

Branch Name:	Management (Business Analytics)
Program Code:	MS301
Course Name:	Business Analytics
Course Code:	2MS3010541
Pre-requisite Course:	Form of Business Organization, Management

Course Objectives:

- 1) To Study core statistical techniques; data retrieval, analysis and mining
- 2) To effectively persuade in the project-oriented world of data-driven decisions.
- 3) To understand the purpose of using business analysis tools within an organization
- 4) To analyse a dataset for making a business decision.
- 5) To use R studio for data analysis.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
4	-	-	4	60	40	-	-	100

Subject Contents:

Sr No.	Topic	Total Hours	Weightage (%)
1	Introduction to Business Analytics and Big Data: Business Analytics - Definition - Need - Scope - A categorization of Analytical Methods - Analytics in action - Big data - Business analytics in practice - types of data - modifying data in Excel - creating Distributions from data-measures of location.	10	20
2	Application of Business Analytics Machine Learning - Introduction and Concepts - Differentiating algorithmic and model-based frameworks, Decision analytics. Descriptive analytics - Predictive analytics - Prescriptive analytics.	10	20
3	Decision support and Data Visualisation DSS- Executive and enterprise support- Automated decision support - Web analytics- Data mining -Applied artificial intelligence - Visual analysis: Data concepts – Data Dashboards - Data exploration & visualization - Scorecards	10	20
4	Time Series and Forecasting Time series pattern – forecasting accuracy – moving averages and exponential smoothing - using regression analysis for forecasting – determining the best forecasting model to use - building good spreadsheet model – What-If analysis – some useful Excel functions for modeling – auditing spreadsheet model – a simple maximization problem.	10	20

5	Data Analysis using R R Studio: Introduction – R data types and objects, reading and writing data - Data structures in R - R programming fundamentals - Advantages and disadvantages of using R.	08	20
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Text Books:

Sr. No.	Books
1	Majid Nabavi, David L.Olson, Introduction to Business Analytics, Business Expert Press, 2018
2	Umesh R Hodeghatta and Umesha Nayak, Business Analytics Using R - A Practical Approach- Apress, 2017.

Reference Books:

Sr. No.	Books
1	Jeffery D.Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, Essentials of Business Analytics, Cengage Learning, 2015
2	Bernard Marr, Big Data: Using Smart Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance, Wiley, 2015
3	Sandhya Kuruganti, Business Analytics: Applications To Consumer Marketing, McGraw Hill, 2015

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Critically analyze the business problems and apply analytical knowledge in big data	Analyze
CLO2	Recognize, understand, and apply the language, theory, and models of the field of business analytics	Understand
CLO3	Able to cultivate cognitive skills in the applications of business analytics	Understand
CLO4	Commitment to sustainable development of data visualization and time series analysis related to various sectors.	Apply
CLO5	Provide leadership in the application of R statistics	Apply
CLO6	Cultivating cognitive skills acquired in forecasting methods	Evaluate

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes	Program Outcomes (POs)								Program Specific Outcomes (PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CLO1	H	H	M						H	M
CLO2	M						H	H	M	
CLO3		M	H					H	H	
CLO4				H		M	H			H
CLO5	H		H			H				H
CLO6		H	M					M	H	

H: High, M: Medium, L: Low
