

1.	Title of the course	Intelligent Systems Laboratory
2.	Course number	CS540P
3.	Structure of credits (L-T-P-C)	0-0-3-3
4.	New course/modification to	Modified with CS519P/INTELLIGENT SYSTEMS LABORATORY
5.	To be offered by	Computer Science and Engineering
6.	Prerequisite	CS519L/MACHINE LEARNING
7.	Course Objective(s): To practice key concepts in artificial intelligence and machine learning methods.	
8.	Course Content: Exercises on artificial intelligence methods including state space search, planning domain definition language and Prolog; Exercises on supervised learning methods including nonparametric and parametric methods, model selection, error characterization; Exercises on unsupervised learning methods including clustering and high-dimensional visualization;	
9.	Textbook(s): 1. Aurelien G, Hands-on machine learning with scikit-learn & Tensorflow, O' Reilly, 1st Edition (2018). 2. Ivan B, PROLOG: Programming for Artificial Intelligence, Pearson, 3rd Edition (2002).	
10.	Reference(s): 1. Sebastian R, Yuxi L, Vahid M and Dmytro D, Machine Learning with PyTorch and Scikit-Learn: Develop machine learning and deep learning models with Python, Pakt, 1st Edition (2022).	