

Babu Banarasi Das University Lucknow

School of Management

Course Curriculum

Master of Business Administration Data Science and Artificial Intelligence Program (MBA-AI) In Collaboration with GUVI-HCL

Effective from Academic Batch 2026-27

**COURSE STRUCTURE OF MASTER OF BUSINESS ADMINISTRATION-
DATA SCIENCE AND ARTIFICIAL INTELLIGENCE PROGRAM (MBA-AI)****Version Control**

Version	1.0
Effective from	1 st July, 2026

Approved by Board of Studies of School of Management on _____

Introduction

School of Management, Babu Banarasi Das University ensures that learning is an interactive process. India is one of the fastest growing countries in the world and is poised to become the second largest economy in the world in the next two to three decades. This spectacular growth is being fuelled largely by the ever increasing domestic consumption and the entrepreneurial spirit of individuals. There is an ever increasing need for industry ready management professionals. Therefore there is a strong need for imparting business management education and training in the right way to make this dream a reality.

To cater the market needs, School of Management offer Program of Master of Business Administration in Data Science and Artificial Intelligence in collaboration with GUVI-HCL (MBA-AI Full Time-2 years)

MASTER OF BUSINESS ADMINISTRATION in DATA SCIENCE AND ARTIFICIAL INTELLIGENCE PROGRAM (MBA-AI)

The MBA-AI is a two year (four-semesters) full time regular program with specialisation in Artificial Intelligence in collaboration with GUVI-HCL. The Program aims to provide students with industry-relevant knowledge and practical competencies in the field of Artificial Intelligence, enabling them to effectively contribute to modern business, industry, and trade environments, while addressing emerging technological challenges, data-driven decision-making needs, and innovation demands across organizations. The program not only aims to provide comprehensive knowledge and practical skills in various domains of management and Artificial Intelligence, but also focuses on the holistic development of students by enhancing their analytical thinking, innovation capabilities, ethical decision-making, leadership qualities, communication skills, and adaptability to the evolving digital business environment.

The structure of the program consists of core courses and specialized courses of Data Science and Artificial Intelligence. Data Science and Artificial Intelligence is introduced as a major specialization from the first semester itself, enabling students to build strong foundational knowledge in Data Science and AI-driven business applications from the beginning of the program. Along with core management courses offered in the initial semesters, students are gradually exposed to advanced and domain-specific electives in areas such as AI in Marketing, AI-driven Finance, Human Resource Analytics, Business Intelligence, and Data-Driven Decision Making in subsequent semesters. Right from the beginning of the program, the focus is on providing relevant inputs through case discussion/ analysis, Lab works, management games, simulations, role plays, flipped classroom etc. keeping in mind the current industry requirements. The detailed teaching and evaluation scheme is given in subsequent sections.

Summer Internship of minimum 45 days is compulsory for every student pursuing the programme, which they have to undergo between second and third semester. Beyond 45 days student has to take permission from the Dean of the School. During the training, the student is expected to learn about the organization and analyze and suggest solutions to a live problem. The objective is to equip the student with the knowledge of actual functioning of the organization and problems faced by them for exploring feasible solutions and suggestions. The student, after the completion of training will submit two spiral bound reports to the School/University, which will form part of third semester examination. It is mandatory that

the student will make presentation in the presence of teachers and students. The detailed guidelines regarding the report will be provided by the School at the beginning of the third semester.

The concept of “Research Based Learning (RBL)” is introduced from the session 2026-27. The RBL will start from semester one and in final semester student has to submit a Research Report/ Book Chapter as part of the course. The detailed guidelines regarding the RBL will be provided by the School at the beginning of each semester.

Credit system will be followed during the entire two years course curriculum.

MASTER OF BUSINESS ADMINISTRATION

in

DATA SCIENCE AND ARTIFICIAL INTELLIGENCE (MBA-AI)

Core Strengths

- Industry-oriented learning aligned with evolving business environments
- Strong foundation in management concepts with AI awareness
- Strategic learning focused on analytical and decision-making abilities
- Application-focused approach connected to real business challenges
- Professional learning environment supporting overall career growth

Unique Features

- Management-oriented learning aligned with emerging AI-driven business practices
- Future-focused academic structure aligned with industry evolution
- Practical learning connected to contemporary business environments
- Career-oriented approach designed for professional readiness
- Industry-aware framework supporting modern managerial perspectives

Career Outcomes

- Enhanced managerial and analytical capabilities
- Improved understanding of AI-driven business environments
- Strengthened strategic thinking and decision-making abilities
- Greater adaptability to evolving industry dynamics
- Improved professional competence and career readiness

PROGRAM OUTCOMES (POS) AND PROGRAM SPECIFIC OUTCOMES (PSO)

Programme Outcomes (POs)	
PO1	Management Knowledge: To equip the students with requisite theoretical and practical management knowledge, skills & right attitude necessary to become management professional.
PO2	Business Analysis: Use analytical and reflective thinking techniques to identify and analyze business problems, develop viable solutions, and make effective decisions.
PO3	Communication: To impart knowledge to the students towards Business Communication for effective and Professional business management.
PO4	Entrepreneurship: To develop the entrepreneurship acumen.
PO5	Individual and Team Work: Develop young men and women into highly adept professional managers with ability to lead a team and develop group behaviour for achieving organizational goals.
PO6	Design / Development of knowledge: To develop the ability to understand, analyse and apply management concepts in the areas related to marketing, operations, human resources and finance for efficient running of the business organization of varying complexity in competitive era.
PO7	Ethics: To recognize and solve business problems in an ethical manner for continuous development of business venture.
PO8	Technology Orientation: To develop competency in the use of technology in modern organizational operations.
PO9	Industry Orientation: To provide professional learning opportunities in real industrial scenario through Summer Internship Program.
PO10	The Business Leader and Society: To help students to apply key systematic and analytical decision making skills to solve complex organizational problems.
PO11	Environment and Sustainability: Understand the relevant issues of environmental concern and sustainable development.
PO12	Life Long Learning: To stimulate an interest in research and its applications to find solutions for business problems and to acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes.

Program Specific Outcomes (PSO)	
PSO1	To provide knowledge of AI-enabled and data-driven business practices along with their managerial applications.
PSO2	To develop managerial capabilities with awareness of emerging technologies, Artificial Intelligence, Data Science, and evolving industry requirements.

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EVALUATION SCHEME

YEAR 1 SEMESTER I										
Theory/ Practical	Course Code	Course Category	Course Title	Contact Hours			Evaluation Scheme			Credits
				L	T	P	CIA	ESE	Total	
Theory	MBAAI1101	Major	Digital Transformation & Emerging Technologies	4	0	0	40	60	100	4
Theory	MBAAI1102	Major	AI Driven Business Analytics	4	0	0	40	60	100	4
Theory	MBAAI1103	Major	Data Analytics with Power BI	4	0	0	40	60	100	4
Theory	MBAAI1104	Core	Managerial Economics	4	0	0	40	60	100	4
Theory	MBAAI1105	Core	Accounting & Financial Analysis	3	2	0	40	60	100	4
Theory	MBAAI1106	Core	Organizational Behaviour	4	0	0	40	60	100	4
Theory	MBAAI1107	Core	Marketing Management	4	0	0	40	60	100	4
Theory	MBAAI1108	Core	Principles of Management	2	0	0	40	60	100	2
Practical	MBAAI1109	Core	Research Based Learning I	0	0	2	100		100	1
Practical	GP1101	Core	General Proficiency				100		100	1
Total									1000	32

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EVALUATION SCHEME

YEAR 1				SEMESTER II						
Theory/ Practical	Course Code	Course Category	Course Title	Contact Hours			Evaluation Scheme			Credits
				L	T	P	CIA	ESE	Total	
Theory	MBAAI1201	Major	AI for Marketing & Consumer Intelligence	4	0	0	40	60	100	4
Theory	MBAAI1202	Major	AI in Finance & Risk Management	4	0	0	40	60	100	4
Theory	MBAAI1203	Major	AI Driven Research & Business Intelligence	4	0	0	40	60	100	4
Theory	MBAAI1204	Core	Operations Research	4	0	0	40	60	100	4
Theory	MBAAI1205	Core	Managing Human Resources	4	0	0	40	60	100	4
Theory	MBAAI1206	Core	Cost & Management Accounting	3	2	0	40	60	100	4
Theory	MBAAI1207	Core	Sales & Distribution Management	4	0	0	40	60	100	4
Theory	MBAAI1208	Core	Marketing of Services	4	0	0	40	60	100	4
Practical	MBAAI1209	Core	Research Based Learning II	0	0	2	100		100	1
Practical	GP1201	Core	General Proficiency				100		100	1
Total									1000	34

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EVALUATION SCHEME

YEAR 2 SEMESTER III										
Theory/ Practical	Course Code	Course Category	Course Title	Contact Hours			Evaluation Scheme			Credits
				L	T	P	CIA	ESE	Total	
Theory	MBAAI1301	Major	AI for Strategic Management	4	0	0	40	60	100	4
Theory	MBAAI1302	Major	Financial Information System & Big Data Analytics	4	0	0	40	60	100	4
Theory	MBAAI1303	Core	Legal Aspects of Business	4	0	0	40	60	100	4
Theory	MBAAI1304	Core	Operations Management	4	0	0	40	60	100	4
Theory	MBAAI1305	Core	Capital Markets & Financial Instruments	4	0	0	40	60	100	4
Theory	MBAAI1306	Core	Negotiation and Counseling	4	0	0	40	60	100	4
Theory	MBAAI1307	Core	Retail Management	4	0	0	40	60	100	4
Theory	MBAAI1308	Core	Integrated Marketing Communication	4	0	0	40	60	100	4
Practical	MBAAI1309	Core	Summer Internship Project Report				100		100	6
Practical	MBAAI1310	Core	Research Based Learning III	0	0	4	100		100	2
Practical	GP1301	Core	General Proficiency				100		100	1
Total									1100	41

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EVALUATION SCHEME

YEAR 2 SEMESTER IV										
Theory/ Practical	Course Code	Course Category	Course Title	Contact Hours			Evaluation Scheme			Credits
				L	T	P	CIA	ESE	Total	
Theory	MBAAI1401	Major	Gen AI Strategy & Enterprise Transformation	4	0	0	40	60	100	4
Theory	MBAAI1402	Core	Corporate Governance, Values & Ethics	4	0	0	40	60	100	4
Theory	MBAAI1403	Core	Supply Chain Management	4	0	0	40	60	100	4
Theory	MBAAI1404	Core	Industrial Relations & Labour Codes	4	0	0	40	60	100	4
Theory	MBAAI1405	Core	Compensation & Benefits	4	0	0	40	60	100	4
Practical	MBAAI1406	Core	Research Based Learning IV	0	0	4	100		100	2
Practical	GP1401	Core	General Proficiency				100		100	1
Total									700	23

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Digital Transformation & Emerging Technologies	L	T	P	Credits
Course Code	MBAAI1101	4	0	0	0

Course Objectives:	To understand the concepts of digital transformation and the impact of emerging technologies on modern business organizations..
	To develop strategic and analytical skills for implementing digital technologies and innovation-driven business transformation solutions.

Course Outcomes:	
CO1	Understand the fundamentals of digital transformation and emerging technologies in business environments.
CO2	Apply digital technologies and AI-driven tools for improving business operations and decision-making.
CO3	Analyze business challenges and opportunities associated with digital innovation and enterprise transformation.
CO4	Develop technology-enabled business transformation strategies using emerging digital solutions.

Course Contents	No of Hours	Mapped CO
Module I: Fundamentals of Digital Transformation • Introduction to Digital Transformation Concepts • Evolution of Digital Business and Industry 4.0 • Role of AI, Automation, and Data-driven Systems in Enterprises • Digital Business Models and Innovation Strategies • Organizational Change Management in Digital Transformation • Digital Customer Experience and Engagement • Enterprise Digital Ecosystems and Platforms • Ethical, Legal, and Governance Issues in Digital Technologies	15	CO1
Module II: Emerging Technologies in Business • Artificial Intelligence and Machine Learning Applications • Internet of Things (IoT) and Smart Systems • Cloud Computing and Virtualization Technologies • Blockchain Technology and Digital Transactions • Big Data Analytics and Business Intelligence • Robotic Process Automation (RPA) Concepts • Cybersecurity and Digital Risk Management • Applications of Emerging Technologies in Enterprises	15	CO2
Module III: Strategic Enterprise Transformation • Digital Strategy and Innovation Management • AI-driven Business Process Optimization • Smart Supply Chain and Operations Management • FinTech, HealthTech, and EdTech Transformation Models • Customer Analytics and Personalized Digital Services • Enterprise Resource Planning (ERP) and CRM Systems	15	CO3

- Digital Leadership and Workforce Transformation - Case Studies on Successful Digital Transformation Practices		
Module IV: Future Technologies and Digital Transformation Project - Metaverse and Extended Reality (XR) in Business - Generative AI and Intelligent Automation Systems - Sustainable Digital Transformation Strategies - Smart Enterprises and Data-driven Decision Systems - Emerging Trends in Digital Innovation and Enterprise Technology - Data Privacy, Ethics, and Governance in Digital Ecosystems - Business Reporting and Strategic Technology Planning Mini Project: Digital Transformation Strategy for a Smart Enterprise - Develop a technology-driven digital transformation model for an organization by integrating emerging technologies to improve operational efficiency and customer experience.	15	CO4
Suggested Readings: - Thomas M. Siebel – Digital Transformation: Survive and Thrive in an Era of Mass Extinction, RosettaBooks. - Bernard Marr – Tech Trends in Practice: The 25 Technologies that are Driving the 4th Industrial Revolution, Wiley Publications. - Andrew McAfee & Erik Brynjolfsson – Machine, Platform, Crowd: Harnessing Our Digital Future, W.W. Norton & Company. - David L. Rogers – The Digital Transformation Playbook: Rethink Your Business for the Digital Age, Columbia Business School Publishing.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	AI-Driven Business Analytics	L	T	P	Credits
Course Code	MBAAI1102	4	0	0	4

Course Objectives:	To understand the concepts, tools, and techniques of AI-driven business analytics for organizational decision-making.
	To develop analytical skills for applying Artificial Intelligence methods in business data analysis, forecasting, and strategic planning.

Course Outcomes:	
CO1	Understand the fundamentals of AI and business analytics in organizational environments.
CO2	Apply AI-based analytical methods for business data processing and decision-making.
CO3	Analyze business trends, customer insights, and operational performance using AI techniques.
CO4	Develop AI-driven analytical solutions for solving real-world business problems.

Course Contents	No of Hours	Mapped CO
Module I: Fundamentals of AI and Business Analytics • Introduction to Business Analytics • Evolution of Artificial Intelligence in Business • Types of Analytics: Descriptive, Predictive, and Prescriptive • AI Concepts: Machine Learning and Deep Learning Basics • Business Data Sources and Data-driven Decision Making • Role of AI in Business Transformation • Data Visualization Concepts and Dashboards • Ethical Issues and Challenges in AI Analytics	15	CO1
Module II: Data Analytics and Predictive Intelligence • Data Collection and Data Preparation Techniques • Structured and Unstructured Business Data • Exploratory Data Analysis (EDA) • Predictive Analytics and Forecasting Methods • Customer Analytics and Behavioral Analysis • AI-based Recommendation Systems • Business Performance Metrics and KPI Analysis • Introduction to AI Tools used in Business Analytics	15	CO2
Module III: AI Applications in Business Decision-Making • AI in Marketing and Sales Analytics • AI in Financial and Risk Analytics • Supply Chain and Operations Analytics • Human Resource Analytics using AI • Fraud Detection and Business Intelligence Systems • Sentiment Analysis and Social Media Analytics • AI-based Strategic Planning and Decision Support Systems • Case Studies on AI-driven Business Applications	15	CO3

Module IV: AI-Driven Business Analytics Project & Emerging Trends - AI-enabled Business Intelligence Platforms - Real-time Analytics and Automation - Cloud-based Analytics Solutions - AI in Digital Business Transformation - Emerging Trends in AI and Analytics - Data Privacy, Security, and Governance - Business Reporting and Insight Generation Mini Project: AI-based Business Performance Analysis System - Develop a simple AI-driven business analytics model that analyzes organizational data and generates insights for business decision-making.	15	CO4
Suggested Readings: - Foster Provost & Tom Fawcett – Data Science for Business, O'Reilly Publications. - Cindi Howson – Successful Business Intelligence, McGraw-Hill Education. - Bernard Marr – Artificial Intelligence in Practice, Wiley Publications. - Gert H. N. Laursen & Jesper Thorlund – Business Analytics for Managers, Pearson Education.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Data Analytics with Power BI	L	T	P	Credits
Course Code	MBAAI1103	4	0	0	4

Course Objectives:	Develop interactive dashboards and reports using Power BI for effective business decision-making.
	Apply data modeling and DAX techniques to transform raw data into meaningful insights.

Course Outcomes:	
CO1	Understand the fundamentals of Business Intelligence and Power BI concepts.
CO2	Apply data preparation, transformation, and modeling techniques using Power BI.
CO3	Develop interactive dashboards and visual reports for business decision-making.
CO4	Analyze business data using DAX, advanced analytics, and Power BI deployment features.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Business Intelligence and Power BI • Introduction to Business Intelligence (BI) • Overview of Power BI components • Data sources in Power BI • Data loading and connectivity • Power BI interface and views • Data types and basic transformations • Introduction to Power Query Editor • Importing and exploring datasets • Case study on sales data analysis	15	CO1
Module II: Data Preparation and Modeling • Data cleaning techniques • Handling missing values and duplicates • Data transformation using Power Query • Data modeling concepts • Relationships and keys • Star schema and snowflake schema • Creating and managing data models • Calculated columns and measures • Introduction to DAX basics • Case study on business reporting model	15	CO2
Module III: Data Visualization and Dashboard Design • Principles of data visualization • Types of charts and visuals • Creating interactive dashboards • Filters, slicers, and drill-down features • Custom visuals and report formatting • Dashboard storytelling techniques • Designing executive reports	15	CO3

- Dashboard layout and usability - Case study on sales performance dashboard		
Module IV: Advanced Analytics and Power BI Deployment - Advanced DAX functions - Measures and KPI creation - Trend analysis and forecasting - Scenario analysis techniques - Introduction to Python/R integration - Data refresh and scheduling - Performance optimization in reports - Publishing reports to Power BI Service - Dashboard sharing and collaboration - Row-Level Security (RLS) basics - Industry applications of Power BI - Mini Project: Business dashboard solution	15	CO4
Suggested Readings: - Marco Russo & Alberto Ferrari – The Definitive Guide to DAX - Reza Rad – <i>Power BI from Rookie to Rock Star</i> - Avichal Singh & Bhavik Merchant – <i>Mastering Microsoft Power BI</i>		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Managerial Economics	L	T	P	Credits
Course Code	MBAAI1104	4	0	0	4

Course Objectives:	To develop insight into the principles, concepts and theories of micro economics.
	To develop analytical skills for applying micro economic principles, concepts and theories in business decision making.

Course Outcomes:	
CO1	Understand and interpret the concept of managerial economics and the role of managerial economists in forecasting and business decision making.
CO2	Apply the mechanics of demand and supply in real world business problems.
CO3	Identify the changes in the competitive strategies according to different markets.
CO4	Analyze different pricing strategies and the concept of profit in economics.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Economics Meaning, Definition, Nature and Scope of Managerial Economics, Objectives of a Firm, Role of Managerial economist, Concept of Utility and its theories.	15	CO1
Module II: Demand & Supply Analysis Determinants and Law of Demand; Exceptions, Elasticity of Demand: Price, Income, Cross, Advertising, Application of Elasticity in Decision-Making, Measurement Techniques, Demand Forecasting: Methods & Measurement, Law of Supply and Supply Elasticity, Production Concepts: Short-run vs. Long-run, Cost Analysis: Short-run and Long-run Cost Curves.	15	CO2
Module III: Market Structures Market and its types; Perfect Competition: Features and Price Determination, Monopoly: Pricing and Price Discrimination, Monopolistic Competition: Pricing and Product Differentiation, Oligopoly: Kinked Demand Curve, Cartels, Price Leadership, Market equilibrium and price determination.	15	CO3
Module IV: Pricing & Profit Management Concept of pricing and its strategies: Full-cost, Product Line, Skimming, Penetration, Profit Concepts and Theories: Dynamic Surplus Theory, Risk & Uncertainty Theory, Innovation Theory.	15	CO4
Suggested Readings: • Damodaran Suma , Managerial Economics (Oxford, 2006). • Dominick Salvatore, Managerial Economics (Oxford, 2007). • Hirschey Mark , Economics for Managers (Thomson, India Edition, 2007). • Petersen Craig H. etal., Managerial Economics (Pearson Education, 2006).		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Accounting & Financial Analysis	L	T	P	Credits
Course Code	MBAAI1105	3	2	0	4

Course Objectives:	To familiarize students with fundamentals, basic theory and concepts of financial accounting.
	To have knowledge of various Accounting Standards, IFRS and US-GAAP used in preparation of financial statements.
	To understand how to prepare and present financial statements.
	To acquire knowledge about how various techniques are used for analyzing financial statements and their application for managerial decision making.

Course Outcomes:	
CO1	To understand and demonstrate the fundamental accounting principles, accounting equation, standards and IFRS, US GAAP and accounting techniques.
CO2	To prepare and maintain books of accounts, financial records and Financial statements by collecting, recording and classifying the financial information from divergent sources.
CO3	To make critical analysis and interpretation of financial statements of a company.
CO4	Demonstrate the ability to differentiate between and prepare Cash Flow Statements and Funds Flow Statements of a company.

Course Contents	No of Hours	Mapped CO
Module I : Fundamentals of Accounting, Accounting Standards and Financial Reporting System. Accounting concepts, Conventions and principles, Accounting Equation, International Accounting principles and standards, Comparison of Indian Accounting Standard (IAS), International Financial Reporting Standards (IFRS) and US GAAPs.	15	CO1
Module II: Book Keeping and Accountancy, Preparation of Financial Books and Preparation of Final Accounts Introducing to Book Keeping and Record Maintenance: The concept of double entry and fundamental principles, Journal, Ledger, Cash Book, Subsidiary Books, Bank Reconciliation Statement, Rectification of Errors, and Journalizing of transactions. Preparation of final accounts: Trial Balance, Profit & Loss Account, Profit & Loss Appropriation account and Balance Sheet, Policies related with depreciation, Inventory and intangible assets like copyright, trademark, patents and goodwill.	15	CO2
Module III: Analysis of Financial Statements, Ratio Analysis and Comparative Statements Understanding and Interpreting Financial Statements. Ratio Analysis and interpretation: Solvency ratios, profitability ratios, activity ratios, liquidity ratios, market capitalization ratios. Common Size Statement, Comparative Balance Sheet, Trend Analysis of manufacturing, service & banking organizations.	15	CO3

Module IV: Cash Flow and Funds Flow Analysis, Working Capital Management Fund Flow Statement: Meaning, Concept of Gross and Net Working Capital, Preparation of Schedule of Changes in Working Capital, Preparation of Funds Flow Statement and its analysis. Cash Flow Statement: Various cash and non-cash transactions, Flow of cash, Preparation of Cash Flow Statement and its analysis.	15	CO4
Suggested Readings: - Narayanswami, Financial Accounting: A Managerial Perspective (PHI, 2nd Edition). - Mukherjee, Financial Accounting for Management, 1st Edition, TMH. - Ramchandran & Kakani, Financial Accounting for Management, 2nd Edition, TMH. - Ghosh T. P. , Accounting and Finance for Managers (Taxman, 1st Edition). - Maheshwari S.N. & Maheshwari S.K., An Introduction to Accountancy, 9th Edition, Vikas Publication. - Ashish K. Bhattacharya, Essentials of Financial Accounting, PHI, New Delhi.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Organizational Behaviour	L	T	P	Credits
Course Code	MBAAI1106	4	0	0	4

Course Objectives:	Understand key factors influencing individual behavior such as attitudes, emotions, personality, and motivation.
	Understand group dynamics and leadership in the context of teams, power, politics, and conflict.
	Understand the impact of organizational structure and culture on employee behavior and outcomes.
	Identify strategies for managing change and stress to enhance organizational effectiveness.

Course Outcomes:	
CO1	Explain key OB concepts related to individual behavior, including attitudes, emotions, personality, and values.
CO2	Apply the knowledge of theories of perception, decision-making, motivation, and learning in organizational settings.
CO3	Analyze and manage the influence of group dynamics, leadership, power, politics, and conflict in organizations.
CO4	Analyze organizational structure, culture, and change, and apply models to manage change, stress and foster an innovative, ethical, and adaptable work environment

Course Contents	No of Hours	Mapped CO
Module I: Understanding Organizational Behavior & Individual Processes Importance of interpersonal skills, Define OB, disciplines that contribute to the OB field, Challenges & opportunities for OB, Attitudes: Definition & components, Major job attitudes at work, Job satisfaction- causes & outcomes of job satisfaction, Impact of job dissatisfaction- counterproductive work behaviour (CWB), Emotions and Moods: Basic concepts & sources, Emotional labor, Affective events theory, Emotional intelligence, Applications of emotions and moods at work. Personality and Values: Define personality, Personality frameworks: the Myers-Briggs Type Indicator, The big five personality model, Other personality attributes relevant to OB, Values- Terminal versus Instrumental values, Hofstede's framework.	15	CO1
Module II: Understanding Behavior at Work: Perception, Decision Making, Motivation, and Learning Perception: definition & process, Attribution theory, Common shortcuts in judging others, Decision Making Models: The Rational Model, Bounded Rationality, and Intuition, Common biases and errors in decision making, Individual differences and organizational constraints in DM, Creativity: Concept, Creative decision making, Motivation: Concept, Early theories - Hierarchy of Needs Theory, Two-Factor Theory, McClelland's Theory of Needs, Contemporary Theories of Motivation - Self-Determination Theory, Reinforcement Theory, Goal-Setting Theory, Self-Efficacy Theory, Equity Theory, Expectancy Theory, Motivating by job design: The Job Characteristics Model, Job redesign, Alternative work arrangements, Employee involvement and participation, Using rewards & benefits to motivate employees,	15	CO2

Learning: Concept & theories of learning.		
Module III: Group Dynamics, Leadership, Power, Politics, and Conflict Management Defining and classifying groups, Stages of group development, Group properties (roles, norms, status, size and dynamics, cohesiveness, diversity), Group decision making. Define work teams, Differences between groups and teams, Types of teams, Creating Effective Teams, Turning individuals into team players. Leadership: Basics of leadership, Full range of leadership model. Power and Politics: Definition, Bases of power, Power influencing tactics, Politics behavior, Factors contributing to political behavior. Conflict Management: Meaning & Stages of conflict, Strategies for managing conflict.	15	CO3
Module IV: Organizational Design and Development: Structure, Culture, Change, and Stress Management Organization Structure: Elements of org structures, Common Structures-simple structure, bureaucracy, and matrix structure, mechanistic and organic structural models, Determinants of organization structure. Organizational Culture: Meaning, Functional and dysfunctional effects of organizational culture, How culture is transmitted to employees, Ethical culture Organizational Change: Forces stimulating and resisting change, approaches to managing change (Kurt Lewin's model, Kotter's Eight-step Plan, OD Techniques), Creating a culture of innovation & learning organization Stress Management: Understanding Stress, Causes of stress and its consequences, managing stress.	15	CO4
Suggested Readings: - Robbins Stephen P., Organizational Behavior, 17th Edition, Pearson Education. - Aswathappa, K., Organizational Behavior (Text, Cases and Games), 12th Ed., Himalaya Publication. - Fred Luthans, Organizational Behavior: An Evidence-Based Approach, 12th Ed. McGraw Hill Education. - Gupta, C. B., A textbook of Organizational Behavior: With text and cases, S. Chand & Company.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Marketing Management	L	T	P	Credits
Course Code	MBAAI1107	4	0	0	4

Course Objectives:	To familiarize with foundational marketing concepts, theories, and principles.
	To understand the impact of marketing on organizational objectives
	To learn tools and techniques of marketing with focus on Indian experiences, approaches and cases.
	To familiarize students with marketing concepts to different national and global business situations.

Course Outcomes:	
CO1	Remember and comprehend basic marketing management concepts.
CO2	Understand and apply basic marketing concepts to develop the knowledge, skills, and attitude needed for a career in management.
CO3	Apply and develop marketing strategies and plans.
CO4	Analyse business and consumer markets and evaluate business problems, develop practical solutions, and make effective decisions.

Course Contents	No of Hours	Mapped CO
Module I : Introduction Nature and scope of marketing, Various marketing orientations, Need, Want, Demand, Elements of Marketing mix, Creating Customer Value, Satisfaction, and Loyalty and the value delivery process. Gathering Information and Scanning the Environment. Conducting Marketing Research and Forecasting Demand. Market segmentation: Meaning, Factors influencing segmentation, Market Aggregation, Basis for segmentation, Segmentation of Consumer. Targeting: Meaning, Basis for identifying target customers, Target Market Strategies. Positioning: Meaning, product differentiation strategies, tasks involved in positioning.	15	CO1
Module II: Product Decision and Pricing Decision Product Concept, Product Hierarchy, New Product Development, Diffusion process, Product Life cycle, Product mix strategies, New Product Development. Packaging and Labeling: Packaging as a marketing tool, requirement of good packaging, Role of labeling in packaging. Branding: Concept of Branding, Brand Types, Brand equity, Branding Positioning. Pricing Decisions: Pricing concepts for establishing value, Pricing Decisions, Pricing Objectives, Policies Methods of Setting Price, and Pricing Strategies	15	CO2
Module III: Distribution and Promotion Meaning, Purpose, Channel alternatives, Factors affecting channel choice, Channel design and Channel management decisions, Channel conflict, Retailing & Types of Retailers. Promotion Mix: Advertising-concept, types & objectives, AIDA model, Advertising Budget, Sales Promotion- kinds & techniques, Personal Selling-concept and features, steps involved in personal selling process, Publicity and Public relation.	15	CO3
Module IV: Consumer Behaviour and Current Issues in Marketing	15	CO4

Understanding Consumer Behavior: Buying motives, factors influencing buying behavior, buying habits, stages in consumer buying decision process, types of consumer buying decisions. Stimulus- response model. CRM Meaning, Relationship Marketing Vs. Relationship Management, Types of Relationship Management, Significance of Customer Relationship Management. Global Marketing: current scenario, Global Marketing environment, Recent trends and Innovation in Marketing- Green Marketing, Agile Marketing. Role of IT in Modern marketing: Marketing intelligence, Database Marketing, B2B, B2C, B2G marketing, Online marketing.		
Suggested Readings: 1. Marketing Management: A South Asian Perspective - Kotler, Keller, Kevin 15/e, Pearson Education, 2016. 2. Marketing Management - Ramaswamy V. S. & Namakumari S, 6/e, Sage Publication India Pvt Ltd., 2018. 3. Marketing Management - Tapan Panda, 5/e, Excel Publication, 2007. 4. Fundamentals of Marketing Management - Etzel M. J, B J Walker & William J. Stanton, 14/e, McGrawHill Education Publishers, 2015.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Principles of Management	L	T	P	Credits
Course Code	MBAAI1108	2	0	0	2

Course Objectives:	To have an in-depth knowledge of the basics of management along with its process & functions.
	To analyze & evaluate the role of various functions of management in business decision making.

Course Outcomes:	
CO1	Understand basics of management & its evolution.
CO2	Explain how planning & organizing helps in achieving organizational goals.
CO3	Identify how staffing & directing is helpful to managers in effective decision making.
CO4	Describe the importance of Controlling in the overall management function.

Course Contents	No of Hours	Mapped CO
Module 1: Basics of Management Management: Concept, Definitions, Features, Significance, Functions, Levels, Effectiveness V/s Efficiency, Management v/s Administration, Evolution of management thought: Classical (Scientific & Administrative Management), Neo-classical(Human Relations Approach), behavioural, systems and contingency approaches	08	CO1
Module II: Planning & Organizing Planning: Concept, Definitions, Features, Importance, Planning Process, Types of Plans, Limitations of Planning. Organizing: Concept, Definitions, Features, Importance, Organizing Process, Organizational Structure, Formal v/s Informal Organization, Overview of Delegation, Centralization & Decentralization	07	CO2
Module III: Staffing & Directing Staffing: Concept, Definitions, Features, Importance, Staffing Process, Aspects of Staffing:- Recruitment, Selection, Training & Development Directing:- Concept, Definitions, Features, Importance, Principles & Elements	08	CO3
Module IV: Controlling & Coordination Controlling : Concept, Definitions, Features, Significance, Controlling Process, Relationship between planning & controlling, Limitations of Controlling Coordinating:- Concept, Definitions, Features, Significance, Principles of effective coordination	07	CO4
Suggested Readings:- - Principles & Practices of Management - L.M. Prasad - Principles & Practices of Management - T.N. Chhabra, 11th Edition, 2009 - Principles of Management - V.S.P. Rao, First Edition, 2024 - Principles of Management- P.C, Tripathi, PN Reddy, Ashish Bajpai, 7th Edition, TMH		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		I	
Course Title	Research-Based Learning I	L	T	P	Credits
Course Code	MBAAI1109	0	0	2	1

Course Objectives:	Understand the role of research in business decision-making.
	Develop skills to identify and frame research problems.
	Formulate a focused research title through critical thinking and collaboration.
	Strengthen the ability to review and synthesize literature from credible sources.

Course Outcomes:	
CO1	Explain the importance of research in business and apply it to real-world situations.
CO2	Identify and frame research problems by analyzing current industry trends.
CO3	Formulate precise and relevant research titles through critical thinking and collaboration.
CO4	Review, analyze, and synthesize literature from credible academic and industry sources.

Course Structure (Classroom Activity)

Topic	Learning Activities
Introduction to Research-Based Learning	Importance and use of research in business
Identifying Research Problems	Group activity: Problem framing from current industry trends
Finalize the Title for Research-Based Learning	Brainstorming session and peer review of proposed titles
Literature Review	Accessing authentic journals, databases, and industry reports

Assessment Pattern

The performance of students will be evaluated through an audit-based evaluation system, which includes presentations and viva-voce.

Guidelines for RBL Teacher

- Introduce the importance of research in business through case discussions and examples.
- Guide students in identifying research problems using industry trends.
- Facilitate brainstorming sessions to guide students in identifying suitable titles.
- Train students in accessing and reviewing authentic journals, databases, and industry reports.
- Explain how to write using APA referencing style.
- Emphasize academic honesty and research ethics.

Guidelines for RBL Guide

- Guide students in refining research problems into focused titles.
- Provide academic or industry insights to strengthen research direction.
- Guiding Students in reviewing at least 10 good research papers related to the title.
- Guiding Students about drafting the literature review as per the given format.

Format for Literature Review

S.No	Title of the Paper	Authors' Names	Abstract	Keywords	Summary (150-200 words)	Findings/ Conclusion
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- Provide a detailed explanation of writing in accordance with the APA referencing style.
- Interact regularly to monitor progress and resolve difficulties.

- Make helpful suggestions for viva-voce and presentation finalization.

Guidelines for Students

- Choose a broad area of interest (e.g., marketing, finance, HR, entrepreneurship, digital business etc.) and narrow it down to a feasible, relevant, and researchable problem.
- Engage actively in research discussions to frame problems and finalize titles.
- Read and summarize at least 10 research papers (200 words each), compare studies, and identify research gaps.
- Strengthen literature review skills through credible resources and systematic drafting.
- Present research progress confidently and respond effectively during viva-voce.
- Maintain academic integrity by avoiding plagiarism and applying APA referencing correctly.

Referencing List (Strictly Follow APA Style)

1. **Book**
Author, A. A. (Year). **Title of the book** (xth ed.). Publisher.
(Note: Write edition in parentheses after the title, e.g., (2nd ed.). *Italicize the title of the book.*)
2. **Journal Article**
Author, A. A., & Author, B. B. (Year). Title of the article. **Title of the Journal**, Volume(Issue), page range. <https://doi.org/xxxx>
(Note: **Journal title and volume are italicized; issue number is in parentheses but *not* italicized.**)
3. **Website**
Author/Organization. (Year, Month Day). Title of the webpage. **Website Name**. URL
(Note: **Italicize the webpage title, not the website name. If no date, use n.d.**)
4. **Report/Company Document**
Organization. (Year). **Title of the report** (Report No. xxx if available). Publisher. URL
(Note: **Italicize the report title. If publisher and author are the same, omit the publisher name.**)

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	AI for Marketing & Consumer Intelligence	L	T	P	Credits
Course Code	MBAAI201	4	0	0	4

Course Objectives:	To introduce AI-driven marketing concepts, consumer analytics techniques, and intelligent decision-making systems used in modern business environments.
	To develop the ability to apply AI tools and consumer intelligence methods for market segmentation, personalization, campaign optimization, and strategic marketing insights.

Course Outcomes:	
CO1	Explain the fundamentals of AI technologies and their applications in marketing and consumer behavior analysis.
CO2	Analyze customer data using AI-based analytical methods for segmentation, targeting, and prediction.
CO3	Apply intelligent marketing techniques for personalization, recommendation systems, and campaign automation.
CO4	Develop AI-enabled consumer intelligence solutions and evaluate marketing performance using real-world business data.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to AI in Marketing - Fundamentals of Artificial Intelligence and Machine Learning - Evolution of Digital Marketing and AI Integration - Role of AI in Modern Marketing Ecosystem - Marketing Automation Concepts - AI-driven Decision Making in Business - Introduction to Consumer Intelligence - Applications of AI in Branding, Advertising, and Sales - Ethical Issues and Challenges in AI Marketing	15	CO1
Module II: Consumer Data Analytics & Customer Intelligence - Consumer Data Collection and Management - Structured and Unstructured Marketing Data - Customer Segmentation using AI Techniques - Predictive Analytics in Consumer Behavior - Recommendation Systems in E-commerce Platforms - Customer Lifetime Value (CLV) Analysis - AI-based Personalization and Target Marketing - Social Media Analytics and Sentiment Analysis	15	CO2
Module III: AI-driven Marketing Strategies - AI in Digital Advertising and Campaign Management - Chatbots and Virtual Assistants in Customer Engagement - AI for Content Creation and Email Marketing - Search Engine Optimization (SEO) using AI Tools	15	CO3

- AI in Pricing and Dynamic Promotion Strategies - Marketing Performance Analytics and KPI Tracking - AI-based Sales Forecasting Techniques - Case Studies on AI Applications in Marketing Industries		
Module IV: AI Applications & Consumer Intelligence Project - AI Tools for Marketing Research - Consumer Journey Mapping using AI - AI-enabled CRM Systems - Market Basket Analysis and Buying Patterns - AI in Omnichannel Marketing - Future Trends in AI for Marketing - Data Privacy, Security, and Responsible AI Usage Mini Project: AI-based Consumer Preference Analysis System - Develop a simple AI-enabled marketing analysis model that identifies consumer preferences and purchasing patterns using sample customer datasets.	15	CO4
Suggested Readings: - Raj Venkatesan & Jim Lecinski – The AI Marketing Canvas, Stanford University Press. - Philip Kotler, Hermawan Kartajaya & Iwan Setiawan – Marketing 5.0: Technology for Humanity, Wiley. A. K. Pradeep, Andrew Appel & Stan Sthanunathan – AI for Marketing and Product Innovation, Wiley. - Katie King – Using Artificial Intelligence in Marketing, Kogan Page Publishers.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	AI in Finance and Risk Management	L	T	P	Credits
Course Code	MBAAI1202	4	0	0	4

Course Objectives:	To understand the role of Artificial Intelligence in financial management, investment analysis, and risk assessment.
	To develop analytical and decision-making skills using AI-driven techniques for financial forecasting and risk management.

Course Outcomes:	
CO1	Understand the fundamentals of AI applications in finance and risk management systems.
CO2	Apply AI-based analytical techniques for financial data analysis and forecasting.
CO3	Analyze financial risks, fraud patterns, and investment decisions using AI tools and models.
CO4	Develop AI-driven financial and risk management solutions for business applications.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to AI in Finance - Fundamentals of Financial Management and AI - Evolution of AI in Banking and Financial Services - Types of Financial Analytics - AI Concepts: Machine Learning and Predictive Analytics - Financial Data Sources and Data Processing - Role of AI in Financial Decision Making - Introduction to FinTech and Digital Finance - Ethical Issues and Challenges in AI-based Finance	15	CO1
Module II: AI-driven Financial Analytics - Financial Data Collection and Preparation - Descriptive and Predictive Financial Analytics - AI-based Budgeting and Financial Planning - Investment Analysis using AI Techniques - Stock Market Trend Analysis and Forecasting - Credit Scoring and Loan Assessment Systems - Customer Financial Behavior Analytics - AI Applications in Insurance and Banking Operations	15	CO2
Module III: Risk Management and Fraud Analytics - Fundamentals of Risk Management - Types of Financial Risks: Credit, Market, and Operational Risks - AI-based Risk Assessment Models - Fraud Detection using Machine Learning Techniques - Anomaly Detection in Financial Transactions - Cybersecurity and Risk Intelligence in Finance - Regulatory Compliance and Financial Governance - Case Studies on AI in Financial Risk Management	15	CO3
Module IV: AI Applications in Financial Intelligence & Mini Project AI-enabled Financial Decision Support Systems	15	CO4

• Robo-advisors and Automated Trading Concepts • Blockchain and AI in Financial Systems • AI for Portfolio Management and Wealth Analytics • Cloud-based Financial Analytics Platforms • Emerging Trends in AI-driven Finance • Data Privacy, Ethics, and Security in Financial AI Systems Mini Project: AI-based Financial Risk Analysis Dashboard • Develop a simple AI-enabled financial analytics system that analyzes financial datasets to identify risks, trends, and investment insights.		
Suggested Readings: • Yves Hilpisch – Artificial Intelligence in Finance, O'Reilly Media. • Steven Finlay – Artificial Intelligence and Machine Learning for Business, Relativistic Publications. • Paul Wilmott – Machine Learning: An Applied Mathematics Introduction, Wiley Publications. • Ngai Hang Chan – Machine Learning and AI for Risk Management, Springer Publications.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	AI-Driven Research & Business Intelligence	L	T	P	Credits
Course Code	MBAAI203	4	0	0	4

Course Objectives:	To understand the role of Artificial Intelligence in business research, data analytics, and business intelligence systems.
	To develop analytical and decision-making skills using AI-driven tools and techniques for business research and strategic intelligence.

Course Outcomes:	
CO1	Understand the fundamentals of AI-driven research methodologies and business intelligence concepts.
CO2	Apply AI-based analytical techniques for business data collection, processing, and interpretation.
CO3	Analyze business trends, market behavior, and organizational performance using business intelligence tools.
CO4	Develop AI-enabled research and business intelligence solutions for real-world business applications.

Course Contents	No of Hours	Mapped CO
Module I: Fundamentals of AI in Research and Business Intelligence - Introduction to Business Research and Intelligence Systems - Fundamentals of Artificial Intelligence and Machine Learning - Role of AI in Business Research and Decision-Making - Types of Business Analytics: Descriptive, Predictive, and Prescriptive - Business Data Sources and Data Collection Techniques - Introduction to Business Intelligence (BI) Tools and Platforms - Data-driven Organizational Strategies - Ethical Issues and Challenges in AI-based Research Systems	15	CO1
Module II: AI-driven Research Analytics and Data Processing - Research Design and AI-assisted Research Methods - Structured and Unstructured Business Data - Data Cleaning, Transformation, and Preparation - Exploratory Data Analysis Techniques - AI-based Survey and Consumer Research Analytics - Sentiment Analysis and Text Analytics - Predictive Analytics for Business Forecasting - Data Visualization and Reporting Techniques	15	CO2
Module III: Business Intelligence and Strategic Analytics - Fundamentals of Business Intelligence Architecture - Dashboard Creation and KPI Monitoring - AI-based Market and Competitor Analysis - Customer Intelligence and Behavioral Analytics - Financial and Operational Intelligence Systems	15	CO3

- Real-time Analytics and Decision Support Systems - Cloud-based BI and Enterprise Reporting - Case Studies on AI-driven Business Intelligence Applications		
Module IV: AI Applications in Research & Business Intelligence Project - AI-enabled Research Automation Tools - AI in Strategic Planning and Business Optimization - Business Forecasting and Trend Analysis - AI for Risk Assessment and Performance Evaluation - Emerging Trends in AI-driven Business Intelligence - Data Privacy, Governance, and Security in BI Systems - Business Insight Presentation and Reporting Mini Project: AI-based Business Intelligence and Market Trend Analysis System - Develop a simple AI-driven business intelligence solution that analyzes business or market datasets to generate strategic insights and performance reports.	15	CO4
Suggested Readings: - Foster Provost & Tom Fawcett – Data Science for Business, O'Reilly Media. - Efraim Turban, Ramesh Sharda & Dursun Delen – Business Intelligence and Analytics, Pearson Education. - Bernard Marr – Artificial Intelligence in Practice, Wiley Publications. - Cindi Howson – Successful Business Intelligence, McGraw-Hill Education.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	Operations Research	L	T	P	Credits
Course Code	MBAAI1204	4	0	0	4

Course Objectives:	To familiarize students with the quantitative techniques for improving the quality of managerial decisions.
	To build Generalist approach towards Operations Research

Course Outcomes:	
CO1	Understand the need of using operational research for effective decision making.
CO2	Identify how linear programming, transportation and assignment helps in business decision making and interpret their solutions.
CO3	Make use of the sequencing and game theory in business problem solving.
CO4	Distinguish between several queuing models and derive performance measures for each of them; examine network technique in resource allocation.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Operations Research & Decision-Making Environment Uses, Scope and Applications of Operation Research in Managerial Decision-Making. Decision-Making under Certainty, Uncertainty and Risk Situations, Decision Tree Approach and its Applications.	15	CO1
Module II: Linear Programming, Transportation Problem & Assignment Problem Linear Programming: Mathematical Formulations of LP Models for Product-Mix Problems, Graphical Method of Solving LP Problems, Simplex Method of Solving LP Problems, Duality of LP Problem. Transportation Problem: Various methods of finding Initial Basic Feasible Solution and Optimal Solution. Assignment Model: Hungarian Algorithm and its Applications in terms of Maximisation and Minimisation.	15	CO2
Module III: Game Theory & Sequencing Problem Game Theory: Concept of Game, Two-Person Zero-Sum Game, Pure and Mixed Strategy Games, Saddle Point, Odds Method, Dominance Method and Graphical Method for Solving Mixed Strategy Game. Sequencing Problem: Johnsons Algorithm for n Jobs and Two machines, n Jobs and Three Machines.	15	CO3
Module IV : Queuing Theory & Project Management Queuing Theory: Characteristics of M/M/I Queue model, Application of Poisson and Exponential distribution in estimating Arrival Rate and Service Rate, Applications of Queue Model for better service to the customers. Project Management: Rules for drawing the Network Diagram, Applications of CPM and PERT Techniques in Project Planning and Control, Crashing of Operations.	15	CO4
Suggested Readings: - Vohra, Quantitative Techniques in Management, 2nd edition, Tata McGraw-Hill, 2003. - Taha Hamdy, Operations Research - An Introduction, 7th edition, Prentice-Hall. - Kothari, Quantitative Techniques, 3rd Edition , Vikas Publication, 1996. - Sharma J K, Operations Research , 3rd Edition . Pearson. - Kapoor V.K., Operations Research, 4th Edition, S. Chand.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	Managing Human Resources	L	T	P	Credits
Course Code	MBAAI1205	4	0	0	4

Course Objectives:	Provide students with a comprehensive understanding of the nature, scope, and functions of Human Resource Management (HRM), and to analyze HRM's strategic role in enhancing organizational effectiveness in a dynamic business environment.
	Equip students with the knowledge of various HR functions and their processes, and understand contemporary tools such as HR information systems and e-HR.
	Develop understanding of training, development, and performance appraisal and management systems
	Foster an understanding of Industrial Relations (IR), and to examine the impact of digital transformation and AI on contemporary labor-management relations.

Course Outcomes:	
CO1	Demonstrate the knowledge of Human Resource Management and critically analyse strategic HRM models, HR environments, and organizational alignment with HR strategies.
CO2	Apply HR forecasting techniques, implement effective recruitment and selection processes, use HR metrics and job design approaches, and e-HR systems.
CO3	Assess and design training and development programs, appraise and manage performance and evaluate compensation structures
CO4	Critically examine the structure, dynamics, and evolving nature of industrial relations and the influence of emerging practices on employer-employee relationships.

Course Contents	No of Hours	Mapped CO
Module I: Introduction Meaning, nature, and scope of HRM, HRM functions and objectives, HRM environment: internal and external, HRM models, Organizing of HR department, Personnel policies and principles. Strategic HRM: Environmental scanning, strategy formulation, implementation and evaluation, Strategic role of HRM.	15	CO1
Module II: HR Planning, HR Metrics, Recruitment, Selection & Other HR Functions, E-HR HR Planning: definition, process, importance of HRP, factors affecting HRP, HR demand models: Managerial judgment, Ratio-trend analysis, Delphi technique, HR supply models: Replacement Analysis, Markov Models, Requisite for successful HRP, Barriers to HRP. Career and succession planning: Concept and processes, Career anchors. HR Metrics and Job design: HR accounting and audit, Job design approaches, factors affecting job design. Recruitment: Recruitment process and factors influencing recruitment. Selection: Process, Barriers to effective selection. Orientation: Types and requisite of an effective orientation program. Placement. Promotion, Transfer and Separation: Purpose, principle, and types of promotion, Transfer: types, separation: lay off, resignation, dismissal, retrenchment and voluntary retirement schemes. HR Information System, Concept of e-HR	15	CO2
Module III: Training & Development, Appraising and Managing Performance, Compensation Structure	15	CO3

Training and Development: Purpose and Process of training, , Effective training program, Management development program Appraising and Managing Performance: Nature & objectives of performance appraisal, Appraisal process. Compensation and Benefits: Pay Model, Job-based structure: Evaluating work by job analysis and job evaluation. Wage policy in India: minimum wage, fair wage and living wage, Person based structure, Defining competitiveness, Designing pay levels, Mix and pay structure. Employee contribution. Fringe benefits, The future of fringes, Prerequisite for an effective incentive system, Significance of incentive program.		
Module IV: Employee Relations Overview of IR: Nature, Objective & Scope of Industrial Relations in India, Various approaches to IR, Factors affecting IR & prerequisites of successful IR programme, International Labor Organization (ILO) and its role in IR. Trade Union: Origin & concept of TU, Role of trade union in IR. Growth & problems of Trade Union, Issue of IR in modern era: Technology. Discipline and Grievance Procedures: Discipline, Misconduct, Employee Grievance Handling Procedure, Worker's Participation in Management, Concept, Objectives & Process of Collective Bargaining, Wages & IR. Emerging Trends in Industrial Relations: Impact of artificial intelligence and digital technologies on industrial relations.	15	CO4
Suggested Readings: - Aswathappa K - Human Resource and Personnel Management (Tata McGraw Hill, 7th Ed.). - Rao VSP - Human Resource Management, Text and Cases (Excel Books, 2nd - Dessler - Human Resource Management (Prentice Hall, 10th Ed.) - Piyali Ghosh and Shefali Nandan, Industrial Relations and labour Laws, 1st Ed., McGraw Hill education - George T. Milkovich, Jerry M. Newman, C S Venkata Ratnam, Compensation, 9th Ed., McGraw Hill education.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	Cost & Management Accounting	L	T	P	Credits
Course Code	MBAAI1206	3	2	0	4

Course Objectives:	To familiarize students with cost and management accounting in Business Scenario with managerial emphasis.
	To have knowledge of concepts of costs with regard to managerial decision making.
	To understand accounting and control of the three main elements of cost, i.e., material, labour and overhead, and also the various methods of costing in different industries.
	To develop skills for managerial decision making by using various techniques of management accounting.

Course Outcomes:	
CO1	To identify the basic concepts of Cost Accounting and Management Accounting, their principles and procedures, cost elements, techniques and classification.
CO2	To apply and calculate the cost of material, labour, and overheads, to interpret the application of cost in real world for service and trading Sector.
CO3	To carry out analysis of cost-volume-profit techniques and variance analysis to determine optimal managerial decisions thereby contributing to strategic planning and control. To prepare and analyse budgets for monitoring and control.
CO4	To identify and establish responsibility centres and to compare and contrast the financial statements of firms and interpret the results.

Course Contents	No of Hours	Mapped CO
Module I : Basic Fundamentals of Cost & Management Accounting. Meaning, nature and scope of Management accounting, Role of management accountant, Tools and techniques of management accounting, Distinction between financial accounting, cost accounting and management accounting. Direct vs. Indirect cost, Fixed vs. Variable Cost, Activity Based Costing concept, Job Order Cost Systems, Process Cost System, Normal Loss & Abnormal Loss, Joint Product and By Products, Relevant Cost and Differential Cost. Accounting information and managerial decision making: Basic Cost Terms and Concepts, Tools and techniques of management accounting, Cost concepts objectives of costing system, Cost classification establishing costing system, Relevant Cost, Statement of Cost, Cost Concepts and Classification of costs, Elements of Cost.	15	CO1
Module II: Elements of Cost, Purchase Procedures, Labour Cost Control, Payroll Procedure, Overhead Cost Control Material cost: Purchase procedures, Store keeping and inventory control, Fixing Of minimum, maximum and re-order levels, ABC analysis, Pricing of receipts and Issue of material and accounting thereof, Investigation and corrective steps for Stock discrepancies, Accounting and control of wastage, Spoilage and defectives. Labour cost: Classification of labor costs, Payroll procedures, Labor analysis, Monetary and non-monetary incentive schemes, Measurement of labor efficiency and productivity, Labor turnover and remedial measures, Treatment of idle time and overtime. Overheads: Nature, classification, collection, allocation, apportionment, absorption and control of overheads, Allocation, apportionment, re-	15	CO2

apportionment and absorption of overhead costs. Cost Accounting Standards, Inventory Management, Cost Audit, Activity Based Costing, Application of Costing concepts in the Service and Trading Sector.		
Module III: Marginal and Absorption Costing Techniques, Variance Analysis and Budgeting. Marginal Costing: Break Even Analysis, Cost - Volume - Profit Analysis, Managerial Application of CVP Analysis and cost-: decision making, BEP Charts, P/V Charts, Cash B.E.P charts and decision-making, simulated BEP analysis, Marginal costing and decisions regarding product mix, make or buy decisions, and dropping of product. Application of BEP in decision making. Standard Costing and variance analysis: Types of standards, determination of standards, variance analysis disposal and reporting of variances to management. Manufacturing standards for material, labor, and overhead. Price/rate and usage/efficiency variances for materials, labor and overhead. Further subdivision of total usage/efficiency variances into mix and yield components. Fixed overhead variances. Interpretation, interrelationship, significance and application of these variances. Budgeting: Budget Concepts and preparation of fixed and flexible budgets, Time series analysis including moving totals and averages, treatment of seasonality. Fixed, variable, semi-variable and activity based categorizations of cost and their application in projecting financial results. Unit Budgetary control – preparation of various types of budgets, advantages and limitations, budgetary control reports to management.	15	CO3
Module IV: Responsibility Accounting and Establishment of Responsibility Centers, Transfer Pricing, Cash Flow Statement Responsibility accounting: basic principles, centers of control, responsibility reporting, implementation, organizational aspects & benefits and Responsibility centers: Cost center, profit center and investment center. Transfer pricing: profit as a measure of performance: transfer pricing methods, benefits of transfer pricing: international transfer pricing. Analysis and interpretation of financial statements: nature, objectives, types and tools of financial statement analysis. Cash flow statements and fund flow statement: classification preparation and usefulness. Operating ratios: interpretation and analysis.	15	CO4
Suggested Readings: • Lall, B.M. and I.C. Jain, Cost Accounting: Principles and Practice, Prentice Hall, New DELHI. • Homgren, Charles T., George Foster and Srikant M. Dallar, Cost Accounting: A Managerial Emphasis Prentice Hall, New Delhi. • Anthony, Robert, Management Accounting, Tara pore - wale, Mumbai. • Homgren, Charles T., Gary L Sundem, and William D. Statton, An Introduction to Management Accounting, Prentice Hall, New Delhi. • Pandey, I.M. Management Accounting, VIKAS publications, New Delhi. • Horngren, Foster & Dater, Cost Accounting: A Managerial Emphasis (Pearson).		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	Sales & Distribution Management	L	T	P	Credits
Course Code	MBAAI1207	4	0	0	4

Course Objectives:	To familiarize students with knowledge and skills needed to manage a business's sales force and distribution functions to help gain a competitive advantage.
	To familiarize students with Sales Management, Sales Process, role of distribution channels, and management of channel partners.

Course Outcomes:	
CO1	Understanding of the concepts, attitudes, techniques, and approaches required for effective decision-making in Sales and Channel management.
CO2	Evaluate the techniques of sales forecasting and prepare a sales budget.
CO3	Develop skills critical for generating, evaluating, and selecting sales and channel members and developing strategies to deliver value.
CO4	Analyse how various distribution channels operate and suggest tactics for effectively managing each of them

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Sales Management Selling a part of marketing, Role of Sales Manager, Sales Management Process, Concept of Personal Selling, Sales Management and Salesmanship, Personal Selling, Process of Personal Selling, Qualities of a Successful Salesman, Goals in Sales Management, Goal Setting Process in Sales Management, Analysing Market Demand and Sales Potential, Techniques of Sales Forecasting, Preparation of Sales Budget, Formulating Selling Strategies. Internet as an Emerging Selling Technique	15	CO1, CO2
Module II: Selling Approaches and Channel Design Buying Formula Theory. Modern Sales Approaches: Partnering, Team Selling, Value Added Selling, Consultative Selling, Distribution Objective/Strategy, Interface between Sales force and Channel, Channel Design, Importance & types of channels like Primary Distributors, specialized & participants. Distributor's selection & appointment, Managing the distributor & his team	15	CO1, CO3, CO4
Module III: Channel Management Managing the Channel support Members, Channel Dynamics, Channel Power, Channel Conflict and Conflict Resolution, Channel Evaluation, Sales Quota Management, Territory Management and Allocation, Effective Selling, Salesman Recruitment, Compensation and Motivation of Sales Force, Supervisory Styles	15	CO3, CO4
Module IV: Monitoring and Performance Appraisal Monitoring, Reporting, Essentials of sales Force Monitoring, Evaluating performance standards, Field Sales Report Management of outbound supply chain, Damages & expiries, Concept selling in services industry, After sales services, Customer retention methodology,	15	CO1, CO3
Suggested Readings: • Donaldson B - Sales Management: Theory and Practice (Palgrave). • Jobber David and Lancaster Geoff - Selling and Sales Management (Pearson Education). • 3. Still, R.R., Cundiff, E.W. and Govani, N.A.P.; Sales Management; Pearson Education 2.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	Marketing of Services	L	T	P	Credits
Course Code	MBAAI1208	4	0	0	4

Course Objectives:	To understand the unique characteristics of services and their impact on service design and delivery.
	To gain insight into the key components of the service mix and how they influence service strategy.
	To explore the role of service marketing in sectors like finance and telecommunications.
	To comprehend with the dynamics of international service marketing

Course Outcomes:	
CO1	Understand the concept, nature, scope, and significance of service marketing, including its role in the service industry.
CO2	Examine how Customer Relationship Management (CRM) enhances service quality and builds long-term customer relationships.
CO3	Analyse customer expectations, their zone of tolerance, and the challenges of managing the service marketing mix (product, price, place, promotion, process, physical evidence, and people).
CO4	Apply service marketing principles to financial services like banking and insurance, while identifying global trends and driving forces shaping the international service marketing landscape.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to marketing of Services Difference between Product and Services Marketing, Characteristics of Services Classification of Services, Paradigms in Services Marketing. Importance of Customer Relationship Management: Specific for Service Industry, Service Marketing System: Service Quality, Service Level, Segmentation, Targeting and Positioning of services, Pricing and Distribution, Understanding Customer Expectations and Zone of Tolerance, Services Marketing Mix, Augmented Marketing Mix	15	CO1
Module II: Developing the Service Product/ Intangible Product, Service Product Planning, Service Pricing Strategy, Services Promotions, Services Distributions, Physical Evidence, Role of Communication in Service Marketing, People and Internal Communication, Process of Operations and Delivery of Services, Role of Technology in Services Marketing.	15	CO2, CO3
Module III: Marketing of Financial Services Marketing of Financial Services, Deciding the Service Quality, Understanding the Customer Expectations, Segmenting, Targeting and Positioning of Financial Services, Devising Financial Services, Marketing Mix Strategies with Special Reference to Credit Cards, Home Loans, Insurance and Banking, Marketing of Telecom/ Insurance Services.	15	CO3, CO4
Module IV: International Marketing of Services International Marketing of Services, Recent Trends in international marketing of services, Principal Driving Force in Global Marketing of Services, Key Decisions in Global Marketing, Services Strategy and Organizing for Global Marketing.	15	CO4

Suggested Readings:

- Valerie Zeithaml and Bitner Mary jo, Gremler & Pandit, Services Marketing, Tata McGraw Hill
- Baron S and Harrisk - Services Marketing: Text and Cases (Palgrave, 2nd Ed.).
- Payne Adrian - The Essence of Service Marketing (Prentice Hall of India).

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	I	Semester		II	
Course Title	Research-Based Learning II	L	T	P	Credits
Course Code	MBAAI1209	0	0	2	1

Course Objectives:	Help students understand fundamental research methods and approaches.
	Enable students to transform finalized research titles into clear research objectives, questions, and hypothesis.
	Enhance student's capability to conduct a critical and comparative literature review.
	Develop Conceptual Framework by identifying the variables and define relationship among them.

Course Outcomes:	
CO1	Explain different types of research designs and methodologies.
CO2	Frame well-defined research objectives aligned with business problems.
CO3	Develop research questions and hypothesis logically derived from literature.
CO4	Identify research gaps through comparative analysis of studies.

Course Structure (Classroom Activity)

Topic	Learning Activities
Research Design Basics	Types of research, qualitative vs. quantitative Activity: Case discussion
Objectives & Research Questions	Framing research objectives, research questions, and hypothesis Activity: Group exercise
Literature Review (Advanced)	Comparing prior studies and finding research gaps Activity: Literature comparison table
Develop Conceptual Framework	Identify variables and define relationship among them

Assessment Pattern

Student performance shall be evaluated through continuous assessment by RBL Guide and Viva-Voce under an audit-based evaluation system,

Guidelines for RBL Teacher

Introduce students to the objectives, outcomes, and expectations of Research-Based Learning (RBL).
Explain basic research concepts including research design, objectives, research questions and hypothesis
Provide illustrative examples, case discussions, and hands-on activities to reinforce learning.
Encourage that students adhere to APA referencing standards.

Guidelines for RBL Guide

Guide students in formulating clear research objectives, research questions, and hypothesis.
Mentoring students in identifying research gaps
Provide feedback on research methodology draft and ethical considerations.
Assess student performance through continuous evaluation.

Guidelines for Students

Actively participate in classroom discussions, group activities, and research exercises.
Follow the instruction in developing research objectives and drafting research methodology
Use APA style consistently for citations and references.
Meet all submission deadlines as prescribed by the RBL Teacher and Guide.

Referencing List (Strictly Follow APA Style)**1. Book**

Author, A. A. (Year). Title of the book (xth ed.). Publisher.

(Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)

2. Journal Article

Author, A. A., & Author, B. B. (Year). Title of the article. Title of the Journal, Volume (Issue), page range. <https://doi.org/xxxx>

(Note: Journal title and volume are italicized; issue number is in parentheses but not italicized.)

3. Website

Author/Organization. (Year, Month Day). Title of the webpage. Website Name. URL

(Note: Italicize the webpage title, not the website name. If no date, use n.d.)

4. Report/Company Document

Organization. (Year). Title of the report (Report No. xxx if available). Publisher. URL

(Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	AI for Strategic Management	L	T	P	Credits
Course Code	MBAAI1301	4	0	0	4

Course Objectives:	To understand the role of AI in competitive strategy, business intelligence, and strategic decision-making using modern strategic frameworks and analytics.
	To apply AI-driven strategic planning, governance, and organizational transformation techniques for achieving sustainable competitive advantage and business innovation.

Course Outcomes:	
CO1	Understand AI-driven strategic frameworks, competitive advantage concepts, and the impact of AI on industry structure and business ecosystems.
CO2	Apply AI-enabled decision-making tools, predictive analytics, and strategic planning techniques for organizational growth and performance management.
CO3	Analyze AI strategy formulation, implementation processes, governance frameworks, and organizational transformation challenges in modern enterprises.
CO4	Evaluate emerging AI trends, strategic risks, ethical governance practices, and future AI-driven business models for sustainable strategic management.

Course Contents	No of Hours	Mapped CO
Module I: AI and Competitive Strategy Foundations - Evolution of Strategy in the AI Era: Data-driven competition - Revisiting Classical Frameworks: Porter's Five Forces, Value Chain in AI context - Resource-Based View (RBV) and Data as a Strategic Asset - AI-driven Competitive Advantage: Cost leadership vs differentiation - Network Effects, Platform Economies, and AI ecosystems - Strategic Role of Data, Algorithms, and Infrastructure - Industry Disruption Patterns due to AI - Case Study: AI-led transformation in digital platforms - From Descriptive to Prescriptive Analytics in strategy - Decision Support Systems (DSS) and Executive Dashboards - Predictive Analytics for Strategic Planning (demand, risk, growth)	15	CO1
Module II: AI-Driven Decision Making and Strategy Formulation - Scenario Planning and Simulation using AI - KPI Design and Data-driven performance management - Visualization and storytelling for executives - Biases in algorithmic decision-making - Case Study: Data-driven strategic planning in retail/finance - Identifying Strategic AI Use Cases across value chain - Build vs Buy vs Partner decisions in AI adoption - AI Maturity Models and Readiness Assessment - Aligning AI initiatives with corporate strategy	15	CO2

• Business Model Innovation using AI (servitization, personalization) • Investment Planning and ROI measurement for AI projects		
Module III: AI Strategy Implementation and Organizational Transformation • Scaling AI initiatives across the organization • Case Study: Enterprise AI adoption roadmap • Organizational Structures for AI (centralized, decentralized, hybrid) • Change Management in AI-driven transformation • Talent Strategy: Upskilling, hiring, and cross-functional teams • Data Governance and AI Governance frameworks • Risk Management: Model risk, operational risk, reputational risk • Ethical AI and Responsible Innovation • Leadership in AI-driven organizations • Case Study: Managing enterprise-wide AI transformation • Autonomous Decision Systems and Strategy Automation	15	CO3
Module IV: Future of Strategy in the Age of AI and Capstone Project • AI in Dynamic Strategy: Real-time adaptation and feedback loops • Role of Generative AI in strategic planning and innovation • Hyper-personalization and customer-centric strategies • AI in Global Strategy: Geopolitics, regulation, and competition • Sustainability and ESG considerations using AI • Strategic Risks: Over-reliance on AI, loss of human judgment • Future trends in AI-driven strategic management • Responsible AI adoption in strategic leadership • AI-enabled innovation and competitive transformation • Emerging strategic business models using AI • Ethical governance in AI-powered enterprises Capstone/Mini Project: AI-driven strategic plan for a business	15	CO4
Suggested Readings: • Marco Iansiti & Karim R. Lakhani – <i>Competing in the Age of AI</i>, Harvard Business Review Press • Ajay Agrawal, Joshua Gans & Avi Goldfarb – <i>Prediction Machines: The Simple Economics of Artificial Intelligence</i>, Harvard Business Review Press • Thomas H. Davenport & Rajeev Ronanki – <i>Artificial Intelligence for the Real World</i>, Harvard Business Review (Article/Collection)		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Financial Information Systems & Big Data Analytics	L	T	P	Credits
Course Code	MBAAI1302	4	0	0	4

Course Objectives:	To understand the concepts of Financial Information Systems and the role of Big Data Analytics in financial decision-making and business operations.
	To develop analytical and technical skills for applying AI-driven big data techniques in financial analysis, forecasting, and strategic management.

Course Outcomes:	
CO1	Understand the fundamentals of Financial Information Systems and Big Data Analytics in modern business environments.
CO2	Apply data analytics and AI-based techniques for financial data management and business intelligence.
CO3	Analyze financial performance, risks, and business trends using big data analytical tools and methods.
CO4	Develop AI-driven financial analytics and business intelligence solutions for organizational decision-making.

Course Contents	No of Hours	Mapped CO
Module I: Fundamentals of Financial Information Systems • Introduction to Financial Information Systems (FIS) • Components and Architecture of Financial Information Systems • Role of Information Systems in Financial Management • Fundamentals of Big Data and Business Analytics • Types of Financial Data and Data Sources • Financial Databases and Data Warehousing Concepts • AI and Automation in Financial Systems • Ethical, Security, and Privacy Issues in Financial Data Management	15	CO1
Module II: Big Data Analytics in Finance • Data Collection and Financial Data Processing Techniques • Structured and Unstructured Financial Data • Data Cleaning, Transformation, and Integration • Descriptive and Predictive Financial Analytics • Financial Forecasting using AI Techniques • Customer and Investment Analytics • Fraud Detection and Risk Analytics using Big Data • Data Visualization and Dashboard Reporting Techniques	15	CO2
Module III: AI-driven Financial Intelligence and Decision Systems • Business Intelligence in Financial Organizations • AI-based Decision Support Systems • Financial Performance and KPI Analytics • Credit Risk and Loan Assessment Analytics • Stock Market and Investment Trend Analysis	15	CO3

- Real-time Financial Monitoring Systems - Cloud-based Financial Analytics Platforms - Case Studies on Big Data Applications in Banking and Finance		
Module IV: Emerging Trends and Financial Analytics Project - AI and Machine Learning Applications in Finance - Blockchain and Financial Technology (FinTech) Concepts - Big Data Analytics for Strategic Financial Planning - AI-based Portfolio and Wealth Management Systems - Cybersecurity and Governance in Financial Information Systems - Emerging Trends in Financial Analytics and Digital Banking - Business Reporting and Financial Insight Presentation Mini Project: AI-based Financial Performance and Risk Analytics Dashboard - Develop a simple financial analytics system using sample financial datasets to analyze organizational performance, identify financial risks, and generate strategic insights.	15	CO4
Suggested Readings: - Efraim Turban, Ramesh Sharda & Dursun Delen – Business Intelligence and Analytics: Systems for Decision Support, Pearson Education. - Anand Raja Raman & Bhaskar Vijay – Big Data Analytics using Spark, McGraw-Hill Education. - Yves Hilpisch – Artificial Intelligence in Finance, O'Reilly Media. - David Loshin – Big Data Analytics: From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph, Morgan Kaufmann Publications.		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Legal Aspects of Business	L	T	P	Credits
Course Code	MBAAI1303	4	0	0	4

Course Objectives:	To have an in-depth knowledge about the basics of contract act & various laws related to business. To equip the students with practical implication of various issues of business laws.
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Course Outcomes:	
CO1	Describe the basics of Indian Contract Act & special contracts (Bailment and Pledge, Indemnity and Guarantee).
CO2	Explain the basic concept of Sales of Goods Act & Negotiable Instruments Act.
CO3	Interpret the basics of Partnership Act, its essentials, rights & duties of partners etc.
CO4	Understand various laws related to Consumer Protection Act & Information Technology Act.

Course Contents	No of Hours	Mapped CO
Module I: Indian Contract Act, 1872 Definition of a Contract and its essentials, Kinds of Contract, Formation of a valid Contract: Offer and Acceptance, Consideration, Capacity to Contract, Free consent, Breach of Contract, Quasi contracts, Contract of Indemnity and Guarantee, Bailment and Pledge, Contract of Agency.	15	CO1
Module II: Sales of Goods Act, 1930 & Negotiable Instrument Act, 1881 Sales of Goods Act: Definition of a Contract of Sale, Sale v/s Agreement to Sell, Conditions and Warranties, Rights of Unpaid Seller against the Goods. Negotiable Instrument Act: Definition and characteristics of negotiable instrument, Kinds of negotiable instruments, Promissory Note, Bill of Exchange and Cheques, Holder and Holder in due course, Crossing of Cheques, Bouncing of Cheques.	15	CO2
Module III: Partnership Act, 1932 Partnership Act: Definition of Partnership and its essentials, Rights and Duties of Partners, Types of Partners, Partnership Deed, Reconstitution of Partnership, Registration of Firms, Dissolution of firms.	15	CO3
Module IV : Consumer Protection Act, 2019 & The Information Technology Act, 2000 Consumer Protection Act: Aims and Objects of the Consumer protection Act, Rights of Consumers, Redressal Machinery under the act, Procedure for complaints under the act. The Information Technology Act: Definition of the Information technology Act, Digital Signature, Electronic Governance, Regulation of Certifying Authorities, Digital Signature Certificates, Penalties and Offences.	15	CO4
Suggested Readings:- - Gulshan J.J. Business Law Including Company Law, 13th Edition, New Age International Publisher. - Kuchhal M.C. Business Law , 4th Edition, Vikas Publication. - Avtar Singh, Principles of Mercantile Law, 7th Edition, Eastern Book Company. - N.D. Kapoor, Business Law, 7th Edition ,Sultan Chand & Sons		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Operations Management	L	T	P	Credits
Course Code	MBAAI1304	4	0	0	4

Course Objectives:	To provide students with a comprehensive understanding of the strategic importance of Operations Management in achieving organizational effectiveness across various sectors. It aims to enhance students' analytical and decision-making abilities by equipping them with the knowledge and skills required to plan, manage, and improve operational processes. The course also seeks to develop students' competence in addressing real-world operational challenges, fostering a mindset of continuous improvement, and promoting alignment between operations and overall business strategy.
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Course Outcomes:	
CO1	Understand the strategic importance of operations management in both manufacturing and service sectors, and evaluate key decisions related to plant location, layout, and operations strategy.
CO2	Apply appropriate qualitative and quantitative forecasting methods and work study techniques to improve productivity and support effective operational planning.
CO3	Understanding and ability to use production planning techniques and inventory management techniques for optimizing resource allocation and workflow.
CO4	Analyse and apply quality management principles and tools, including TQM, Six Sigma, and Lean, to drive continuous improvement and operational excellence.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Operations Management Operations Management: An overview, Definition of Operations Management, Production Cycle, Classification of Operations Systems, Responsibilities of Operations Manager, The Strategic Role and Objectives of Operations, Plant Location, Plant Layout Planning. Introduction to Operations in Service Industry: Nature of Services, Difference between Operations in Service and Manufacturing Industry, Major Operation Management Issues and Decisions in Service Industry. Service Quality Gap Model.	15	CO1
Module II: Forecasting & Work Study Definition and Scope of Forecasting, Methods of Forecasting: Qualitative & Quantitative Methods: Delphi, Expert Opinion, Brainstorming, Market Survey Methods, Regression, Time Series based Method, Exponential Smoothing. Work Study: Method Study, Work Measurement.	15	CO2
Module III: Production Planning & Inventory Management Introduction to Planning Techniques, Capacity Plan, Aggregate Plan, Scheduling: Forward and Backward, Master Production Schedule, Material Requirement Planning (MRP). Inventory Management: Objectives & Factors, Inventory Control Techniques namely ABC, VED, FSN and EOQ analysis, JIT, Kanban.	15	CO3
Module IV: Quality Management Basic Concepts of Quality, Dimensions of Quality, Juran's Quality Trilogy, Deming's 14 Principles, PDCA Cycle, Quality Circles, 7QC Tools and 7 New QC Tools, Six Sigma: DMAIC, DMADV.	15	CO4
Suggested Readings: Heizer and Render, Operations Management, 14th edition, Prentice-Hall.		

- Hill T, Operations Management, Palgrave Macmillan, 2017.
- K. Aswathapa, Production and Operations Management, Himalayan Publication.
- B. Mahadevan, Operations Management, Pearson

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Capital Markets & Financial Instruments	L	T	P	Credits
Course Code	MBAAI1305	4	0	0	4

Course Objectives:	The history of Indian capital market along with their working and detailed study about the regulatory body governing the capital market.
	Market intermediaries and their working in primary Market
	Working Mechanisms of secondary market along with Investor and speculator working
	Bond market and the working of credit rating agencies.

Course Outcomes:	
CO1	Identify the working of Indian capital market and regulation body regulating and controlling the Capital Market
CO2	To understand the process for issue of shares in primary market and its functioning
CO3	Illustrate the working of stock exchange which helps them to analyze the importance of various procedures and stock exchange intermediaries involve in it.
CO4	Understand how bond market mechanism and to Identify the relevance of credit rating agencies and their role in India.

Course Contents	No of Hours	Mapped CO
Module I: Indian Capital Market, Regulation of Indian Capital Market: Development Since 1991, Traditional and Emerging (ECB, ADR, GDR). SEBI - Objectives - Management - Powers and functions - Regulatory role - Investor Protection - Insider Trading. Rationale - Insiders - Insider information - Connected persons. National Stock Exchange (NSE), Bombay stock Exchange (BSE) & Over the Counter Exchange of India(OTCEI)	15	CO1
Module II: Primary Market Meaning – New Issue Market Vs Secondary Market - Methods of New Issue - Intermediaries in the New issues market - SE BI Guidelines on Primary Market - Listing - Agreement - Benefits - Consequences of Non-listing - Underwriting - Definition - Types - Mechanics - Benefits - Book Building - Concept - Characteristics - Process - IPO including e-IPO - Reverse book - building.	15	CO2
Module III: Stock Exchanges in India: History and development and importance listing of Scripts, On-line Trading, and Managing Shareholder Relations. Depositories: Growth & Development Share Market Instruments: Stock Exchange Trading Mechanism, Basics of Pricing Mechanism, Demat Account - Electronic Settlement of Trading Process, Carry Forward, Badala Transaction, . Players on Stock Exchange: Investors, Speculators, Market Makers, Bulls, Bears, Stags	15	CO3
Module IV: Bond Market Instruments and Credit Ratings: Concept of Bond Market. Bond Structure in India, bonds with embedded option, types of risk in bond investment. Credit rating: concept & types, Functions & limitations, Profile of Indian Rating Agencies. Merchant Banking: Functions & Roles of Merchant Banking in India.	15	CO4
Suggested Readings: - Relevant text of SEBI guidelines. - Merchant Banking & Securities Management - M.A.Kohak. - Khan, M. Y., Indian Financial System-Theory and Practice, TMH. - Bhole, L. M.: Financial Markets and Institutions, TMH. - Nayak and Sana,: Indian Financial System and Financial Market Operations, Rabindra Library. - Gurusamy; Financial Services, TMH.		

- Pathak, B.,: Indian Financial System, Pearson.

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Negotiation and Counselling	L	T	P	Credits
Course Code	MBAAI1306	4	0	0	4

Course Objectives:	Understand the fundamental structure of negotiation and its sub processes
	Provide insights into the core approaches, skills, and models of counselling and the its application in organizational settings

Course Outcomes:	
CO1	Demonstrate the knowledge of the fundamentals of the negotiation process.
CO2	Apply the understanding of negotiation process in different cultural settings
CO3	Demonstrate the understanding of the core approaches, skills, and models of counselling
CO4	Apply the counselling skills, and ethical principles to address behavioural and performance-related challenges in organizational settings

Course Contents	No of Hours	Mapped CO
Module I: Fundamentals of Negotiation Negotiation: Nature, Characteristics, Strategy and Tactics of Distributive Bargaining, Strategy and Tactics of Integrative Negotiation; Strategy and Planning for Negotiation. Negotiation Sub processes: Perception, Cognition and Emotion, Communication Styles, What is communicated during negotiation and how people communicate in Negotiation	15	CO1
Module II: Negotiation Issues across Culture, Negotiation Context & Individual Differences Fundamental Structure of negotiation and BATNA, International and Cross Cultural Negotiation: Context and Concept, Influence of Culture on Negotiation, Relationships in Negotiation: Agents, Constituencies, Audiences, and Coalitions. Multiple Parties and Teams, Individual Differences: Gender, Personality, Work- Experience, and Family Background.	15	CO2
Module III: Introduction to Counselling Defining counselling, Major goals of counselling, Role of a counsellor Approaches to Counselling: Psychoanalytic approach, Behaviouristic and Humanistic approach. 5-D Model of the Counselling process, Counselling skills	15	CO3
Module IV: Role Conflicts & Organizational Application of Counseling Skills Role conflicts in Counselling: Dilemmas of a manager counsellor. Changing Behaviours through Counselling: Specific Techniques of Counselling. Dealing with problem Subordinates. Career Counselling and Performance Counselling. Alcoholism and Other Substance Abuse, Ethics in Counselling.	15	CO4
Suggested Readings: - Singh Kavita - Counseling Skills for Managers, 2nd Ed., PHI Learning Private Limited. - Robert L. Gibson, Marianne H. Mitchell, Introduction to Counseling and Guidance, 7th Ed., PHI Learning Private Limited. - Roy J. Lewicki, Bruce Barry, David Saunders, Essentials of Negotiation, 6th Ed., McGraw- Hill - Roy J. Lewicki, Bruce Barry, David Saunders, Negotiation: Readings, Exercise & Cases, 6th Ed., McGraw-Hill		

- Moursund, J.: The Process of counselling and therapy, New Jersey: Prentice Hall.
- Patterson, L. E., &Welfel, E. R.: The counselling process: A multi theoretical integrative approach, New York: Brooks Cole.

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Retail Management	L	T	P	Credits
Course Code	MBAAI1307	4	0	0	4

Course Objectives:	To familiarize students with a comprehensive understanding of the theoretical and applied aspects of retail management.
	To examine the importance of retailing to the overall economy and explore the opportunities available within the retail sector.

Course Outcomes:	
CO1	Analyze modern retailing concepts, evaluate strategies, understand current retailing trends, and compare various retail formats to effectively navigate and contribute to the dynamic retail industry.
CO2	Understand the significance of retail store location decisions, evaluate retail performance, and formulate effective pricing strategies.
CO3	Apply the concept of merchandising in retail and demonstrate understanding of consumer behaviour in retail context.
CO4	Demonstrate the retail Store operations, retail Store Design and evaluate the supply chain management with its practical implications.

Course Contents	No of Hours	Mapped CO
Module I : An overview of Retailing, Classification and Types of retail store format, Product Retailing vs. Service Retailing. Retail strategy: Achieving competitive advantage and positioning, Retailing environment: Legal, Social, Economic, and Technological, Trends in the Indian Retailing and future prospects, The role of franchising in the retail industry. Globalization and changing retail formats: Online retailing, International retailing- Opportunities and Challenges	15	CO1
Module II: Store Location & Pricing The importance of store locations, Types of locations, Steps involved in choosing a location, Trade areas and their evaluation, Evaluation of a retail location, Measures of Financial Performance, the strategic profit model, Measures of retail performance, the concept of retail pricing and the factors affecting price, Elements of retail price, Developing a pricing strategy, Adjustment to retail price.	15	CO2
Module III: Retail Merchandising The concept of merchandising, the Evolution of the merchandising function in retail, the Process of Merchandising Buying, the Procedure for selecting vendors and building partnerships, the Concept of own brand and manufacturer's brand, the Concept of Category Management, the Role of private labels, Retail Communication, the concept of retail marketing mix, Segmentation Targeting and Positioning.	15	CO3
Module IV: Retail Store Operation, SCM, and Role of IT Retail Store Operations and Retail Store Design. The relationship between store image and store design, Components of exterior and interior, Consideration for selecting layout. Supply Chain Management: The concept of SCM, Retail logistics, and Reverse logistics. Retail Management (IT) - Role and importance of IT, Application of IT, Customer Relationship Management (CRM), and HR in Retail.	15	CO4
Suggested Readings:		

- Retail Management **by** Rosemary Varley **and** Mohammed Rafiq – Palgrave Macmillan
- Retail Management **by** Chetan Bajaj – Oxford University Press
- Information Technology for Retail **by** Giridhar Joshi – Oxford University Press, New Delhi

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Integrated Marketing Communication	L	T	P	Credits
Course Code	MBAAI1308	4	0	0	4

Course Objectives:	To develop basic knowledge of Consumer Behaviour.
	To develop conceptual and theoretical understanding of variables affecting behavioural with their strategic implications to marketers
	To equip with different elements of integrated marketing communications and basics of marketing communications.
	To understand role of E-Commerce in Marketing Communication.

Course Outcomes:	
CO1	Understand the theoretical concepts of consumer behavior.
CO2	Identify and understand the major individual and external factors that affect consumers' decision-making process.
CO3	Analyze Marketing Communication, Integration of marketing tools and role of advertising.
CO4	Apply marketing messages strategy and implementing it through right media strategies using traditional and emerging marketing concepts.

Course Contents	No of Hours	Mapped CO
Module I : Understanding Consumer Behavior Meaning, scope and contemporary significance of consumer Behavior. Level of analysis in consumer Behavior. Consumer Decision Making Process. Consumer Behaviour Models: Black Box Model; Hawkins Stern Model; Howard-Sheth Model and Nicosia Model.	15	CO1
Module II: Internal and External Influences on Consumer Behaviour Internal influences on Consumer Behaviour- Motivation: theories and their application. Perception: Meaning and application of perception. Meaning and nature of personality and its effects on purchasing Self-Concept, Development of the self-Image Congruence assumptions. Application of absolute and differential threshold in consumer Behavior. Psychographics and Lifestyle. External influences on Consumer Behaviour- Cultural and subcultural influences- Social class- Reference groups and family influences- Opinion leadership and the diffusion of innovations Marketing implications of the above influences.	15	CO2
Module III: Marketing Communication and IMC and Advertising Marketing Communication process, Establishing marcom Objectives, Budgeting for Promotional Programmes, DAGMAR approach for setting objectives. Meaning and Role of IMC in marketing. IMC tools, Participants in IMC, Model of the IMC Planning Process, Challenges in IMC. Advertising Management: Meaning, Nature and Scope of Advertising, Classification of advertising, Process of Advertising, Fundamentals of Advertising Campaigns, Advertising Effectiveness & its measurement. Advertising Agencies – their role, functions. Global vs local advertising.	15	CO3
Module IV: Message Development, Media Planning and Emerging Concepts	15	CO4

Message Strategies, Executional Framework of messages, Sources and Spokespersons, Source Characteristics, The Creative Brief, and Advertising Appeals. Media Planning and Strategy: Steps involved in media planning, Media Types and their characteristics; Setting Media objectives, Media Selection & Media Strategy. Interactive Marketing, Placing Ads and Promotions online, Buzz Marketing, Viral Marketing, and Mobile marketing.		
Suggested Readings: • Leon G. Schiffman and Keslie, L.KamK.: Consumer Behavior, PHI, New Delhi. • Batra &Kazmi: Consumer Behavior, Excel Books, New Delhi. • Kotler, Keller, Koshy and Jha: Marketing Management, Pearson Education. • Shah Kruti& D' Souza Alan, Advertising & promotions an IMC perspective, McGraw Hill education. • Belch George E & Belch Michael A, Advertising and promotion- An integrated Marketing Communication Perspective, McGraw Hill Education.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		III	
Course Title	Research-Based Learning III	L	T	P	Credits
Course Code	MBAAI1310	0	0	4	2

Course Objectives:	Enable students to develop appropriate research instruments for data collection.
	Train students in conducting pilot studies and refining research tools.
	Develop practical understanding of primary and secondary data collection procedures.
	Enhance students' capability in data coding, tabulation, and preparation for analysis.
	Develop students' ability to perform data analysis and derive meaningful findings from Collected data.
	Strengthen ethical practices in field research and data handling.

Course Outcomes:	
CO1	Develop structured questionnaires/interview schedules aligned with research objectives.
CO2	Conduct pilot testing and refine research instruments.
CO3	Execute primary and/or secondary data collection systematically.
CO4	Apply ethical practices during field research and respondent interaction.
CO5	Organize, code, and prepare collected data for statistical analysis.
CO6	Analyze collected data using appropriate statistical tools.
CO7	Present findings through tables, charts, and graphical representations.
CO8	Draw preliminary conclusions based on the analyzed data.

Course Structure (Classroom Activity)

Topic	Learning Activities
Research Instrument Development	Questionnaire and interview schedule drafting
Measurement Scales	Designing Likert scale, ranking scale, semantic differential scale
Pilot Study	Activity: Pilot testing and refinement of tools
Data Collection Process	Field survey/interview/secondary data collection
Ethical Considerations in Research	Consent, confidentiality, and academic integrity
Data Preparation	Coding, tabulation, data entry, and data cleaning
Data Analysis	Descriptive statistics using SPSS/Excel (frequency, percentage, mean, charts)
Findings and Interpretation	Preparation and presentation of key findings and observations

Assessment Pattern

Student performance shall be evaluated through continuous assessment, research instrument development, data collection progress, data analysis, practical exercises, presentations, and viva-voce under an audit-based evaluation system.

Guidelines for RBL Teacher

- Guide students in developing appropriate data collection instruments.
- Conduct practical sessions on measurement scales and questionnaire design.
- Explain pilot testing procedures and refinement techniques.
- Train students in ethical data collection practices.
- Introduce students to data coding, tabulation, data analysis, and software tools such as SPSS/Excel.
- Guide students in presenting findings through tables, charts, and graphical representations.
- Ensure adherence to APA referencing standards.

Guidelines for RBL Guide

- Review and approve research instruments before data collection.
- Guide students during pilot study and refinement of tools.
- Monitor progress of primary/secondary data collection.
- Verify authenticity, adequacy, and ethical compliance of collected data.
- Assist students in coding, organizing, and analyzing data.
- Review preliminary findings and provide constructive feedback.
- Provide continuous feedback and mentoring.

Guidelines for Students

- Develop research instruments aligned with approved objectives and hypothesis.
- Conduct pilot study and incorporate suggested modifications.
- Complete primary and/or secondary data collection within the semester timeline.
- Follow ethical standards while interacting with respondents.
- Organize, code, and analyze collected data using appropriate tools.
- Prepare tables, charts, and graphical presentations of findings.
- Present preliminary findings and observations systematically.
- Maintain APA style in all documentation and references.

Referencing List (Strictly Follow APA Style)**1. Book**

Author, A. A. (Year). *Title of the book* (xth ed.). Publisher.

(Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)

2. Journal Article

Author, A. A., & Author, B. B. (Year). Title of the article. *Title of the Journal*, Volume(Issue), page range. <https://doi.org/xxxx>

(Note: Journal title and volume are italicized; issue number is in parentheses but not italicized.)

3. Website

Author/Organization. (Year, Month Day). *Title of the webpage*. Website Name. URL

(Note: Italicize the webpage title, not the website name. If no date, use n.d.)

4. Report/Company Document

Organization. (Year). *Title of the report* (Report No. xxx if available). Publisher. URL

(Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		IV	
Course Title	Gen AI Strategy and Enterprise Transformation	L	T	P	Credits
Course Code	MBAAI1401	4	0	0	4

Course Objectives:	To understand Generative AI strategies, enterprise AI architectures, and business transformation frameworks for AI-driven organizations.
	To apply GenAI technologies, governance principles, and implementation strategies for responsible and scalable enterprise AI adoption.

Course Outcomes:	
CO1	Understand the fundamentals of Generative AI, enterprise AI architectures, and business value creation through AI-driven transformation.
CO2	Apply supervised learning algorithms and predictive modelling techniques using machine learning tools and real-world datasets.
CO3	Analyze organizational transformation, governance frameworks, AI risks, and compliance requirements for responsible GenAI adoption.
CO4	Evaluate enterprise GenAI use cases, implementation roadmaps, performance metrics, and emerging trends in AI-driven business innovation.

Course Contents	No of Hours	Mapped CO
Module I: Foundations of Generative AI and Enterprise Value - Evolution of AI to Generative AI: LLMs, diffusion models (high-level) - GenAI Capabilities: Content generation, summarization, code, multimodal use cases - Enterprise Value Mapping: Productivity, revenue uplift, cost optimization - Use-Case Taxonomy by Function: Marketing, sales, operations, HR, finance - Build vs Buy vs Partner decisions for GenAI solutions - Total Cost of Ownership (TCO) and ROI estimation frameworks - Risk Landscape: Hallucinations, bias, IP concerns - Case Study: GenAI-driven customer support transformation - Data Strategy for GenAI: Proprietary data, data readiness, governance - Knowledge Integration: RAG (Retrieval-Augmented Generation) concepts - Enterprise Architecture: APIs, microservices, model orchestration layers	15	CO1
Module II: Data, Platform Strategy and Enterprise AI Architecture - Model Choices: Foundation models, open-source vs proprietary, fine-tuning vs prompting - Prompt Engineering and Evaluation basics for business users - Vector Databases and Embeddings (conceptual overview) - MLOps/LLMOps lifecycle: Versioning, monitoring, rollback - Vendor Landscape and tooling (cloud AI platforms overview)	15	CO2

• GenAI Operating Models: Centralized, federated, hub-and-spoke • Cross-functional Teams: Product, data, engineering, domain SMEs • Workflow Redesign and Human-in-the-Loop systems • Change Management: Adoption barriers, training, incentives • Governance Structures: AI councils, model review boards • Capability Building: Upskilling, prompt literacy, citizen developers		
Module III: Responsible AI, Governance and Organizational Transformation • KPI Design: Productivity metrics, quality, risk indicators • Case Study: Enterprise-wide rollout of AI copilots • Responsible AI Principles: Fairness, accountability, transparency • Model Risks: Hallucination, drift, prompt injection, data leakage • Privacy and Security: PII handling, access control, secure deployment • Regulatory Landscape: Global perspectives (EU AI Act overview, sectoral norms) • IP and Copyright considerations in generated content • Evaluation and Guardrails: Red-teaming, content filters, human review • Auditability and Documentation (model cards, data lineage) • Case Study: Risk mitigation in regulated industries (banking/healthcare) • Organizational transformation using GenAI systems	15	CO3
Module IV: Enterprise Implementation Roadmap and Industry Use Cases • Use-Case Prioritization Framework: Value vs feasibility matrix • Pilot-to-Scale Roadmap: MVPs, experimentation, scaling stages • Integration with Enterprise Systems: CRM, ERP, knowledge bases • Cost Management: Inference costs, optimization strategies (caching, batching) • Performance Measurement: A/B testing, ROI tracking, business KPIs • Industry Playbooks: Customer service automation, Marketing content generation, Software development copilots • Partner Ecosystem and Vendor Management • Enterprise AI transformation strategies • Emerging trends in Generative AI adoption • Future scope of GenAI in business operations • AI-driven enterprise innovation models Capstone/Mini Project: • GenAI transformation plan for a chosen enterprise	15	CO4
Suggested Readings: • Tom Taulli – <i>Generative AI: How ChatGPT and Other AI Tools Will Revolutionize Business</i>, Apress • Bernard Marr – <i>Generative AI in Practice: 100+ Amazing Ways Generative AI Is Changing Business and Society</i>, Wiley • Marco Iansiti & Karim R. Lakhani – <i>Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World</i>, Harvard Business Review Press		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		IV	
Course Title	Corporate Governance, Values & Ethics	L	T	P	Credits
Course Code	MBAAI1402	4	0	0	4

Course Objectives:	To develop knowledge about the importance of corporate governance and the need for business ethics to ensure sustained business growth & stability
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Course Outcomes:	
CO1	Describe the concept of corporate values and governance
CO2	Explain Intellectual property rights and CSR
CO3	Explain and apply the concept learnt from the value system based on Indian scriptures and tradition.
CO4	Explain the concept of ethics and its incorporation into different business functions.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Corporate Governance A brief history of Corporate Governance, Need of corporate governance, Evolution of Corporate Governance system worldwide, Corporate Governance in India, Social responsibility of Corporate, Corporate Social reporting, Corporate Governance Issues, Code of Corporate Practices, Corporate Governance and the role of Board (BOD), Corporate disclosure and Investor protection in India.	15	CO1
Module II: Board of Directors, CSR & IPR Board of Directors, Types of Directors & composition of Board, Corporate Social Responsibility, Need and significance of CSR, Growth and sustainability with CSR, Laws and regulations related to CSR, Corporate Social Reporting.	15	CO2
Module III: Values-impact on Business Indian Value system and Values. Management lessons from Indian scriptures and traditions namely Geeta, Ramayana, Mahabharata, Upanishads and Vedas, Bible and Quran.	15	CO3
Module IV: Ethical-impact on Business Business Ethics, Features of Ethics, Ethical theories and approaches, Ethical Issues in Capitalism and market systems, Ethics and social responsibility. Ethical issues in functional areas of marketing, finance, human resource and Information Technology, with Discussions related contemporary Business cases.	15	CO4
Suggested Readings: - S.S. Iyer - Managing for Value (New Age International Publishers, 2002) - Laura P Hartman Abha Chatterjee - Business Ethics (Tata McGraw Hill, 2007) - S.K. Bhatia - Business Ethics and Managerial Values (Deep & Deep Publications Pvt. Ltd, 2000) - Velasquez - Business Ethics - Concepts and Cases (Prentice Hall, 6th Ed.) 5. Neeru Dr.Vasishtha - Business Ethics & Values-Taxmann's II ed.		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		IV	
Course Title	Supply Chain Management	L	T	P	Credits
Course Code	MBAAI1403	4	0	0	4

Course Objectives:	To develop knowledge about the elements of Logistics and Supply Chain Management processes.
	To acquaint with the recent trends and issues in the supply chain management function.

Course Outcomes:	
CO1	Describe the role and basic concepts of supply chain management, various value flows and key issues in supply chain management
CO2	Explain logistic management, different models including distribution and warehouse management.
CO3	Explain various techniques of inventory management. Calculate various costs associated with inventory, EOQ, buffer stock, lead time etc.
CO4	Explain the role of IT in supply chain management and Customer relationship management.

Course Contents	No of Hours	Mapped CO
Module I: Introduction to Supply Chain Management Basic Concept, Objectives and importance of Supply Chain Management, Cycle view of SCM, Pull & Push system, competitive and supply chain strategies, achieving strategic fit, Supply chain Drivers & Obstacles, Key Issues in SCM and Benefits.	15	CO1
Module II: Logistics Management, Purchase and Vendor Management Logistics Management: Logistics as part of SCM, Logistics costs, Inbound and outbound logistics, Bullwhip effect in logistics. Reverse Logistics. Distribution and warehousing management, Cross docking, Milkrun, Super stores. Purchase & Vendor management, vendor rating.	15	CO2
Module III: Inventory Management Concept of Inventory Management, Various costs associated with inventory, Various EOQ models, Buffer stock (trade- off between stock out / working capital cost), Lead time reduction, Re-order point / re-order level fixation, ABC, SDE / VED Analysis, Just-In-Time & Kanban System.	15	CO3
Module IV: Recent Issues in SCM Role of Computer & IT in Supply Chain Management, CRM Vs SCM, Bench-marking concept: Features and Implementation, Outsourcing basic concept, 3 PL, 4 PL, Value Addition in SCM, Concept of demand chain management.	15	CO4
Suggested Readings: • Raghuram G. (I.I.M.A.) - Logistics and Supply Chain Management (Macmillan, 1st Ed.) • Krishnan Dr. Gopal - Material Management, (Pearson, New Delhi, 5th Ed.) • Agarwal D.K. - A Text Book of Logistics and Supply chain management (Macmillan, 1st Ed.). • Sahay B.S. - Supply Chain Management (Macmillan, 1st Ed.) • Chopra Sunil and Peter Meindl - Supply chain management (Pearson, 3rd Ed.) • Ballou, Ronald H: Supply Chain Management: Pearson Education		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		IV	
Course Title	Industrial Relations & Labour Codes	L	T	P	Credits
Course Code	MBAAI1404	4	0	0	4

Course Objectives:	A comprehensive understanding of India's reformed labour law framework, including Industrial Relations, Wages, Social Security, and Occupational Safety codes, and their practical implications for employers and workers.
	The emerging challenges in employment relations arising from automation and Artificial Intelligence, with a focus on legal, ethical, and governance issues in the world of work.

Course Outcomes:	
CO1	Demonstrate the understanding of the concept of IR and basic provisions related to Code on Wages, including wage components, minimum wage fixation, payment of wages, deductions, and overtime provisions
CO2	Analyze the provisions of the Industrial Relations Code, 2020, and evaluate their practical implications in industrial relations through case studies.
CO3	Apply the provisions of the Social Security Code relating to employee compensation, ESI benefits, provident fund, gratuity, and workplace social security measures.
CO4	Evaluate workplace safety, health, welfare, and working condition provisions under the OSH Code and the implications of AI on employment relations.

Course Contents	No of Hours	Mapped CO
Module I: Industrial Relations & Code on Wages, 2019 Introduction to Industrial Relations: Meaning, Scope & Objectives of Industrial Relations, Evolution of IR in India, Role of Trade Unions and Employers' Associations, Role of Government in IR, Emerging Trends in Industrial Relations, Impact of Liberalization, Privatization & Globalization, Case Study Code on Wages, 2019: Objectives and Scope of the Code, Concept of "Wages" under the Code, Minimum Wages & Floor Wages, Payment of Wages, Bonus Provisions, Gender Equality in Wages, Authorities & Inspectors under the Code, Penalties and Compliance, Case Study	15	CO1
Module II: Trade Unions & Industrial Relations Code, 2020 Trade Unions: Meaning & Types of Trade Unions, Trade Union Movement in India, Registration & Recognition of Trade Unions, Rights & Liabilities of Trade Unions, Problems of Trade Unionism, Case Study Industrial Relations Code, 2020: Standing Orders, Notice of Change, Lay-off, Retrenchment & Closure, Strikes and Lockouts, Grievance Redressal Mechanism, Industrial Tribunals & Adjudication, Concept of Fixed-Term Employment, Case Study	15	CO2
Module III: Social Security & Code on Social Security, 2020 Social Security: Concept of Social Security, Types of Social Security: Social Assistance & Social Insurance, Role of Social Security in Employee Welfare, Case Study Code on Social Security, 2020: Applicability of the Code, Provident Fund, Employees' State Insurance, Gratuity, Maternity Benefit, Employee Compensation, Coverage of Gig & Platform Workers, Social Security Funds, Compliance & Registration, Case Study.	15	CO3
Module IV: Occupational Safety & Health and Code on OSHWC, 2020	15	CO4

Occupational Safety & Health: Concept of Occupational Safety & Health, Importance of Workplace Safety, Duties of Employer & Employees, Role of Safety Committees, Case Study Code on Occupational Safety, Health & Working Conditions (OSHC), 2020: Applicability of the Code, Health, Safety & Working Conditions Standards, Working Hours & Leave, Welfare Provisions, Employment of Women, Contract Labour Provisions, Inter-State Migrant Workers, Inspector-cum-Facilitator, Offences & Penalties, Case Study		
Suggested Readings: • Taxmann's New Labour Codes, 1st Edition 2025, Taxmann Publications Private Ltd. • Mamoria CB, Mamoria, Gankar, Dynamics of Industrial Relations, Himalayan Publications, 15th Ed. • Universal Law Publishing - Labour Codes with Rules • Ministry of Labour & Employment - Bare Acts of Four Labour Codes • Dr. Bhagyashree A. Deshpande, Textbook on new labour and industrial laws, Central Law Publications		

Course Articulation Matrix														
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		IV	
Course Title	Compensation & Benefits	L	T	P	Credits
Course Code	MBAAI1405	4	0	0	4

Course Objectives:	Introduce the fundamental concepts and strategic importance of compensation.
	Understand the components and structure of compensation systems.
	Understand employee benefits, incentives, and pay-for-performance plans.
	Examine compensation issues related to special employee groups and legal frameworks.

Course Outcomes:	
CO1	Explain key theories and principles of compensation and benefits.
CO2	Design and evaluate compensation structures aligned with organizational goals.
CO3	Analyze and apply various incentive plans, employee services, and benefits.
CO4	Design compensation strategies for special employee categories within legal frameworks.

Course Contents	No of Hours	Mapped CO
Module I : Introduction to Compensation and Benefits- Role and significance of compensation in organization, Economic and Behavioural theories related to compensation, Strategic perspectives and motivational aspects of compensation, Compensation policy, Pay models and structure design, Job analysis, Job evaluation.	15	CO1
Module II: Compensation Structure and Competitiveness- Person based and skill-based pay systems, defining competitiveness, Designing pay levels, mix and pay structure, Employee contribution and Compensation differentials, Adminstrating compensation package.	15	CO2
Module III: Incentives and Employee Benefits- Components of compensation: fixed, variable, and fringe benefits, incentives and retirement plans Pay for performance plans, Employee benefits, Compensation of social group, Role of trade unions in compensation management.	15	CO3
Module IV: Compensation of Special Group and Legal Framework- Compensation of special group: Corporate Directors, Chief Executives & Senior Managers, Components of executive compensation package, Compensation of professionals and knowledge workers, R&D staff, Sales compensation plan, International compensation, Statutory provisions and institutional mechanisms (Wage Boards, Pay Commissions), Tax planning in compensation.	15	CO4
Suggested Readings: • Milkovich, George T. & Newman, J.M. – <i>Compensation</i>, Tata McGraw Hill • Henderson, R.O. – <i>Compensation Management</i>, Pearson Education • Martocchio, J.J. – <i>Strategic Compensation</i>, Pearson Education • Armstrong, M. & Murlis, H. – <i>Reward Management</i>, Kogan Page • Singh, B.D. – <i>Compensation and Reward Management</i>, Excel Books		

Course Articulation Matrix														
PO- PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1														
CO2														
CO3														
CO4														
Avg														

Program	Master of Business Administration in Data Science and Artificial Intelligence				
Year	II	Semester		IV	
Course Title	Research-Based Learning IV	L	T	P	Credits
Course Code	MBAAI1406	0	0	6	3

Course Objectives:	Enable students to interpret research findings and draw meaningful conclusions.
	Develop the ability to derive managerial implications and practical recommendations from Research outcomes.
	Enhance students' skills in academic writing and report preparation.
	Familiarize students with book chapter writing and publication ethics.
	Prepare students for effective presentation and defence of their research work.

Course Outcomes:	
CO1	Interpret research findings in relation to research objectives and hypothesis.
CO2	Draw valid conclusions and formulate recommendations based on research outcomes.
CO3	Prepare a structured research report following academic standards.
CO4	Develop a book chapter from their research work
CO5	Demonstrate effective presentation and communication skills during viva-voce
CO6	Adhere to publication ethics, plagiarism guidelines, and APA referencing standards.

Course Structure (Classroom Activity)

Topic	Learning Activities
Interpretation of Findings	Relating findings to research objectives, hypothesis, and existing literature
Conclusion, Recommendations and Managerial Implications	Drawing conclusions and developing practical recommendations based on research findings
Research Report Writing and Documentation	Preparation of final RBL report, APA referencing, formatting, and documentation
Publication Ethics and Publication-Oriented Writing	Similarity check, ethical publishing practices, and preparation of book chapter manuscript
Presentation and Viva Preparation	PPT preparation, mock presentations, and viva-voce practice
Final Submission of RBL Report / Book Chapter	Submission of the final RBL report by all students and preparation of book chapters for publication based on the quality of research work

Assessment Pattern

Student performance shall be evaluated through continuous assessment, research report preparation / book chapter development, presentation, and viva-voce under an audit-based evaluation system

Guidelines for RBL Teacher

- Guide students in interpreting research findings and developing conclusions.
- Conduct sessions on report writing and academic documentation.
- Introduce publication ethics, plagiarism guidelines, and manuscript preparation.
- Train students in APA referencing and citation management.
- Facilitate mock presentations and viva sessions.
- Provide constructive feedback on research reports and manuscripts.

Guidelines for RBL Guide

- Guide students in drawing conclusions and managerial implications.
- Review draft reports / book chapters.
- Ensure quality, originality, and academic rigor in the final submission.
- Verify adherence to ethical standards and plagiarism norms.

- Mentor students in preparing presentations and viva-voce.
- Assess student performance through continuous evaluation and feedback.

Guidelines for Students

- Interpret research findings logically and objectively.
- Prepare conclusions and recommendations aligned with research objectives.
- Prepare a complete research report in the prescribed format / convert quality research work into book chapters for publication.
- Follow APA style consistently for citations and references.
- Ensure originality and compliance with plagiarism guidelines.
- Participate actively in presentations and viva-voce sessions.
- Submit all deliverables within the prescribed timeline.

Referencing List (Strictly Follow APA Style)**1. Book**

Author, A. A. (Year). *Title of the book* (xth ed.). Publisher.

(Note: Write edition in parentheses after the title, e.g., (2nd ed.). Italicize the title of the book.)

2. Journal Article

Author, A. A., & Author, B. B. (Year). Title of the article. *Title of the Journal, Volume(Issue)*, page range. <https://doi.org/xxxx>

(Note: Journal title and volume are italicized; issue number is in parentheses but not italicized.)

3. Website

Author/Organization. (Year, Month Day). *Title of the webpage*. Website Name. URL

(Note: Italicize the webpage title, not the website name. If no date, use n.d.)

4. Report/Company Document

Organization. (Year). *Title of the report* (Report No. xxx if available). Publisher. URL

(Note: Italicize the report title. If publisher and author are the same, omit the publisher name.)