

(Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow)

Knowledge Park-II, Greater Noida (U.P.)

Lesson Plan

Program:MBA **Semester: 3rd Course Code**:KMBN IT01 Decisions

Course Name: Data Analytics for Business

Course Objectives

(CO1): Understanding the Role of Business Analyst and Data Science in Business.

(CO2): Understanding the basic concept of Data management

(CO3): To understand the basic concept of R Programming.

(CO4): To Understand the application of business analysis

(CO5): Understanding the basic concept of Data Science Project Life Cycle.

Session Duration: 60 minutes

Participants:

Entry level knowledge and skills of students

- i. Data analytics, technical equipment, operation skills,
- ii. Use of Digital tools, Problem Solving

Equipment required in Classroom/ Laboratory/ Workshop

- i. LCD/Projector
- ii. Whiteboard/ Black Marker

Assessment Schemes

S. No.	Criteria	Marks (150)
1	AKTU End Term Examination	100
2	Internal Evaluation Scheme	50
2(a)	Class Tests	30
2(a)(i)	Class Test-I	15
2(a)(ii)	Class Test-II	15
2(b)	Teacher Assessment (Continuous Evaluation)	20
2(b)(i)	Attendance	5
2(b)(ii)	Case Study/Topic Based Presentation	5
2(b)(iii)	*GD	10
	*MCQ Based Assignment	2

Course Outcomes (starting with action-oriented observable and measurable verb)

(CO1):Understand the basics of business analysis and Data Science

(CO2): Understand data management and handling and Data Science Project Life Cycle.

(CO3): Understand the data mining concept and its techniques



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(CO4): Understand and Analyzing machine learning concept

(CO5):Understand the application of Business analysis in Different domain

L. No.	Topics	Sub Topics	Date of implementation	Pedagogy	CO- Covered	Faculty Sign	HoD's Remark with Date
			Unit - 1				
1.		Wjhat is business					
		analytics? Historical			CO1		
		overview of Data			01		
	Introduction	analysis		Lecture			
2.		Data Scientist Vs Data					
		Engineer vs Business			CO1		
		Analyst, Career in		Locturo	001		
2	Introduction	Business Analytics		Lecture			
5.	Introduction	Why Data Science,		Lecture	CO1		
4.		Application for Data					
		Science, Data Scientist,			CO1		
		Role and			01		
	Introduction	Responsibility		Lecture			
			Unit - 2				
5.	Data Analysis	Data Collection		Lecture	CO2		
6.		Data Classification,			CO2		
	Data Analysis	Data Management		Lecture	02		
7.	Data Analysis	Big Data Management		Lecture	CO2		
8.		Organization/Sources			<u> </u>		
	Data Analysis	of Data		Lecture	02		
9.		Importance of Data			CO2		
	Data Analysis	Quality		Lecture	001		
10.	Data Analyzia	Dealing with noisy data		Locturo	CO2		
11	Data Analysis	Dealing with missing		Lecture			
±1.		or incomplete data.					
		Outlier Analysis			CO2		
	Data Analysis	Method to deal outlier		Lecture			
12.	Data Analysis	Data Visualization					
			Unit - 3				
13.	Data Science						
	Project Life			Locture	CO3		
1/	Cycle Data Science	Business Requirement		Lecture			
14.	Project Life				500		
	Cycle	Data Acquisition		Lecture			
15.	Data Science				<u> </u>		
	Project Life	Data Preparation		Lecture	03		



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16 Data Science Cycle Hypothesis and Modeling Lecture CO3 17. Data Science Project Life Cycle Evaluation and Interpretation Lecture CO3 18. Data Science Project Life Cycle Deployment Lecture CO3 19. Data Science Project Life Cycle Deployment Lecture CO3 20. Data Science Project Life Cycle Optimization CO3 CO3 21. Introduction of Data R Graphical user Interfaces Lecture CO4 CO4 22. Introduction of Data Data Import and Export, attribute and data type CO4 CO4 CO4 23. Introduction to R and Visualization of Data Descriptive Statistics, exploratory data analysis CO4 CO4 24. Introduction to R and Visualization of Data Visualization of Categorical Data in R CO4 CO4 25. Introduction to R and Visualization of Data Visualization of Categorical Data in R CO4 CO4 26. Introduction to R and Visualization of of Data Visualization of Categorical Data in R Lecture CO4 27. Introduction to R and Visualization of of Data Visuali		Cycle						
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30.	Application of Business Analysis	Retail Analytics		Lecture	CO5	
31.	Application of Business Analysis	Marketing Analytics		Lecture	CO5	
32.	Application of Business Analysis	Marketing Analytics		Lecture	CO5	
33.	Application of Business Analysis	Financial Analytics		Lecture	CO5	
34.	Application of Business Analysis	Healthcare Analytics		Lecture	CO5	
35.	Application of Business Analysis	Supply Chain Analytics		Lecture	CO5	
36.	Application of Business Analysis	Supply Chain Analytics		Lecture	CO5	
			Revision			
37.	Presentation					
38.	Presentation					
39.	Revision of all Units					
40.	Revision of all Units					
41.	Revision of all Units					
42.	Revision of all Units					
43.	Revision of all Units					
44.	Revision of all Units					

Text Books:

 Essentials of Business Analytics: An Introduction to the methodology and its application, BhimasankaramPochiraju, Sridhar Seshadri, Springer
Business Analytics: Albright & Winston Cengage

Reference Books:

- 1. Business Analytics, Tanushri Banerjee & Arindam Banerjee, SAGE Publishing
- 2. Introduction to Data Science, Laura Igual Santi Segui, Springer

Journals:



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1. Lemenkova, P. (2019). Statistical analysis of the Mariana Trench geomorphology using R programming language. *Geodesy and Cartography*, *45*(2), 57-84.

 Fitzpatrick, A. M., Teague, W. G., Holguin, F., Yeh, M., Brown, L. A. S., & Program, S. A. R. (2009). Airway glutathione homeostasis is altered in children with severe asthma: evidence for oxidant stress. *Journal of Allergy and Clinical Immunology*, *123*(1), 146-152.

Electronic Database:

https://www.youtube.com/watch?v=7076ZuAwUn8&list=PLWPirh4EWFpEvN4ktS8LE0cvLCSfhD 55t

Software required

- 1. Microsoft Excel365
- 2. R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical, Computing, Vienna, Austria. URL https://www.R-project.org/.