INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

MARKETING ANALYTICS								
IV Semester: MBA								
Course Code	**Category**	**Hours / Week**			**Credits**	**Maximum Marks**		
		L	**T**	**P**	**C**	**CIA**	**SEE**	**Total**
CMBE50	**Elective**	2	-	-	2	40	60	100
Contact Classes: 45	**Tutorial Classes: Nil**	**Practical Classes: Nil**				**Total Classes: 45**		
Prerequisite: Marketing Management								
SDGs Mapped: SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption & Production)								

I. COURSE OVERVIEW:

This course introduces to Marketing Analytics, focusing on collecting, summarizing, and analyzing marketing data to make informed business decisions. Students will learn to use tools like MS Excel for data organization, pivot tables, and advanced analytics techniques. The course covers customer, pricing, segmentation, and promotion analytics, enabling students to extract insights, optimize marketing strategies, and enhance decision-making in marketing management.

II. COURSE OBJECTIVES:

The students will try to learn:

I. The scope, need, and application of marketing analytics in business decision-making.
II. How to organize and summarize marketing data using tools like MS Excel, pivot tables, and crosstabs.
III. The customer behavior, map customer journeys, and calculate customer lifetime value (CLV).
IV. Pricing analytics, including demand estimation, price optimization, bundling, and price elasticity.
V. How to conduct segmentation and promotion analytics to optimize marketing strategies and evaluate campaign effectiveness.

III. COURSE OUTCOMES:

At the end of the course students should be able to:

CO1 Recall the definitions, scope, and differences between marketing analytics and marketing research.

CO2 Organize, summarize, and visualize marketing data using Excel tools, pivot tables, and slicers.

CO3 Analyze customer data to build personas, track customer behavior, and compute customer lifetime value.

CO4 Apply pricing analytics techniques to optimize product pricing, bundles, and assess price elasticity.

CO5 Perform market segmentation using cluster analysis, decision trees, and conjoint analysis.

CO6 Evaluate promotion effectiveness using ad stock models, media selection models, and pay-per-click analysis.

IV.COURSE CONTENT:

MODULE-I- Introduction to Marketing Analytics- Classes: (05)
Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data. Summarizing Revenue Data: Month-wise and Product wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables.

MODULE -II- Summarizing Marketing Data - Classes: (10)
Summarizing Revenue Data: Month-wise and Product-wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables, Using GETPIVOT Function for Pulling Data, Adding Data Labels and Data Tables.

MODULE –III: Customer Analytics -Classes: (10)
Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behavior Derived Customer Metrics. Customer Persona, Building a Customer Persona and its Benefits, Parts of Buyer Persona.

What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Creating the Basic Customer Value Template, Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active

MODULE –IV: Pricing Analytics - Classes: (10)
Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming.

MODULE –V: Segmentation & Promotion Analytics - Classes: (10)
Segmentation Analytics: Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Ad stock Model. Media Selection Models: Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising

V. TEXT BOOKS:

1. Seema Gupta & Avadhoot Jathar, Marketing Analytics, Wiley, 2021.
2. Wayne L. Winston, Marketing Analytics: Data Driven Techniques with Microsoft Excel, 2014.
3. Chuck Hermann, Ken Burbary, Digital Marketing Analytics, Que Publishing, 2e, 2018.
4. Moustusy Maity and Pavankumar Gurazada, Marketing Analytics for Strategic Decision Making, Oxford Higher education, 2021

VI. REFERENCE BOOKS:

1. Mike Grigsby, Marketing Analytics, Kogan Page, 2015.
2. Robert Kozielski, Measuring Marketing Analytics, Emerald Publishing, 2018.

VII. WEB REFERENCES:

1. https://d1.islamhouse.com/data/en/ih_books/single/en_Consumer_Behavior.pdf
2. http://www.ijcrar.com/vol-2-9/Pinki%20Rani.pdf

VIII. E-TEXT BOOKS:

1. http://www.pondiuni.edu.in/storage/dde/downloads/markiii_cb.pdf
2. shttp://nptel.ac.in/courses/110105029/pdf%20sahany/Module-1-1.pdf