Elective Course 1: Marketing Analytics

Course Type:	PS: Program Specialisation	Course Credits:	2
Course Code:	M3PE509	Course Duration:	30 Hours

Course Objectives:

- To provide students with foundational knowledge of analytics techniques and tools applied to marketing.
- To equip students with skills to analyse marketing data for strategic decision-making and performance measurement.
- To enable application of predictive modelling, segmentation analysis and customer lifetime value calculation.
- To familiarize students with analytical tools and software commonly used in marketing analytics.
- To cultivate critical understanding of data-driven decision-making processes in contemporary marketing practices.

Course Outcomes:

- CO1: Understand the Role of Analytics in Modern Marketing Decision-Making.
- CO2: Apply customer analytics and segmentation techniques to enhance customer acquisition, retention, and loyalty strategies.
- CO3: Analyse statistical and financial analysis methods for evaluating marketing performance, pricing, and promotional strategies.
- CO4: Analyse marketing trends using descriptive, diagnostic, and predictive models for forecasting.
- CO5: Evaluate the application of digital marketing metrics and advanced analytical techniques for data-driven marketing strategies.

Unit/ Module	Content	CO Mapping	Hours Assigned
1	**Introduction to Marketing Analytics** Definition, Scope, and Importance Types of Data in Marketing- Structured vs.	CO1	6

	Unstructured, First-party, Second- party, Third-party Data, Role of Data in Customer Segmentation and Personalization, Overview of Analytical Tools and Platforms (Google Analytics, Power BI, Python/R Basics for Marketing)		
2	**Customer Analytics:** Types of Marketing Data: Transactional data, Customer data, Digital data, Market research data**,** Market Segmentation, Targeting and Positioning (STP) Analytics**,** Customer acquisition & retention analysis**,** Customer Lifetime Value (CLV) analysis**,** RFM (Recency, Frequency, Monetary) analysis**,** Churn analysis and loyalty segmentation	CO1, CO2	6
3	**Pricing and Promotion Analytics:** Price optimization techniques, Promotion effectiveness analysis, Pricing, Breakeven and Margin Analysis, Demand Estimates, Marketing Budget and Marketing Performance Measure, Marketing Metrics and its application	CO2, CO3	6
4	**Applications of Multivariate Analysis in Marketing** Conjoint Analysis	CO4	6
5	Factor Analysis, Cluster Analysis, Discriminant Analysis and Multi- Dimensional Scaling	CO5	6

Textbooks:

1. Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques – Mike Grigsby
2. Marketing Data Science: Modeling Techniques in Predictive Analytics with R and Python – Thomas W. Miller
3. Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die – Eric Siegel

4. Applied Predictive Analytics: Principles and Techniques for the Professional Data Analyst – Dean Abbott

Reference Books:

1. Customer Segmentation and Clustering Using SAS Enterprise Miner – Randall S. Collica
2. Text Mining and Analysis: Practical Methods, Examples, and Case Studies Using SAS – Gokhan S. Yildirim, Gary A. Koppenhaver
3. Sentiment Analysis: Mining Opinions, Sentiments, and Emotions – Bing Liu
4. Managing Customers for Profit: Strategies to Increase Profits and Build Loyalty –V. Kumar & Werner Reinartz
5. Customer Analytics for Dummies – Jeffrey Strickland
6. Marketing Metrics: The Manager's Guide to Measuring Marketing Performance – Paul W. Farris, Neil T. Bendle, Phillip E. Pfeifer, David J. Reibstein
7. Cutting-Edge Marketing Analytics: Real-World Cases and Data Sets for Hands- On Learning – Rajkumar Venkatesan, Paul Farris, Ron T. Wilcox