NIRMA UNIVERSITY

Institute of Management

Master of Business Administration (Family Business & Entrepreneurship) Programme Term - II

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Course Code	MFB4CCOQ01
Course Title	Data Analytics for Entrepreneurs

Course Learning Outcomes (CLO):

At the end of the course, students will be able to:

- 1. Demonstrate the ability of structuring and analyzing business problems statistically.
- 2. Formulate practical situations into models and solve the models to optimize the business objectives.
- 3. Apply quantitative methods in effective management decision making process.
- 4. Develop the ability to perform statistical calculations using computer based statistical software.

Syllabus Teaching Hours Unit I: Introduction to Descriptive Statistics 07 Introduction to Statistics; Descriptive Statistics; Data Analysis using spreadsheets function like Pivot tables, Data **Analysis Tools Unit II: Inferential Statistics** 08 Probability Distributions; Sampling Methods, • Hypothesis Testing for population mean; Simple Correlation and Simple Regression Analysis; **Unit III: Resource Optimization Models** 07 • Overview of Operations Research Modelling Approach; Linear Programming Problem (LPP); Spreadsheet models to analyze both simple and complex business problems **Unit IV: Optimization Models using Spreadsheets** 08 • Duality in LPP: Sensitivity Analysis using more complex excel function like Solver, • Transportation Model, Assignment Model. Design and structure spreadsheets to maximize benefit in solving business problems in the area of supply chain distribution

Suggested Readings:

- 1. Anderson, D., Sweeney, D. & Williams, T. Statistics for Business and Economics. New Delhi: Cengage Learning
- 2. Black, K. Business Statistics for Contemporary Decision Making. New Delhi: Wiley-India Student Edition.
- 3. Hillier, F. & Hillier, M. Introduction to Management Science A Modelling and Case Studies Approach. New Delhi: Tata McGraw Hill.
- 4. Levin, R. I. & Rubin, D. S., Statistics for Management, New Delhi: Pearson India.
- 5. Render, B., Stair, R. M. Jr., Hanna, M. E. & Badri, T. N. Quantitative Analysis for Management, New Delhi: Pearson Education.

w.e.f. Academic year 2019-20 and onwards