

McGraw-Hill

2. Database Management Systems by P.S.Gill
3. Database System Concepts by Silberschatz
4. Database Management Systems by Bipin Desai
5. Principles of Database Systems by J.D.Ullman

Elective Course 2: Big Data , Business Analytics & FinTech

Course Type:	Elective	Course Credits:	2
Course Code:	S3PE510	Course Duration:	30 Hours

Course Objective:

- To introduce foundational concepts and applications of big data and business analytics in finance.
- To equip students with skills to utilize analytical tools and techniques for financial decision-making.
- To develop practical abilities to harness big data for strategic advantage and customer insights in financial services.
- To foster critical understanding of fintech innovations, digital payment systems, and technology-driven financial solutions.
- To cultivate analytical capabilities to evaluate the impact of fintech trends on traditional financial services.

Course Outcomes:

- CO1: Understand the fundamental concepts and importance of big data and business analytics and FinTech..
- CO2: Analyse big data architectures, tools, and technologies for data processing.
- CO3: Evaluate data analytics techniques, predictive modelling, and machine learning applications and FinTech.
- CO4: Apply big data analytics and FinTech in decision-making and business intelligence.
- CO5: Explore emerging trends and challenges in big data, FinTech, analytics-driven businesses.

Unit/ Module	Content	CO Mapping	Hours Assigned
1	Introduction to Big Data and Business Analytics - Basics of big data and Business Analytics its	CO1,	4

	ecosystem. - Data processing frameworks. - Industry trends and challenges.	CO2	
2	Big Data & Data Management - Data collection and pre-processing. - NoSQL databases and data warehousing. - Data visualization techniques. -Predictive and Business analytics concepts and its applications	CO2, CO3, CO4	4
3	Big Data Implementation and Business Analytics - Big data strategy and governance. - Security and privacy in big data, -Real-time processing and streaming Business analytics -Emerging trends and Case Studies of Big Data and Business Analytics	CO3, CO4,CO 5	5
4	Introduction & Applications of Financial Technology, FinTech: Technology enablers - Blockchain Technology Digital Payments FinTech in Banking FinTech in Lending Emerging trend and case studies	CO1,CO 2,CO4, CO5	7
5	Introduction & Applications of Financial Technology, FinTech: FinTech in Wealth Management & Capital Markets and Other Types of FinTech – Property, Insurance and across the sectors of the industry with their case studies etc.	CO1,CO 2,CO4, CO5	7
6	Emerging Trends in Business analytics and FinTech with their related case studies	CO4, CO5	3

Textbooks:

1. Big Data and Business Analytics by Jay Liebowitz, Pearson Education India
2. Big Data Analytics by Seema Acharya & Subhashini Chellappan, Wiley India
3. Business Analytics: The Science of Data-Driven Decision Making by U. Dinesh Kumar, Wiley India
4. Data Science and Big Data Analytics by EMC Education Services, Wiley India

Reference Books:

1. Data Analytics by V. P. Jain, Khanna Publishing House
2. Business Analytics by Sanjiv Jaggia, Alison Kelly, and R. A. Sharma (Indian adaptation), Cengage India
3. Fundamentals of Business Analytics by R. N. Prasad & Seema Acharya, Wiley India.
4. Business Intelligence and Analytics by Ramesh Sharda, Dursun Delen & Efraim Turban, Pearson India
5. Big Data: Concepts, Technology and Architecture by Thomas Erl, Pearson India

Elective Course 3: Enterprise Management System

Course Type:	PS: Program Specialisation	Course Credits:	2
Course Code:	S3SE511	Course Duration:	30 Hours

Course Objective:

- To introduce foundational concepts and strategic importance of enterprise systems.
- To equip students with practical skills for implementing and managing ERP systems within organizations.
- To develop analytical capabilities for evaluating enterprise systems' effectiveness and integration.
- To foster understanding of business process automation, resource optimization, and operational efficiency.
- To cultivate strategic insights into emerging trends and challenges in enterprise system management.

Course Outcomes:

- CO1: Understand the enterprise resource planning (ERP) and its integration for effective business.
- CO2: Describing the Enterprise Content Management in organisational workflow
- CO3: Analyse the various business application of enterprise system across the functions and verticals of the organisation
- CO4: Evaluate the emerging technologies available for building enterprise systems and portals and implementation strategies.