

Business Analytics

CS801E

Contracts: 3L

Credits- 3

Total: - 38 Lectures

Module 1: Foundations of Business Analytics (4L)

Introduction to Business Analytics, Analytics on Spreadsheets.

Module 2: Product-Market Fit: Gap Analysis (6L)

Gap Analysis, Carrying Out Gap Analysis, Steps in Gap Analysis, Conducting a Representative Survey for Gap Analysis, Predicting Consumer Behaviour and Gap Analysis in Smartphone Market.

Module 3: Analytical Modeling by Factor and Cluster Analysis (8L)

Factor Analysis Concepts, Application of Factor Analysis
Concepts of Cluster Analysis, Similarity Measures, Application of Cluster Analysis.

Module 4: Analytical Modeling by Logistics Regression and Discriminant Analysis (10L)

Linear Discriminant Analysis Model, Predictive Modeling using Discriminant Analysis, Application of Linear Discriminant Analysis for Credit Scoring of Loan Applicants.
Theoretical Formulation of Logistics Regression, Mathematical Interpretation of Logistics Regression, Indicator for Model Fit, Applying Logistics Regression,
Application of Logistics Regression in Predicting Risk in Portfolio Management
Testing the Reliability/Consistency of the Different Factors Measured.

Module 5: Segmentation of primary target market by Heuristic Modeling (4L)

Introduction to RFM Analysis
Enhancing Response Rates with RFM Analysis.

Module 6: Segmentation of target market based on large databases using Decision Tree approach. (6L)

Introduction to Chi-square Automatic Interaction Detection (CHAID)
Predictive Modelling by CHAID.

Text:

1. "Business Analytics: An Application Focus", Purba Halady Rao, Prentice Hall.
2. "Business Analytics" James R. Evans, Pearson.

Reference:

1. "Modeling Techniques in Predictive Analytics", Thomas W. Miller, Pearson
2. "Enterprise Analytics: Optimize Performance, Process, and Decisions Through Big Data", Thomas H. Davenport, Pearson.
3. "Fundamentals of Business Analytics", Seema Acharya, Wiley India.
4. "Business Intelligence: A Managerial Perspective on Analytics", Ramesh Sharda, Dursun Delen, Efraim Turban, David King, Prentice Hall