

LAB SCHEDULE PLAN



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956. Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20CB4L01	COMPUTATIONAL STATISTICS LAB	IV	CSB	3 Periods	2023-2024	03-01-2024

COURSE OUTCOMES

1	Study and use basic fundamental concepts to solve the real world problem using R programming language.
2	Design and implement the solution using scalar, vectors, matrices and statistical problems in R program.
3	Design and implement the program using data frame, list to provide the solution for various problem.
4	Study about factors and tables and to solve statistical problems.
5	Minimize and maximize functions, simulation and visualization and statistical analysis using R.

Experiment Number	Experiment	Contact Hours
1	Installing R and RStudio Basic functionality of R, variable, data types in R	3
2	a) Implement R script to show the usage of various operators available in R language. b) Implement R script to read person's age from keyboard and display whether he is eligible for voting or not. c) Implement R script to find biggest number between two numbers. d) Implement R script to check the given year is leap year or not.	3
3	a) Implement R Script to create a list. b) Implement R Script to access elements in the list. c) Implement R Script to merge two or more lists. Implement R Script to perform matrix operation	3
	Implement R script to perform following operations: a) various operations on vectors b) Finding the sum and average of given numbers using arrays. c) To display elements of list in reverse order	3

LAB SCHEDULE PLAN

SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956, Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharamapuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)



Proposed
No. of Sessions

5	a) Implement R Script to perform various operations on matrices b) Implement R Script to extract the data from dataframes.	3
6	a) Write an R script to find basic descriptive statistics using summary, str, quartile function on mtcars & cars datasets. b) Write an R script to find subset of dataset by using subset (), aggregate () functions on iris dataset	3
7	a) Implement R Script to create a Pie chart, Bar Chart, scatter plot and Histogram (Introduction to ggplot2 graphics) b) Implement R Script to perform mean, median, mode, range, summary, variance, standard deviation operations.	3
8	Implement R Script to perform Normal, Binomial distributions.	3
CUMULATIVE PROPOSED PERIODS		24

	Name	Signature with Date
I. Faculty	Mr. M.N.V.L. Naryaana	
II. Module Coordinator	Dr. RVVSV Prasad	
III. Programme Coordinator	Dr. RVVSV Prasad	

Principal