

Course Type	Course Code	Name of Course	L	T	P	Credit
DP	NMCC505	Fundamentals of Machine Learning Practical	0	0	3	1.5`

Course Objective
To impart knowledge of how to apply software to solve real life problem using Machine Learning tools
Learning Outcomes
Students will learn how to implement Machine Learning techniques using R/Python.

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1.	Applications of Regression analysis, Logistics Regression, Decision Tree and SVM in Data Analytics.	09	To learn implementation of different regression and classification techniques
2.	Application of Random forest, bagging and boosting methods	06	To learn implementation of different ensemble methods
3.	Applications of Non-linear Regression analysis -knn methods	06	To learn implementation of lazy algorithms in regression and classification problems
4.	Applications of PCA, LDA, ICA in Data Analytics	07	To learn implementation of different dimension reduction techniques
5.	Applications of Unsupervised Learning in Data Analytics-different clustering methods	07	To learn implementation of different clustering methods
6.	Applications of Neural Network and Deep learning in Data Analytics.	07	To learn implementation of feed-forward neural network in regression and classification problems
	Total	42	

Text Books:

1. Sebastian Raschka and Vahid Mirjalili, Python Machine Learning, Packt, 2017

Reference Books:

1. P. Muller and L Massaron, Machine Learning (in Python and R), Jhon Wiley & Sons, 2016