Business Analytics

1.1 Course Number: MT5601

1.2 Contact Hours: 40 Hours, **Credits:** 11

1.3 Semester-offered: 4th Semester

1.4 Prerequisite: Business Statistics

1.5 Syllabus Committee Member: Dr. Kavita Srivastava & Dr. Saroj Kumar Mishra

2 Objective:

➢ To gain an understanding of how managers use business analytics to solve business problems and to support managerial decision making.

➢ To make students familiar with the processes needed to develop, report, and analyze business.

➢ To introduce and provide some practice with core and necessary statistics concepts so that students can participate in, and lead analytics-based projects.

3 Course Content:

Unit-wise distribution of content and number of lectures

Unit	Topics	Sub-topic	Lectures
1	Overview of the course	Business Research Problems Identification, Hypotheses Formulation	03
2	Research Designs	Exploratory Research Design, Descriptive Research Design, Causal Research design	05
3	Nature of Data/Data Visualization & Data Collection Methods	Sources of Data, Importance of Data Quality, Data Categorization, Quantitative Data Collection Methods, Qualitative data Collection Methods, Data Collection Tools, Designing Questionnaire	05
4	Sampling Methods & Data Preparation	Probability and Non-Probability Sampling Methods, Data Cleaning, Handling incomplete or missing data, Outliers, Preparing Data for Statistical Analysis	05

5	Analysis of Data I	Introduction of SPSS Descriptive Analysis of Data, Parametric and Non-Parametric Test for Data Analysis Hypothesis Testing; Type 1 & II error	05
6	Analysis of Data II	Chi Square, T-Test, Linear Regression Analysis (Bivariate and Multiple), Correlation Analysis	07
7	Project Work	A group of students will be allocated a project relevant to the course, where they can apply their understanding. They will be collecting data through fieldwork, submit their research report and present their findings. Project will be a part of course evaluation.	10
		Total	**40**

4 Readings

4.1 Text Books:

➢ Business Analytics, James R. Evans, University of Cincinnati, Recent Edition Pearson

4.2 Reference Books:

➢ William G. Zikmund, "Business Research Methods" (Thomson Asia Pvt. Ltd.).

➢ D. Chawla and Neena Sondhi, "Research Methodology: Concepts and Cases" (Vikas publication)

5 Outcome of the Course:

➢ The course will help student to build career in data analytics.