

PROGRAM	Master of Business Administration (Business Analytics)
SEMESTER	4
COURSE TITLE	Matlab
COURSE CODE	04MB0457
COURSE CREDITS	2
COURSE DURATION	28 Sessions

COURSE OUTCOMES:

- Experimenting Matlab for interactive computations.
- Creating and Analyzing plots and export this for use in reports and presentations.
- Evaluating and applying Statistical tools in Matlab.

COURSE CONTENTS:

Unit No	Unit / Sub Unit	Sessions
I	MATLAB Basics and Visualizing Data Desktop Environment , Data Import and Export : Data I/O via the Command Line , The Import Wizard , Examples of Data I/O in MATLAB , Data I/O with the Statistics Toolbox . Data in MATLAB : Data Objects in Base MATLAB , Accessing Data Elements , Examples of Joining Data Sets, Data Types in the Statistics Toolbox , Object-Oriented Programming. Miscellaneous Topics: File and Workspace Management , Punctuation in MATLAB , Arithmetic Operators , Functions in MATLAB. Visualizing Data : Basic Plot Functions :Plotting 2-D Data , Plotting 3-D Data Scatter Plots : Basic 2-D and 3-D Scatter Plots, Scatter Plot Matrix GUIs for Graphics : Simple Plot Editing , Plotting Tools Interference , Plots Tab.	8
II	Descriptive Statistics Measures of Central Tendency (Mean , Median , Mode) Measures of Dispersion (Range , Variance , Standard Deviation , Quantiles , Interquartile Range , Skewness) Visualization (Histogram , Probability Plots , Boxplots)	10
III	Hypothesis Testing Basic Concepts , z-Test , t-Test , One-Way ANOVA	10

EVALUATION:

The students will be evaluated on a continuous basis and broadly follow the scheme given below:

	Component	Weightage
A	Continuous Evaluation Component (Assignments / Presentations/ Quizzes / Class Participation/ etc.)	20% (C.E.C.)
B	Internal Assessment	30% (I.A.)
C	End-Semester Examination	50% (Practical/Viva) (External Assessment)

SUGGESTED READINGS:
Text Books:

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
T-01	MoonJung Cho, Wendy L. Martinez	Statistics in MATLAB	Chapman and Hall	1 st ,Edition,2015
T-02	Angel R. Martinez and Wendy L.	Computational Statistics Handbook with MATLAB	Chapman and Hall	1 st ,Edition,2015

Reference Books:

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
R-01	Peter I Kattan	MATLAB Guide to Statistics: A Beginner's Approach	Independently published	1 st ,Edition,2020
R-02	Cesar Lopez	MATLAB Statistics	Apres	1 st Edition.2016