

1.	Title of the course	Introduction to Data Analytics - Tools
2.	Course number	HS619L
3.	Structure of credits	1-1-0-2
4.	Offered to	PG
5.	New course/modification to	Modification To HS6034/21
6.	To be offered by	Department of Humanities and Social Sciences
7.	To take effect from	July 2022
8.	Prerequisite	CoT
9.	<b>Course Objective(s):</b> To introduce basic software tools for data analytics. To introduce skills of management, processing and visualization of data.	
10.	<b>Course Content:</b> Essential knowledge of script development and execution environments including Python; Visualization of data with scatter, line and box plots; Summarization techniques including curve fitting, histograms and pie charts; Advanced visualization techniques including contours, heat maps and geo-spatial data; Overview of tools for managing large datasets including web services, application program interfaces and stand alone software.	
11.	<b>Textbook(s):</b> 1. Aurelien G, <i>Hands-on machine learning with scikit-learn and tensorflow</i> , 1st Edition, O Reilly Media (2019).	
12.	<b>Reference(s):</b> 1. Bishop C M, <i>Pattern recognition and machine learning</i> , 1st Edition, Springer (2006).	