1.	Title of the course	Introduction to Data Analytics - Methods
2.	Course number	HS503L
3.	Structure of credits	1-1-0-2
4.	Offered to	PG
5.	New course/modification to	Modification To HS5023/21
6.	To be offered by	Department of Humanities and Social Sciences
7.	To take effect from	July 2022
8.	Prerequisite	CoT
9.	**Course Objective(s):** To introduce basic machine learning methodologies. To provide an understanding about the scope and limitations of artificial intelligence technologies.	
10.	**Course Content:** Overview of artificial intelligence framework - state space representation and search; Introduction to essentials of machine learning; Supervised learning, linear regression, binary classification, multiclass classification, standard metrics; Unsupervised learning methodologies, clustering, principal component analysis; Overview of deep learning, applications; Understanding the scope and limitation of artificial intelligence methodologies.	
11.	**Textbook(s):** 1. Yeturu K, *Chapter 3: machine learning algorithms, applications, and practices in data science, In: Handbook of statistics vol. 43 - principles and methods for data science*, 1st Edition, Elsevier (2020).	
12.	**Reference(s):** 1. Foster I, Ghani R,Jarmin R,Kreuter F and Lane J, *Big data and social science: a practical guide to models and tools*, 2nd Edition, Taylor and Francis (2020).	