CS106: Basics of Machine Learning & Applications	L	T	P	NIL
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Course Objective: The objective of the course is to develop the skill & knowledge of Machine Learning and understand the knowhow and can function either as an entrepreneur or can take up jobs in the data science.

S. No	Course Outcomes (CO)
CO1	Descibe the basic concepts of machine learning.
CO2	learn Preprocessing of data.
CO3	Apply supervised algorithms on Real-world data.
CO4	Apply unsupervised algorithms on Real-world data.

S. No	Contents	Contact Hours
UNIT 1	Introduction to Machine Learning: Machine Learning, Supervised vs Unsupervised Learning, Classification, Regression, Clustering.	4
UNIT 2	Data Pre-processing: Introduction, Working with CSV files, Handling missing values and outliers, Feature scaling and normalization, Encoding categorical variables, Splitting data into training and testing sets, Cross-validation techniques for model evaluation.	4
UNIT 3	SkLearn for Supervised Learning: Model Initialization, Model Training, Model prediction, Model evaluation, Model selection, Model Persistence, Feature selection, performance metrics, Ensemble methods, House-price prediction, Sentiment Analysis.	4
UNIT 4	SkLearn for Unupervised Learning: Clustering Algorithms, Anomaly Detection, Document Clustering.	2
Total		14