

Name of College: S. R. Luthra Institute of Management								
Faculty	Management			Program	Master of Business Administration (M.B.A.)			
Year	II			Version	1.0			
Semester	3			Effective From	June 2025			
Course Code	MGMB18302	Course Name	Big Data Analytics (BDA)					
Teaching Scheme					Examination Scheme			
Credits	Lecture (L)	Tutorial (T)	Practical (P)	ME	CE	SE	V	Total
4	4	0	0	30	40	50	---	120

Course Outcomes:

CO1	<i>Understand</i> the fundamentals of Big Data in business analytics
CO2	<i>Apply</i> the knowledge of big data frameworks and architectures to analyse real-world data environments
CO3	<i>Demonstrate</i> conceptual understanding of Big Data technologies using modern tools for handling large and unstructured data
CO4	<i>Evaluate</i> the applications of Big Data across industries, with emphasis on ethical considerations, data governance, and risk management practices.

Mapping Course Outcomes to Program Outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	2	2	1	1	1	2
CO2	2	2	1	2	1	2
CO3	2	3	1	2	2	2
CO4	2	3	2	3	2	2



Sr. No	Module	Description	CO	Marks	Hours
1	I	Introduction to Big Data <ul style="list-style-type: none"> • Concept and Big Data Characteristics • Types of Big Data • Traditional Versus Big Data Approach • Big Data Challenges • Importance and applications in business analytics • Big Data lifecycle and ecosystem 	1	12	10
2	II	Big Data Frameworks and Architectures <ul style="list-style-type: none"> • Overview of distributed computing and storage • Concept of data lakes, data warehouses, and data marts • Centralized vs. decentralized architectures for Big Data 	2	12	10
3	III	Big Data Technologies (Overview) <ul style="list-style-type: none"> • Hadoop ecosystem (HDFS, YARN, MapReduce) – conceptual understanding • Overview of Apache Spark and its use cases • NoSQL databases (e.g., MongoDB, Cassandra) – their role in managing unstructured data 	3	12	10
4	IV	Business Applications of Big Data (Use cases) <ul style="list-style-type: none"> • Retail, Healthcare, Banking, Supply chain • Data Governance and Ethics • Risk Management in Big Data 	4	14	10

REFERENCE

Books:

1. Erl, T., Khattak, W., & Buhler, P. (2016). *Big data fundamentals: Concepts, drivers & techniques*. Prentice Hall.
2. Kleppmann, M. (2017). *Designing data-intensive applications: The big ideas behind reliable, scalable, and maintainable systems*. O'Reilly Media.
3. White, T. (2015). *Hadoop: The definitive guide* (4th ed.). O'Reilly Media.
4. Chambers, B., & Zaharia, M. (2018). *Spark: The definitive guide: Big data processing made simple*. O'Reilly Media.
5. Fowler, A. (2015). *NoSQL for dummies*. Wiley.
6. Acharya, S., & Chellappan, S. (2019). *Big data and analytics* (2nd ed.). Wiley.

Newspapers / Magazines / Journals:

1. News Paper: Business Standard, Economic Times, Times of India
2. Journals: Harvard Business Review, The Wall Street Journal

Web resources:

1. <https://hadoop.apache.org>
2. <https://spark.apache.org>
3. <https://www.mongodb.com/try/download/community>
4. <https://cassandra.apache.org>

