

Course Code	Course Title	L	T	P	C
OLMDS606	Web and Social Media Analytics	3	1	0	4
Pre-requisite	NIL	Syllabus Version			
		1.0			
Course Objectives:					
1. Familiarize the learners with the concept of social media analytics and understand its significance. 2. Familiarize the learners with the tools of social media analytics. 3. Enable the learners to develop skills required for analysing the effectiveness of social media for mitigating real world problems.					
Course Outcomes:					
After successfully completing the course the student should be able to					
1. Extract, monitor, and evaluate digital traces from online social platforms. 2. Choose the effective social media tools and metrics for decision making process 3. Perform social network analysis to identify important social actors, subgroups and network properties. 4. Understand how web and social media analysis can be used to address original research questions in social science domains. 5. Use appropriate information visualization technique to gain insights into large datasets.					
Module:1	Introduction to Web and Social Media Analytics				
Social media landscape, Analyzing the social web, need for SMA; SMA in Small organizations; SMA in large organizations; Application of SMA in different areas.					
Module:2	Network Essentials				
Basics- Node, Edges, Degree and Degree Distribution; Representing Networks, Basic Network Structures, Network Models, Measures and Visualization.					
Module:3	Graph Essentials for SMA				
Graph Representation, Types of Graphs, Connectivity in Graphs, Special Graphs, Graph Algorithms.					
Module:4	Community Analysis and Information Diffusion				
Community Detection, Community Evaluation, Herd Behaviour, Information Cascades, Diffusion of Innovation, Epidemics					
Module:5	Influence and Homophily, Behavior Analytics				
Measuring Assortativity, Measuring and Modeling Influence, Measuring and Modeling Homophily, Distinguishing Influence and Homophily. Behavior Analytics - Individual Behavior, Collective Behavior.					
Module:6	Social Spam & Privacy in Social Networks				
Social Spam and Malicious Behavior, Geospatial social data mining, Privacy in a Networked World, Predicting the future with social media, Social tagging and folksonomies.					
Module:7	Analyzing and visualizing data from various Social platforms				
Harnessing Social Data - Connecting, Capturing, and Cleaning; Uncovering Brand Activity, Popularity, and Emotions on Social Media; Analyzing Sentiment Analysis and Entity Recognition-conventional and deep learning based sentiment analysis; Campaigns and Consumer Reaction Analytics on Social Media Structured and Unstructured; Scraping and Extracting Conversational Topics on Internet Forums.					
		Total Lecture hours			
		120 hours			

Text Book(s)			
1. Reza Zafarani, Mohammad Ali Abbasi, Huan Liu, "Social Media Mining", Cambridge University Press 2014.			
2. Jennifer Golbeck, "Analyzing the Social Web", Morgan Kaufmann, First Edition, 2013.			
Reference Book(s)			
1.	Siddhartha Chatterjee, Michal Krystyanczuk, "Python Social Media Analytics", Packt, Publishing 2017.		
2.	Clifton B., Advanced Web Metrics with Google Analytics, Wiley Publishing, Inc. (2010), 2nd ed.		
3.	Kaushik A., Web Analytics 2.0 The Art of Online Accountability and Science of Customer Centricity, Wiley Publishing, Inc. (2010),1st ed.		
Mode of Evaluation: Continuous Assessment Tests, Assignment, Quiz, Final Assessment Test.			
Recommended by Board of Studies		16-10-2023	
Approved by Academic Council		No. 72	Date 13-12-2023