SCHOOL OF DATA SCIENCE AND FORECASTING

PROGRAM CODE: DS5B

PROGRAM TITLE: Master of Science (M.Sc.)

- **Data Science and Analytics**

<u>**BATCH: 2024-26**</u>

PROGRAMME STRUCTURE

First Semester:

Code	Title	Credits (L T P)
CORE COURSES		
DS5B-501	Forecasting Methods	3 (3-0-0)
DS5B-503	Probability and Statistics	3 (2-1-0)
DS5B-505	Python for Analytics	3 (2-0-2)
DS5B-507	Data Structures	3 (2-0-2)
DS5B-509	Database Management	3 (2-0-2)
DS5B-511	Advanced Excel	3 (1-0-4)
ELECTIVE COURSES-DISCIPLINE CENTRIC (Any One)		
DS5B-521	Fundamentals of Algorithms	3 (2-0-2)
DS5B-523	Cluster Analysis	3 (3-0-0)
ELECTIVE GENERIC: The students can choose following course or any other PG level generic course being run in this campus.		
DS5B-541	Communication Skills	3 (2-1-0)

Code	Title	Credits
DS5B-551	Comprehensive Viva Voce	4

Second Semester:

Code	Title	Credits (L T P)
CORE COURSES		
DS5B-502	Operations Research	3 (2-1-0)
DS5B-504	Data Mining and Data Warehousing	3 (2-0-2)
DS5B-506	Machine Learning	3 (2-0-2)
DS5B-508	Linear Algebra and Advanced Calculus	3 (2-1-0)
DS5B-510	Statistical Programming in R	3 (2-0-2)
DS5B-512	Big Data Technologies	3 (2-0-2)
ELECTIVE COURSES-DISCIPLINE CENTRIC (Any One)		
DS5B-522	Decision Analysis	3 (2-1-0)
DS5B-524	Cloud Computing	3 (2-1-0)
ELECTIVE GENERIC: The students can choose following course or any other PG level generic course being run in this campus.		
DS5B-542	Technical Communication	3 (2-1-0)

Code	Title	Credits
DS5B-552	Comprehensive Viva Voce	4

Third Semester:

Code	Title	Credits (L T P)
CORE COURSES		
DS5B-601	Mathematical Modelling and Simulation	3 (2-1-0)
DS5B-603	Data Visualization	3 (2-0-2)
DS5B-605	Deep Learning	3 (2-0-2)
DS5B-607	Natural Language Processing	3 (2-0-2)
ELECTIVE COURSES-DISCIPLINE CENTRIC (Any One)		
DS5B-621	Soft Computing	4 (2-1-2)
DS5B-623	Computer Vision	4 (3-1-0)
ELECTIVE GENERIC: The students can choose following course or any other PG level generic course being run in this campus.		
DS5B-641	Text and Image Analytics	4 (2-1-2)
DS5B-651	Comprehensive Viva Voce	4

Fourth Semester:

Code	Title	Credits
DS5B-642	Project Dissertation/ Internship	12 (0-0-24)
DS5B-652	Comprehensive Viva Voce	4

Note: The above course contents can be modified as per requirement from time to time in accordance with University Ordinance No. 14.