



# MARKETING ANALYTICS

**PROF. SWAGATO CHATTERJEE**

Department of Management  
IIT Kharagpur

**TYPE OF COURSE** : Rerun | Elective | PG

**COURSE DURATION** : 12 weeks (18 Jan' 21 - 09 Apr' 21)

**EXAM DATE** : 25 Apr 2021

**PRE-REQUISITES** : Marketing Management and Basic Knowledge of R Programing

**INTENDED AUDIENCE** : Management

**INDUSTRIES APPLICABLE TO** : All analytics companies

**COURSE OUTLINE :**

In this course we will combine various concepts of marketing and business analytics in storytelling and problem solving. Real life marketing problems are often solved through a sequence of quantitative approaches. Identifying that sequence in the context of various marketing problems is important. This course will help the students in building the same.

We expect that the students of the course will be able to do the following at the end of the course:

- Identify a marketing problem as a sequence of small questions
- Identify the appropriate tools and datasets required to solve each small research question
- Properly apply the various available tools and choose the best one
- Create a marketing story out of the statistical and machine learning tools applied
- Solve a marketing analytics project end to end

**ABOUT INSTRUCTOR :**

Dr. Swagato Chatterjee is a researcher, consultant, teacher and academician. He has over 7 years of experience in marketing, operations and analytics. He has worked with companies like Coca Cola, Times of India, Technosoft, Mitsubishi, Nomura, Yes Bank, CSC, Ernst and Young, Genpact, NTPC, Indian Oil in various consultancy and training assignments related to analytics. He has also taught in institutes like IIT Khagarpur, Narsee Monjee Institute of Management, SPJain etc. He has published in reputed international journals including Decision Support Systems, Journal of Strategic Marketing etc. He is a BTech from IIT Kharagpur and a PhD in marketing from IIM Bangalore. Currently he is an Assistant Professor in Vinod Gupta School of Management, IIT Kharagpur in the area of marketing and analytics.

**COURSE PLAN :**

**Week 1:** Introduction to R Programing

**Week 2:** What customers want?: Customer value, Conjoint Analysis

**Week 3:** Analytics for customer segmentation and targeting

**Week 4:** Demand Forecasting & Pricing

**Week 5:** Pricing

**Week 6:** Marketing Mix Models and Advertising Models

**Week 7:** Recommender System

**Week 8:** Market Basket Analysis and RFM Analysis

**Week 9:** Customer Churn & Customer Lifetime Value

**Week 10:** Text Mining and Sentiment Analytics

**Week 11:** Text Mining and Product Innovation Management

**Week 12:** Social Network Analysis for Marketing