

# MOHAMED SATHAK ENGINEERING COLLEGE

Kilakarai- 623806

STAFF NAME : Mrs.K.Samundeeswari

## LESSON PLAN

Department of Information Technology

Name of the Subject	Business Analytics	Regulation	2021
Subject Code	CCW331	Year / Sem	III/ VI
Acad Year	2023-2024	Batch	2021-2025

### Course Objective

- To understand the Analytics Life Cycle.
- To comprehend the process of acquiring Business Intelligence
- To understand various types of analytics for Business Forecasting
- To model the supply chain management for Analytics.
- To apply analytics for different functions of a business

### Course Outcome

- CO1 Acquire the knowledge for the Analytics Life Cycle  
CO2 Understand real-world business problems and models with analytical solutions  
CO3 Identify the business processes for extracting Business Intelligence  
CO4 Learn predictive analytics for business forecasting  
CO5 Apply analytics for supply chain and logistics management  
CO6 Use analytics for marketing and sales

### Lesson Plan

Sl. No.	Topic(s)	T / R*	Periods Required	Mode of Teaching (Google Meet/BB / PPT / NPTEL / MOOC /	Blooms Level (L1-L6)	CO
		Book				
<b>UNIT I: INTRODUCTION TO BUSINESS ANALYTICS (6)</b>						
1	Analytics and data science Analytics life cycle	T1	1	WB	L2	CO1 & CO2
2	Types of Analytics-Business Problem definition	T1	1	WB/NPTEL	L3	CO1 & CO2
3	Data collection- Data preparation	T1	1	WB/NPTEL	L4	CO1 & CO2
4	Hypothesis generation	T1	1	WB	L5	CO1 & CO2
5	Modeling- Validation and Evaluation	T1	1	WB/NPTEL	L2 & L5	CO1 & CO2
6	Interpretation	T1	1	WB/NPTEL	L2	CO1 & CO2
7	Deployment and iteration.	T1	1	WB	L2	CO1 & CO2

**Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any. Assignment**

**Evaluation method:** Assignment

### UNIT II: BUSINESS INTELLIGENCE(6)

8	Data Warehouses and Data Mart	T2	1	WB	L1	CO3
9	Knowledge Management	T2	1	WB/NPTEL	L1	CO3
10	Types of Decisions	T2	1	WB/NPTEL	L2	CO3
11	Decision Making Process	T2	1	WB	L2	CO3
12	Decision Support Systems Business Intelligence	T2	1	WB/NPTEL	L2	CO3
13	OLAP – Analytic functions	T2	2	WB/NPTEL	L2	CO3
14		T2		WB	L4	CO3

**Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any**

**Evaluation method: Case studies**

### UNIT III: BUSINESS FORECASTING(6)

15	Introduction to Business Forecasting and Predictive analytics		1	WB/NPTEL	L4	CO4
16			1			CO4
17	Logic and Data Driven Models		1	WB/NPTEL	L4	CO4
18			1			CO4
19	Data Mining and Predictive Analysis Modelling		1	WB/NPTEL	L4& L5	CO4
20			1			CO4
21	Machine Learning for Predictive analytics.		1	WB/NPTEL	L4	CO4

**Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any Assignment**

**Evaluation method: Quiz/Mini Project**

### UNIT IV: HR & SUPPLY CHAIN ANALYTICS(6)

22	Human Resources – Planning and Recruitment	T4	1	WB	L2	CO5
23	Training and Development	T4	1	WB	L2	CO5
24	Supply chain network	T5	1	WB	L2	CO5
25	Planning Demand, Inventory and Supply	T4	1	WB	L2	CO5
26	Logistics	T5	1	WB	L2	CO5
27	Analytics applications in HR & Supply Chain	T4 & T5	1	WB	L3 & L4	CO5
28	Applying HR Analytics to make a prediction of the demand for hourly employees for a year	T4	1	WB	L3 & L5	CO5

**Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any Quiz**

**Evaluation method: Quiz/Mini Project**

### UNIT V: MARKETING & SALES ANALYTICS(6)

29	Marketing Strategy, Marketing Mix, Customer Behaviour	T3	2	WB/NPTEL	L2	CO6
30	selling Process	T3		WB/NPTEL	L2	CO6
31	Sales Planning	T3	2	WB/NPTEL	L2	CO6
32	Analytics applications in Marketing and Sales	T3		WB/NPTEL	L3 & L4	CO6
33		T3	WB/NPTEL	CO6		
34	predictive analytics for customers' behaviour in marketing and sales	T3	2	WB/NPTEL	L4	CO6
35		T3		WB/NPTEL		CO6

**Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any**

**Evaluation method: Seminar & QuiZ**

**Content Beyond the Syllabus Planned**

1	BI and cloud computing – BI for ERP systems –Social CRM
2	Data Integration -Fact table – Dimension Table

**Text Books**

1	1. R. Evans James, Business Analytics, 2nd Edition, Pearson, 2017 2. R N Prasad, Seema Acharya, Fundamentals of Business Analytics, 2nd Edition, Wiley 2016 3. Philip Kotler and Kevin Keller, Marketing Management, 15th edition, PHI, 2016 4. VSP RAO, Human Resource Management, 3rd Edition, Excel Books, 2010. 5. Mahadevan B, “Operations Management -Theory and Practice”,3rd Edition, Pearson Education,2018.
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**Website / URL References**

1	<a href="http://www.msec.org.in">www.msec.org.in</a> & <a href="https://nptel.ac.in/courses/110105089">https://nptel.ac.in/courses/110105089</a>
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**Blooms Level**

<b>Level 1 (L1) : Remembering</b>	Lower Order Thinking	Fixed Hour Exams	<b>Level 4 (L4) : Analysing</b>					Lower order	<b>Higher Order Thinking</b>
<b>Level 2 (L2) : Understanding</b>			<b>Level 5 (L5) : Evaluating</b>						
<b>Level 3 (L3) : Applying</b>			<b>Level 6 (L6) : Creating</b>						

**Mapping syllabus with Bloom’s Taxonomy LOT and HOT**

Unit No	Unit Name	L1	L2	L3	L4	L5	L6	LOT	HOT
Unit 1	INTRODUCTION TO BUSINESS ANALYTICS	0	4	1	1	2	0	4	4
Unit 2	BUSINESS INTELLIGENCE	2	4	0	1	0	0	6	1
Unit 3	BUSINESS FORECASTING	0	0	0	7	1	0	0	8
Unit 4	HR & SUPPLY CHAIN ANALYTICS	0	5	2	1	1	0	5	4
Unit 5	MARKETING & SALES ANALYTICS	0	3	2	4	0	0	3	6
<b>Total</b>		2	16	5	14	4	0	18	23

**CO PO Mapping**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
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CO1	2	2	3	1	1	-	-	-	1	2	1	1	3	2
CO2	3	3	3	2	3	1	1	1	1	2	2	2	3	2
CO3	2	2	3	3	2	-	-	-	3	1	1	3	3	2
CO4	2	1	1	2	2	1	1	-	3	3	2	1	1	2
CO5	2	3	2	3	2	1	1	-	3	3	1	3	3	1
CO6	2	3	2	3	2	1	1	1	3	3	1	3	3	1
Avg	2.17	2.33	2.33	2.33	2	1	1	1	2.33	2.33	1.33	2.17	2.67	1.67
<b>3</b>	<b>High level</b>				<b>2</b>	<b>Moderate level</b>				<b>1</b>	<b>Low level</b>			

Name & Sign of Faculty Incharge : K.Samundeeswari

Name & Sign of Subject Expert : Mrs.Santhana Lakshmi/MBA

Head of the Department :Dr.B.Aysha Banu

