

Branch Name:	MANAGEMENT
Program Code:	MS201
Course Name:	Business Analytics
Course Code:	3MS2010104P
Pre-requisite Course:	Basic knowledge of Statistics, MS Excel, and Fundamentals of Business Management.

Course Objectives:

1. To introduce students to the basic concepts and importance of Business Analytics in management.
2. To develop the ability to understand, organize and interpret business data.
3. To enable students to use simple analytical techniques for business decision-making.
4. To develop basic skills in using spreadsheets for business data analysis.
5. To help students understand trends, relationships and patterns in business data.
6. To demonstrate the application of Business Analytics in marketing, finance, HR and operations.

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	
-	1	4	3	-	-	50	50	100

Subject Contents:

Sr. No.	Topics	Hours	Weightage
1	Understanding Business Analytics and Business Data: Meaning and importance of Business Analytics; role of analytics in management; examples of analytics in everyday business; types of analytics – Descriptive, Predictive and Prescriptive; data-driven decision-making; identifying a business problem; sources of business data; primary and secondary data; types of business data; collecting and organizing data; data cleaning and data quality; introduction to tables and charts; understanding business performance through Key Performance Indicators (KPIs). List of Practical: • Understanding a business dataset: sales, customers, products and revenue • Entering and organizing business data in Excel • Identifying and correcting missing, duplicate and incorrect data • Sorting and filtering business data • Creating simple tables and charts from business data • Calculating and interpreting basic business KPIs such as sales, profit, growth and customer count • Preparing a simple business performance dashboard	20	33.33%
2	Understanding and Analysing Business Data: Introduction to descriptive statistics; mean, median and mode; range and standard	20	33.33%

	deviation; summarizing business data; comparison of business performance; understanding relationships between two variables; introduction to correlation; simple regression concept; understanding trends in business data; introduction to forecasting; using Excel for basic business analysis; interpreting analytical results in simple business language. List of Practical: • <i>Calculating mean, median and mode using a business dataset</i> • <i>Understanding variation in business data using range and standard deviation</i> • <i>Comparing sales performance across products, regions or months</i> • <i>Finding relationships between two business variables</i> • <i>Simple correlation analysis using sales and advertising data</i> • <i>Introduction to simple regression using a business example</i> • <i>Identifying sales trends using monthly business data</i> • <i>Simple sales forecasting using past data</i>		
3	Using Analytics for Business Decisions: Introduction to scenario analysis; what-if analysis; simple decision-making using data; introduction to risk analysis; basic simulation concept; marketing analytics; sales and customer analytics; financial analytics; human resource analytics; operations and supply chain analytics; creating simple dashboards; presenting business insights; converting data into managerial recommendations; integrated business case studies. List of Practical • <i>What-if analysis: effect of price changes on sales and profit</i> • <i>Scenario analysis: best-case, normal-case and worst-case business situations</i> • <i>Simple customer and sales analysis for marketing decisions</i> • <i>Employee and operational data analysis for managerial decisions</i> • <i>Mini Business Analytics Project: analyse a business dataset and present managerial recommendations</i>	20	33.33%

Text Books:

Sr.No	Books
1	Business Analytics: The Science of Data-Driven Decision Making – U. Dinesh Kumar, Wiley India. (Latest edition).
2	Data Analytics – Anil Maheshwari, McGraw Hill Education.
3	Business Analytics – James R. Evans, Pearson.(Latest edition).

Reference Books:

Sr.No	Books
1	Business Analytics – R.N. Prasad and Seema Acharya, Wiley India. (Latest edition).
2	Data Science for Business – Foster Provost and Tom Fawcett, O'Reilly Media.
3	Competing on Analytics – Davenport Competing on Analytics, Publisher: Harvard Business School Press

List of Open Source Software/learning website:

- Ms Excel (Analysis Toolpak)

LAB/Practical

1. Primary LAB Tools:MS Excel, Google Looker Studio
2. AI & Predictive Analytics Tools:Orange Data Mining / RapidMiner

Journals/Magazines

1. Harvard Business Review (Analytics & AI Section)

2. MIT Sloan Management Review (Analytics Special Issues)
3. Analytics India Magazine
4. Forbes India (AI & Data Section)
5. Economic Times – Digital & Analytics Column

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

CLO	Description	Bloom's Taxonomy Level
CLO1	Explain the fundamental concepts, scope, and applications of Business Analytics in organizational decision-making.	Understand
CLO2	Analyze business data using descriptive statistical techniques and analytical methods to derive meaningful insights.	Analyze
CLO3	Apply quantitative techniques such as correlation, regression, and forecasting for solving business problems.	Apply
CLO4	Use analytical tools and spreadsheet models to support data-driven managerial decisions.	Apply
CLO5	Evaluate business performance and trends using analytical frameworks and key performance indicators (KPIs).	Evaluate
CLO6	Assess the application of Business Analytics across functional areas such as marketing, finance, human resources, operations, and supply chain management.	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	M	M	-	-	-	-	L	M	L
CLO2	M	H	H	-	-	-	-	L	H	M
CLO3	M	H	H	-	-	-	-	L	H	M
CLO4	M	H	H	L	-	-	-	L	H	H
CLO5	L	M	M	H	-	-	-	L	M	H
CLO6	M	M	M	-	M	M	L	L	M	M

H: High, M: Medium, L: Low
