



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
23CD5L01	MACHINE LEARNING	V	DS-A	3 Periods	2025-2026	09-07-25
COURSE OBJECTIVE						
1	To learn about computing central tendency measures and Data preprocessing techniques					
2	To learn about classification and regression algorithms					
3	To apply different clustering algorithms for a problem					
4	Implement classification algorithms such as Naïve Bayes, SVM, Multi-Layer Perceptron					
3	Apply clustering algorithms such as K-Means, Fuzzy C-Means and Expectation Maximization					
Experiment Number	Experiment					Contact Hours
1	Compute Central Tendency Measures: Mean, Median, Mode Measure of Dispersion: Variance, Standard Deviation.					3
2	Apply the following Pre-processing techniques for a given dataset. a. Attribute selection b. Handling Missing Values c. Discretization d. Elimination of Outliers					2
3	Apply KNN algorithm for Classification and Regression					2
4	Demonstrate Decision Tree Algorithm for a Classification problem and perform parameter tuning for better results					3
5	Demonstrate Decision Tree Algorithm for a Regression problem					2
6	Apply Random Forest Algorithm for Classification and Regression					2
7	Demonstrate Naïve Bayes Classification Algorithm.					2
8	Apply Support Vector Machine Algorithm for Classification					2
9	Demonstrate Simple Linear Regression Algorithm for a Regression problem					3



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10	Apply Logistic Regression Algorithm for a Classification problem	3
11	Demonstrate Multi-layer Perceptron Algorithm for a Classification problem	2
12	Implement the K-Means Algorithm and apply it to the data you selected. Evaluate performance by measuring the sum of the Euclidean distance of each example from its class center. Test the performance of the algorithm as a function of the parameters K.	3
13	Demonstrate the use of Fuzzy C-Means Clustering	2
14	Demonstrate the use of Expectation Maximization based Clustering Algorithm	2
CUMULATIVE PROPOSED PERIODS		33
	Name	Signature with Date
i. Faculty	Mr. K V V Nagendra babu	
ii. Module Coordinator	Mr. K V V Nagendra babu	
iii. Programme Coordinator	Dr. RVVSV Prasad	

Principal