



MKT 41503: Marketing Engineering

Level: 4000

Number of Credits : 03

Course Description

Marketing Engineering focuses on providing hands-on approaches for conceptualizing and applying decision modeling to address marketing and business issues. Computer software are used to discuss how to use and interpret: Conjoint analysis, Cluster analysis, Customer lifetime value models, Choice models, Multidimensional Scaling (MDS), and Marketing mix response models.

Intended Learning Outcomes

At the end of the course, the student will be able to;

- Understand the role that analytical techniques and computer models play in enhancing marketing decision making in modern enterprises,
- Demonstrate skills in viewing business processes and relationships systematically and analytically,
- Demonstrate the value of the analytic approach to marketing decision making,
- Use the software tools to apply the models and methods to real problems.

Teaching/Learning Methods

Lectures, Lab-sessions, Case study discussions

Methods of Assessment

In-course Assessments : 30%
End Semester Examination : 70%

Course Contents

1. Principles of marketing engineering
2. Value for customers and valuing customers
3. Segmentation and targeting
4. Positioning
5. Forecasting
6. New product development and service design
7. Pricing decisions
8. Resource allocation: the marketing communications and promotions mix
9. Sales promotions: types and effects
10. Search analytics
11. Social listening and text analysis
12. Panel data analysis
13. Harvesting value from marketing engineering

Recommended Reading

1. Gary L. Lilien, Arvind Rangaswamy, and Arnaud De Bruyn (2017), Principles of Marketing Engineering, Decision Pro, Inc. Trafford Publishing