regression Models, Logistic Regression Significance Tests, Chi-square, ANOVA, MANOVA, Correlation, OLS Regression, Logistic Regression, Factor Analysis & Cluster Analysis
28-06-2019	<b>Dr. N. B. Venkateswarlu</b> M.Tech (IIT Kanpur), Ph.D (BITS, Pilani)  Professor, G.V.P College of Engineering for Women	<b>Logistic Regression Case Study</b> <b>Multiple Regression Case Study</b>	Developing any project according to company requirements
29-06-2019		Basic Data Mining using R : Introduction, Data Processing, Exploratory Data Analysis, Statistical Approaches to Estimation and Prediction, K nearest Neighbour Algorithm, Decision Trees, Hierarchical And k Means Clustering, Association Rules, Model Evaluation Techniques.	<b>Practical session and valedictory function</b>