

Course Code	Course Title	L	T	P	C
OLMBA511	Business Statistics	3	1	0	4
Pre-requisite	NIL	Syllabus Version			
		1.0			
Course Objectives:					
1. The students will be able to convert raw data into useful information using descriptive statistics such as measures of central tendency and dispersion.					
2. Examine the use of probability decision making.					
3. Describe the fundamental principles of hypothesis testing using parametric and non-parametric tests.					
4. To understand predictive and forecasting methods					
Course Outcomes:					
1. Students shall know how to organize, manage, and present data.					
2. Able to develop problem-solving techniques to calculate probabilities and apply them in real-world situations					
3. Will be able to test if differences exist across sample(s)					
4. Predict and forecast business scenarios using associated factors					
Module 1	Introduction to Statistics				
Why statistics – Subdivisions within statistics – Types of data – organising data to convey meaning – Summary statistics: measures of central tendency and dispersion					
Module:2	Probability				
Types of probability – Probability rules – probability under conditions of statistical independence and dependence					
Module:3	Parametric Test				
Introduction to samples – Parametric tests: Independent samples “Z” and “t” tests – dependent sample ‘t’ test – One Way ANOVA – Test of proportions					
Module:4	Non Parametric Test				
Non-parametric tests: Chi-square – Mann Whitney U test – Kruskal Wallis test					
Module:5	Predictive analysis 1				
Basic concepts of prediction – Karl Pearson Correlation – Spearman correlation					
Module:6	Predictive analysis 2				
Simple regression – multiple regression – estimating the regression equation and forecasting					
Module:7	Predictive analysis 3				
Time series: Trend analysis – Seasonal variation – Cyclical variation					
Module:8	Modelling using excel				
Generation and interpretation of results of hypothesis testing methods and predictive methods using excel					
Total Hours of Study:					120 Hrs.

Text Book(s)			
1.	Levin, Rubin, (2017), Statistics for Management, 15th edition, Pearson Education.		
Reference Books			
1.	Murray R. Spiegel, (2018), Theory and Problems of Statistics – Schaums outline Series 9th edition, McGraw Hill.		
2.	Anderson D.R, Sweeney D.J, Williams T.A, (2019), Statistics for Business and Economics, 13th edition, Cengage Learning.		
3.	Jaggia, S., & Kelly, A. (2020). Business Statistics: Communicating with numbers. 2 nd Edn. India)		
	Srivastava T, Rego S, (2016), Statistics for Management, Tata McGraw Hill		
Mode of Evaluation: Quiz/ Assignment/CAT/FAT			
Recommended by Board of Studies		04-11-2024	
Approved by Academic Council		No.76	Date 28-11-2024