

## DISCIPLINE SPECIFIC ELECTIVE COURSE 16 (DSE-16): MARKETING ANALYTICS

### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
<b>Marketing Analytics (DSE 16)</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>Class 12</b>	<b>None</b>

#### Learning Objectives

The course aims to provide an understanding to:

- Market data for informed decision-making.
- Analyse to enhance marketing strategies and performance.
- Assess and improve ROI across marketing efforts.
- Gain proficiency in key marketing analytics tools and methods.

#### Learning outcomes

By studying this course, the students will be able to:

- Understand the meaning of consumer research and marketing analytics.
- Learn demand analysis and allocation through linear programming as well as analyse advertising effectiveness using causal research.
- Analyse consumer perception using cluster and factor analysis.
- Learn a variety of metrics to enhance customer acquisitions online.
- Conduct analysis of big data for digital analytics in customer journey, touch points and social networks.

### SYLLABUS OF DSE-12

#### **Unit 1: Introduction**

**(12 hours)**

Adoption and application of marketing analytics: AIDA, CRM; Consumer research intelligence: descriptive, exploratory, predictive and prescriptive analytics; Processes followed in typical marketing analytics projects. Advertising Analytics: Advertising elasticity of demand, Promotion allocation through linear programming; Advertising effectiveness using causal research, experimental design (Univariate Analysis of Variance) and test markets;

#### **Unit 2: Consumer Perception and Preference**

**(12 hours)**

Consumer perception analysis using factor and cluster analysis; multi-dimensional scaling for brand perception; Consumer attribute preference using conjoint analysis;

**Unit 3: Customer Acquisition Metrics****(12 hours)**

Lead generation metrics, Customer activity metrics, Customer survival analysis-Kaplan Meir Curve and Cox proportional hazards regression, Brand Awareness Recall, Test-drive, Churn, Customer Satisfaction (CSAT), Take Rate, Profit, Net Present Value, Internal Rate of Return, Payback, Cost Per Click (CPC), Transaction Conversion Rate (TCR), Return on Ad Money Spent (ROA), Bounce Rate, WOM (social media reach), Customer Lifetime Value (CLTV).

**Unit 4: Digital Analytics: Big Data****(9 hours)**

Web analytics, Customer journey analysis, Customer touchpoint attribution modeling, Dynamic targeting, Integrated big data models, Social listening, Social network analysis.

**Practical Component (15 practical sessions; total 30 hours):** Practical component of this course equips students with hands-on experience in using data analytics tools to solve real-world marketing problems. Through software-based exercises using SPSS/ Python, students learn to analyze customer data, conduct segmentation, forecast sales, and evaluate campaign effectiveness. Case-based datasets and live dashboards enable learners to apply theoretical concepts in a practical setting. A project on marketing is to be taken up to constitute the end-term practical examination.

**References:***Essential*

1. Maity, M., Guruzada, P., Marketing Analytics - For Strategic Decision Making. Oxford University Press.
2. Jeffery, Mark. Data-Driven Marketing: The 15 Metrics Everyone in Marketing Should Know. John Wiley & Sons Inc. (Chapter- 4, 5, 6, 7, 8, 9)
3. Verhoef, P., Kooge, E. and Walk, N. (2016). Creating Value with Big Data Analytics- Making Smarter Marketing Decisions. Routledge. New York.

*Additional*

1. Hemann, C. and Burbary K., Digital Marketing Analytics: Making Sense of Consumer Data in a Digital World. Pearson Education.
2. Venkatesan, R., Farris, P. & Wilcox, R.T. (2018), Cutting Edge Marketing Analytics - Real World Cases and Data Sets for Hands On Learning. Pearson Education Inc.
3. Sorger, Stephan. Marketing Analytics: Strategic Models and Metrics. CreateSpace Independent Publishing Platform.
4. Kotler, Philip., Kartajaya, Hermawan., Setiawan, Iwan. Marketing 4.0: Moving from Traditional to Digital. John Wiley & Sons Inc.
5. Nargundkar, Rajendra., Sainy, Romi. Digital Marketing: Cases from India. Notion Press.
6. Field, Andy. Discovering Statistics using IBM SPSS Statistics. 5th Edition, SAGE Publications.

**Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**