



*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
(An Autonomous Institution)  
**St. Joseph's Group of Institutions**  
OMR, Chennai - 119.



## **DEPARTMENT OF MANAGEMENT STUDIES**

### **MASTER OF BUSINESS ADMINISTRATION (2 YEARS)**

### **CURRICULUM AND SYLLABUS REGULATIONS 2025**

**(Applicable to the students admitted in the AY 2025-2026)**

**(Approved in the Fifth Board of Studies meeting held on 2nd December 2024,  
and Academic Council Meeting held on .....**



**FACULTY OF MANAGEMENT SCIENCE**  
**MASTER OF BUSINESS ADMINISTRATION (2 YEARS)**  
**CHOICE BASED CREDIT SYSTEM**  
**REGULATIONS 2025**

**VISION**

To prepare the aspiring managers with innovative skills and knowledge in a dynamic learning environment and strengthening institution's reputation through promoting entrepreneurship, research, social and ethical business practices.

**MISSION**

- M1:** To provide a transformative education that blends practical experiences and theoretical knowledge, to face the business challenges.
- M2:** To cultivate a collaborative research environment that promotes social responsibility and upholds ethical practices in business.
- M3:** To build a partnership with industries, ensuring the programs remain relevant and impactful in the global economy
- M4:** To inspire, educate, and empower students to become innovative thinkers and resilient entrepreneurs by providing a supportive environment

**PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

MBA programme curriculum is designed for the post graduate students to,

- I. gain a thorough understanding of the core aspects of the business.
- II. equip with tools to identify, analyze and create business opportunities, solve business problems, and foster entrepreneurial thinking
- III. enhance a holistic approach to management, encourage continuous learning, adaptability, innovation, and stay updated with emerging business trends
- IV. be socially responsible and ethically conscious citizens.

**PROGRAMME OUTCOMES (POs)**

On successful completion of the program,

- 1) **Knowledge and Application:** Ability to apply knowledge of management theories and practices.

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- 2) **Problem-Solving:** To understand and create optimal solutions for complex business problems.
- 3) **Communication and Negotiation:** Ability to communicate and negotiate effectively, to achieve individual and organizational goals.
- 4) **Leadership:** Ability to handle challenging assignments, exhibit leadership skills, creativity and innovation.
- 5) **Critical Thinking:** To analyse and evaluate economic, and ethical aspects of business.
- 6) **Social Responsibility:** To evaluate and implement social outreach initiatives to meet community needs.

**PROGRAMME SPECIFIC OUTCOMES (PSOs)**

1. To cultivate the competencies required to become a successful professional
2. To provide socially responsible solutions for managerial issues using modern techniques for sustainable development.
3. Ability to utilize entrepreneurial knowledge to identify and pursue business opportunities.

**MAPPING OF PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) WITH PROGRAMME SPECIFIC OUTCOMES (PSOs) and PROGRAMME OUTCOMES (POs)**

PEOs	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>I</b>	√	√	√	√	√	√	√	√	√
<b>II</b>	√	√	√	√	√	√	√	√	√
<b>II</b>	√	√	√	√	√	√	√	√	√
<b>IV</b>	√	√	√	√	√	√	√	√	√
<b>V</b>	√	√	√	√	√	√	√	√	√

**Mapping of course outcomes (COs) with Programme Outcomes (POs)**

YEAR	SEM	COURSE TITLE	Programme Outcomes (POs)					
			1	2	3	4	5	6
<b>1</b>	<b>1</b>	Accounting for Management						
		Information Management	√	√	√	√	√	
		Legal Aspects of Business	√	√	√	√		
		Management Principles and Organisational Behaviour	√	√	√	√		
		Managerial Economics	√	√	√	√	√	
		Statistics for Management		√				
		Non-Functional Elective	<b>* shown separately in this table</b>					
		Executive Communication	√	√	√			
		Enhanced Learning Experience	<b>* shown separately in this table</b>					

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		Managerial Skill Development I	√	√	√	√		
<b>1</b>	<b>2</b>	Business Analytics	√	√	√	√	√	√
		Financial Management	√	√	√	√		
		Human Resource Management	√	√	√	√		
		Marketing Management	√	√	√	√		
		Operations Management	√	√		√	√	√
		Quantitative Techniques For Decision Making	√	√	√	√		
		Research Methodology and IPR	√	√	√	√	√	
		Data Analysis (Laboratory)		√				
		Enhanced Learning Experience	<b>* shown separately in this table</b>					
		Managerial Skill Development II	√	√	√	√		
<b>2</b>	<b>3</b>	International Business Management	√	√	√	√	√	√
		Strategic Management	√	√	√	√	√	√
		Professional Elective I	<b>* shown separately in this table</b>					
		Professional Elective II	<b>* shown separately in this table</b>					
		Professional Elective III	<b>* shown separately in this table</b>					
		Professional Elective IV	<b>* shown separately in this table</b>					
		Professional Elective V	<b>* shown separately in this table</b>					
		Professional Elective VI	<b>* shown separately in this table</b>					
		Summer Internship	√	√	√	√	√	√
		Enhanced Learning Experience	<b>* shown separately in this table</b>					
		Managerial Skill Development III	√	√	√	√		
<b>2</b>	<b>4</b>	Project Work	√	√	√	√	√	√
<b>NON-FUNCTIONAL ELECTIVES WITH PO'S</b>								
<b>1</b>	<b>1</b>	Business Ethics and Corporate Governance	√	√	√	√		
		Entrepreneurship Development	√	√	√	√	√	
		Event Management	√	√		√	√	
		Problem Solving and Python Programming	√	√	√		√	
		R Programming		√	√			
		Sustainability Management	√	√	√	√		

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<b>ENHANCED LEARNING EXPERIENCE</b>								
<b>1</b>	1	Profit Challenge	√	√	√	√	√	√
		Sectoral Seminar	√	√	√	√	√	√
<b>1</b>	2	Outbound Training	√	√	√	√	√	√
		Rural Engagement Programme	√	√	√	√	√	√
		Socially Significant Projects	√	√	√	√	√	√
<b>2</b>	3	Consulting Services For Local Businesses	√	√	√	√		√
		Creativity & Innovation		√	√	√		
<b>PROFESSIONAL ELECTIVES</b>								
<b>MARKETING MANAGEMENT</b>								
<b>2</b>	3	Brand Management	√	√	√	√		
		Consumer Behavior	√	√	√	√		
		Customer Relationship Management	√	√	√	√		
		Digital Marketing	√	√	√	√		
		Integrated Marketing Communication	√	√	√	√		
		Marketing Analytics	√	√	√	√		
		Retail Marketing	√	√	√	√		
		Sales and Distribution Management	√	√	√	√		
		Services Marketing	√	√	√	√		
<b>FINANCIAL MANAGEMENT</b>								
<b>2</b>	3	Banking and Financial Services	√	√	√	√		
		Behavioral Finance	√	√	√	√		
		Financial Derivatives	√	√	√	√		
		Financial Modelling and Analytics	√	√	√	√		
		International Finance and Forex Management	√	√	√	√		
		Micro Finance and Financial Inclusion	√	√	√	√		
		Security Analysis and Portfolio Management	√	√	√	√		
<b>HUMAN RESOURCE MANAGEMENT</b>								
<b>2</b>	3	Digital Human Resource Management	√	√	√	√		
		Human Resource Analytics	√	√	√	√		
		Industrial Relations and Labour Legislations	√	√	√	√		
		Managerial Behavior and Effectiveness	√	√	√	√		
		Organizational, Design, Change and Development	√	√	√	√		
		Reward and Compensation Management	√	√	√	√		
		Strategic Human Resource Management	√	√	√	√		
		Talent Acquisition and Management	√	√	√	√		

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<b>BUSINESS ANALYTICS</b>								
<b>2</b>	<b>3</b>	Big Data Analytics	√	√	√	√		
		Business Analytics and Text Mining	√	√	√	√		
		Business tools for Predictive Analysis	√	√	√	√		
		Data Mining for Business Intelligence	√	√	√	√		
		Deep Learning and Artificial intelligence	√	√	√	√		
		Multivariate Data Analysis	√	√	√	√		
		Social Media and Web Analytics	√	√	√	√		
<b>OPERATIONS MANAGEMENT</b>								
<b>2</b>	<b>3</b>	Logistics Management	√	√	√	√		
		Materials Management	√	√	√	√		
		Product Design	√	√	√	√		
		Project Management	√	√	√	√		
		Quality Management	√	√	√	√		
		Supply Chain Analytics	√	√	√	√		
		Supply Chain Management	√	√	√	√		
		Service Operations Management	√	√	√	√		
<b>SYSTEMS MANAGEMENT</b>								
<b>2</b>	<b>3</b>	Advanced Database Management System	√	√	√	√		
		Data Mining For Business Analytics	√	√	√	√		
		E-Business	√	√	√	√		
		Enterprise Resource Planning	√	√	√	√		
		Internet of Things	√	√	√	√		
		Software Project and Quality Management	√	√	√	√		
		Advanced Database Management System	√	√	√	√		

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AFFILIATED INSTITUTIONS  
REGULATIONS -2025  
CHOICE BASED CREDIT SYSTEM  
MASTER OF BUSINESS ADMINISTRATION (2 YEARS)  
CURRICULA AND SYLLABI I TO IV SEMESTERS

SEMESTER -I

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
<b>THEORY</b>							
1	MB25101	Accounting for Management	PCC	4	0	0	4
2	MB25102	Information Management	PCC	3	0	0	3
3	MB25103	Legal Aspects of Business	PCC	3	0	0	3
4	MB25104	Management Principles and Organisational Behaviour	PCC	4	0	0	4
5	MB25105	Managerial Economics	PCC	4	0	0	4
6	MB25106	Statistics for Management	PCC	4	1	0	4
7		Non-Functional Elective	NEC	3	0	0	3
<b>PRACTICALS</b>							
8	MB25P11	Executive Communication	EEC	0	0	4	2
9		Enhanced Learning Experience	EEC	0	0	4	2
10	MB25V11	Managerial Skill Development I	VAC	0	0	2	0
<b>TOTAL</b>				<b>25</b>	<b>1</b>	<b>10</b>	<b>29</b>

NOTE: In the first Semester

- Students need to choose one elective from the Non-Functional stream.
- Students must select one course from the Enhanced Learning Experience, present their work, and submit their report to the department. No end semester examination.

SEMESTER II

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
<b>THEORY</b>							
1	MB25201	Business Analytics	PCC	4	0	0	4
2	MB25202	Financial Management	PCC	4	0	0	4
3	MB25203	Human Resource Management	PCC	4	0	0	4
4	MB25204	Marketing Management	PCC	4	0	0	4
5	MB25205	Operations Management	PCC	4	0	0	4
6	MB25206	Quantitative Techniques For Decision Making	PCC	4	1	0	4
7	MB25207	Research Methodology and IPR	PCC	4	0	0	4
<b>PRACTICALS</b>							
7	MB25P21	Data Analysis (Laboratory)	EEC	0	0	4	2

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8		Enhanced Learning Experience	EEC	0	0	4	2
9	MB25V21	Managerial Skill Development II	VAC	0	0	2	0
<b>TOTAL</b>				<b>28</b>	<b>1</b>	<b>10</b>	<b>32</b>

**NOTE:** In the second Semester

- Students must select one course from the Enhanced Learning Experience, present their work, and submit their report to the department. No end semester examination.
- At the end of the second semester examination students have to undergo, a 4-week summer internship and submit the report to the department within 4 weeks of the reopening date of the 3rd semester.

**SEMESTER III**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
<b>THEORY</b>							
1	MB25301	International Business Management	PCC	3	0	0	3
2	MB25302	Strategic Management	PCC	3	0	0	3
3		Elective I	PEC	3	0	0	3
4		Elective II	PEC	3	0	0	3
5		Elective III	PEC	3	0	0	3
6		Elective IV	PEC	3	0	0	3
7		Elective V	PEC	3	0	0	3
8		Elective VI	PEC	3	0	0	3
<b>PRACTICALS</b>							
9	MB25P31	Summer Internship	EEC	0	0	6	3
10		Enhanced Learning Experience	EEC	0	0	4	2
11	MB25V31	Managerial Skill Development III	VAC	0	0	2	0
<b>TOTAL</b>				<b>24</b>	<b>0</b>	<b>12</b>	<b>29</b>

**NOTE:** In the third semester

- For dual specialisation, students must select three electives from two professional elective streams.
- Students must select one course from the Enhanced Learning Experience, present their work, and submit their report to the department. No end semester examination.

**SEMESTER IV**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
<b>PRACTICALS</b>							
1	MB25P41	Project Work	EEC	0	0	24	12
<b>TOTAL</b>				<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**TOTAL NO. OF CREDITS: 102**

**NON-FUNCTIONAL ELECTIVES**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
1	MB25N01	Business Ethics and Corporate Governance	NEC	3	0	0	3
2	MB25N02	Entrepreneurship Development	NEC	3	0	0	3
3	MB25N03	Event Management	NEC	3	0	0	3
4	MB25N04	Problem Solving and Python Programming	NEC	3	0	0	3
5	MB25N05	R Programming	NEC	3	0	0	3
6	MB25N06	Sustainability Management	NEC	3	0	0	3

**PROFESSIONAL ELECTIVES**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
<b>MARKETING MANAGEMENT</b>							
1	MB25M01	Brand Management	PEC	3	0	0	3
2	MB25M02	Consumer Behavior	PEC	3	0	0	3
3	MB25M03	Customer Relationship Management	PEC	3	0	0	3
4	MB25M04	Digital Marketing	PEC	3	0	0	3
5	MB25M05	Integrated Marketing Communications	PEC	3	0	0	3
6	MB25M06	Marketing Analytics	PEC	3	0	0	3
7	MB25M07	Retail Marketing	PEC	3	0	0	3
8	MB25M08	Sales and Distribution Management	PEC	3	0	0	3
9	MB25M09	Services Marketing	PEC	3	0	0	3
<b>FINANCIAL MANAGEMENT</b>							
1	MB25F01	Banking and Financial Services	PEC	3	0	0	3
2	MB25F02	Behavioral Finance	PEC	3	0	0	3
3	MB25F03	Financial Derivatives	PEC	3	0	0	3
4	MB25F04	Financial Modelling and Analytics	PEC	3	0	0	3
5	MB25F05	International Finance and Forex Management	PEC	3	0	0	3
6	MB25F06	Micro Finance and Financial Inclusion	PEC	3	0	0	3
7	MB25F07	Security Analysis and Portfolio Management	PEC	3	0	0	3

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<b>HUMAN RESOURCE MANAGEMENT</b>							
1	MB25H01	Digital Human Resource Management	PEC	3	0	0	3
2	MB25H02	Human Resource Analytics	PEC	3	0	0	3
3	MB25H03	Industrial Relations and Labour Legislations	PEC	3	0	0	3
4	MB25H04	Managerial Behavior and Effectiveness	PEC	3	0	0	3
5	MB25H05	Organizational, Design, Change and Development	PEC	3	0	0	3
6	MB25H06	Reward and Compensation Management	PEC	3	0	0	3
7	MB25H07	Strategic Human Resource Management	PEC	3	0	0	3
8	MB25H08	Talent Acquisition and Management	PEC	3	0	0	3
<b>BUSINESS ANALYTICS</b>							
1	MB25B01	Big Data Analytics	PEC	3	0	0	3
2	MB25B02	Business Analytics and Text Mining	PEC	3	0	0	3
3	MB25B03	Business tools for Predictive Analysis	PEC	3	0	0	3
4	MB25B04	Data Mining for Business Intelligence	PEC	3	0	0	3
5	MB25B05	Deep Learning and Artificial intelligence	PEC	3	0	0	3
6	MB25B06	Multivariate Data Analysis	PEC	3	0	0	3
7	MB25B07	Social Media and Web Analytics	PEC	3	0	0	3
8	MB25B08	Web and Text Analytics	PEC	3	0	0	3
<b>OPERATIONS MANAGEMENT</b>							
1	MB25O01	Logistics Management	PEC	3	0	0	3
2	MB25O02	Materials Management	PEC	3	0	0	3
3	MB25O03	Product Design	PEC	3	0	0	3
4	MB25O04	Project Management	PEC	3	0	0	3
5	MB25O05	Quality Management	PEC	3	0	0	3
6	MB25O06	Supply Chain Analytics	PEC	3	0	0	3
7	MB25O07	Supply Chain Management	PEC	3	0	0	3
8	MB25O08	Service Operations Management	PEC	3	0	0	3

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<b>SYSTEMS MANAGEMENT</b>							
1	MB25S01	Advanced Database Management System	PEC	3	0	0	3
2	MB25S02	Data Mining For Business Analytics	PEC	3	0	0	3
3	MB25S03	E-Business	PEC	3	0	0	3
4	MB25S04	Enterprise Resource Planning	PEC	3	0	0	3
5	MB25S05	Internet of Things	PEC	3	0	0	3
6	MB25S06	Software Project and Quality Management	PEC	3	0	0	3

**ENHANCED LEARNING EXPERIENCE**

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	C
<b>First Semester</b>							
1	MB25E11	Profit Challenge	EEC	0	0	4	2
2	MB25E12	Sectoral Seminar	EEC	0	0	4	2
<b>Second Semester</b>							
1	MB25E21	Outbound Training	EEC	0	0	4	2
2	MB25E22	Rural Engagement Programme	EEC	0	0	4	2
3	MB25E23	Socially Significant Projects	EEC	0	0	4	2
<b>Third Semester</b>							
5	MB25E31	Consulting Services For Local Businesses	EEC	0	0	4	2
6	MB25E32	Creativity & Innovation	EEC	0	0	4	2

**CATEGORY BASED CREDIT AND SPLIT-UP – SEMESTER WISE**

Semester	PCC	PEC	NEC	EEC	Total credit
I	22	-	3	4	29
2	28	-	-	4	32
3	6	18	-	5	29
4	-	-	-	12	12
<b>Total Credit</b>	<b>56</b>	<b>18</b>	<b>3</b>	<b>25</b>	<b>102</b>

S.No.	Abbreviation	Detailed Description
1	PCC	Professional Core Course
2	PEC	Professional Elective Course
3	NEC	Non-Functional Elective Course
4	EEC	Employability Enhancement Course
5	VAC	Value added Course

**SEMESTER I**

<b>MB25101</b>	<b>ACCOUNTING FOR MANAGEMENT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		4	0	0	4

**OBJECTIVES**

- Acquire knowledge of accounting concepts and evaluate financial statements.
- Enable the students to make decisions using cost and management accounting tools.

**UNIT I FINANCIAL ACCOUNTING 12**

Introduction to Financial, Cost and Management Accounting – Generally Accepted Accounting Principles – Concepts & Conventions of Accounting – Trial Balance – Preparation of Final Accounts: Trading, Profit and Loss Account and Balance Sheet. **CO1**

**UNIT II ANALYSIS OF FINANCIAL STATEMENTS 12**

Ratio Analysis – Concepts – Classification of Ratios – Interpretation of ratios for financial decisions – Comparative Statements – Common Size Statements – Trend Analysis – Cash flow – Concepts – Analysis of cash flow statement. **CO2**

**UNIT III COST ACCOUNTING 12**

Cost Accounting – Concepts – Classification of Costs – Cost Sheet – Job Order Costing – Process Costing - Target Costing - Activity-Based Costing. **CO3**

**UNIT IV MARGINAL COSTING AND VARIANCE ANALYSIS 12**

Marginal Costing and Profit Planning – Cost, Volume, Profit Analysis – Break Even Analysis – Decision-making problems – Make or Buy decisions – Variance Analysis – Material Variance – Cost Variance – Labor Variance. **CO4**

**UNIT V BUDGETARY CONTROL 12**

Budgetary Control – Concepts – Functional Budgets – Master budget – Zero Based Budget – Preparation of various Budgets – Cash Budget – Flexible Budget – Production Budget – Sales Budget **CO5**

**TOTAL : 60 PERIODS**

**TEXT BOOKS :-**

1. Dr.S.N.Maheshwari, CA Sharad.KMaheshwari & Dr.Suneel K Maheshwari “A Textbook of Accounting for Management”, Vikas Publishing House Pvt Ltd, (5<sup>th</sup> ed.), New Delhi, 2022.
2. M.Y.Khan & P.K.Jain, Management Accounting, Tata McGraw-Hill,10th edition, 2021
3. S.P.Jain, K.LNarang “Cost Accounting”, (15th ed.), Kalyani Publishers, 2016.
4. T.S.Reddy & Y.Hariprasad Reddy, Financial Accounting & Management Accounting, 4<sup>th</sup> Edition, Margham Publications, 2008

**REFERENCE BOOKS:**

1. Horngren, Surdem, Stratton, Burgstahler, Schatzberg, “Introduction to Management Accounting”, (17th ed.) Pearson, 2022
2. N. M. Singhvi, Ruzbeh J. Bodhanwala, Management Accounting –Text and cases, 3rd edition PHI Learning, 2018
3. Jan Williams, Susan Haka, Mark Sbettner, Joseph V Carcello, Financial and Managerial Accounting The basis for business Decisions, 18th edition, Tata McGraw Hill Publishers, 2017
4. Earl K. Stice & James D. Stice, Financial Accounting, Reporting and Analysis, 8th edition, Cengage Learning, 2015.
5. Bhattacharya Ashish K., “Cost Accounting for Business Managers”, Elsevier, 2009

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**COURSE OUTCOMES**

**Upon completion of the course, students will be able**

- CO1** To remember and understand financial accounting concepts.
- CO2** To understand the financial statement analysis.
- CO3** To apply and analyses the cost accounting techniques.
- CO4** To analyses the marginal costing and profit planning techniques.
- CO5** To demonstrate an understanding of the budgeting process and draw up budgets based on information provided.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	2	3	1	-	3	2	-
<b>CO2</b>	3	3	2	3	1	-	3	2	-
<b>CO3</b>	3	3	2	3	1	-	3	2	-
<b>CO4</b>	3	3	2	3	1	-	3	3	-
<b>CO5</b>	3	3	2	3	1	-	3	2	-

**MB25102**

**INFORMATION MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To understand the basic concepts in the usage of information system
- To understand the steps in developing an information system and storing data

**UNIT I BASICS OF INFORMATION SYSTEM 9**

Data and Information – Foundation of Information System – Evolution – Types based on functions, hierarchy and systems – Enterprise and Functional Information Systems. **CO1**

**UNIT II SYSTEM ANALYSIS AND DESIGN 9**

System development methodologies – System Flow Chart – System Analysis and Design – Data Flow Diagram (DFD) – Decision Table – Entity Relationship (ER) – Object Oriented Analysis and Design (OOAD) – UML diagram **CO2**

**UNIT III DATABASE MANAGEMENT SYSTEM 9**

Database Management System – Types and Evolution – Relational Database Management System – Object-Oriented Database Management Systems – Data Warehousing – Data Mart – Data Mining. **CO3**

**UNIT IV INTEGRATED SYSTEMS, SECURITY AND CONTROL 9**

Knowledge based Decision Support Systems – Integrating Social Media and Mobile Technologies in Information system - Security, IS Vulnerability – Hackers – Disaster Management – Computer Crimes – Cyber Theft – Securing the Web – Intranets and Wireless Networks. **CO4**

**UNIT V NEW TRENDS IN INFORMATION SYSTEMS 9**

Basics of Deep Learning – Big Data Analytics – Cloud Computing – Artificial Intelligence – Information of Technology (IoT) – Cryptocurrency – Block chain. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

## **Master of Business Administration R 2025-CBCS**

1. Schiller, D. (2024). How to think about Information Management Systems. University of Illinois Press.
2. Dr. Shivani & Dr. Satinder Bal Gupta, Management Information Systems, Mahavir Books, Daryaganj - 2024.
3. Kenneth C. Laudon and Jane Price Laudon, Management Information Systems – Managing the digital firm, PHI Learning / Pearson Education, PHI, Asia, 2012
4. Robert Schultheis and Mary Summer, Management Information Systems – The Managers View, Tata McGraw Hill, 2008

### **REFERENCE BOOKS:**

1. Shuliang Li Information Management Systems, Cambridge, ICIM-2024.
2. Dr. Mohammed Salameh Al-Mahairah ,Guptnath Trivedi ,Dr. K. Suresh Kumar ,Dr. Deepak Chahal, Management Information Systems, Book Rivers - 2022.
3. Haag, Cummings and Mc Cubbrey, Management Information Systems for the Information Age, McGraw Hill, 2005. 9th edition, 2013
4. Rahul de, MIS in business, Government and society, Wiley India Pvt Ltd, 2012
5. Gordon Davis, Management Information Systems: Conceptual Foundations, Structure and Development, Tata McGraw Hill 21st Reprint 2008.

### **COURSE OUTCOMES**

**Upon completion of the course, students will be able**

- CO1** To remember basic concepts of information system and architecture usage in organizations.
- CO2** To apply and analyze steps, levels and various tools used in information system.
- CO3** To understand the basic concepts of database and access data to organization.
- CO4** To analyze the usage of information technology, security and to protect data.
- CO5** To evaluate and apply the recent technologies and development to store legacy data.

### **MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	1	2	2	-	-	1	2	2
<b>CO2</b>	3	1	2	2	-	-	1	3	3
<b>CO3</b>	3	1	2	2	-	-	1	2	3
<b>CO4</b>	3	1	2	2	-	-	1	3	2
<b>CO5</b>	3	1	2	2	-	-	1	3	3

**MB25103**

**LEGAL ASPECTS OF BUSINESS**

**L T P C**  
**3 0 0 3**

### **OBJECTIVES**

- The aim of this course is to provide students with a comprehensive overview of legal principles and theories applicable to Indian law.
- This course will begin by laying the foundations for basic concepts of the law, it will also cover the laws.

The course will provide a survey of the major areas of law, including contracts, administrative law and human rights law. It also covers an overview of Intellectual Property Right and Trademark Related laws to Cyber Space.

**Master of Business Administration R 2025-CBCS**

<b>UNIT I</b>	<b>LAW OF CONTRACT AND SALES OF GOODS ACT</b>	<b>9</b>
Definition of contract – Types of Contracts - Essential of a valid contract, Performance of contracts, discharge of contracts, breach of contract and its remedies - Contract of Agency - Types of agents, creation and Termination of Agency		
	Sale of Goods Act – Conditions and Warranty, Caveat emptor, Transfer of title and risk of loss, and rights of an unpaid seller	<b>CO1</b>
Negotiable Instruments Act – Types, Holder in Due Course - Rights, Discharge of Negotiable Instruments.		
<b>UNIT II</b>	<b>COMPANY LAW</b>	<b>9</b>
Companies Act 2013 – Nature and types of companies, Formation of company, Memorandum and Articles of Association, Prospectus, Power, duties and liabilities of Directors, winding up of companies.		
<b>UNIT III</b>	<b>INDUSTRIAL LAW</b>	<b>9</b>
	Factories Act 2016, Payment of wages Act, Payment of Bonus Act (2015) and Industrial Disputes Act	<b>CO3</b>
<b>UNIT IV</b>	<b>CORPORATE TAX AND GST</b>	<b>9</b>
Corporate Tax planning, Areas of Tax Planning - Goods and Services Tax – Introduction, Objective, Classification and practical implications of GST - Input tax credit, Computation of GST, Liability, Registration, Tax invoice, Levy and Collections of CGST, IGST- Electronic way bill, Returns, Payment of taxes including Reverse Charge.		
<b>UNIT V</b>	<b>CONSUMER PROTECTION ACT AND INFORMATION ACT</b>	<b>9</b>
Consumer Protection Act- Consumer rights, Types of Consumer Redressal Machineries and Forums. Information Technology Act – Cyber-crimes, IT Act 2000 and 2002, Cyber laws.		
		<b>TOTAL : 45 PERIODS</b>

**TEXT BOOKS**

1. N. D. Kapoor, Elements of mercantile Law, Sultan Chand and Company, India, 2018.
2. P. K. Goel, Business Law for Managers, Biztantatara Publishers, India, 2020.
3. Akhileshwar Pathack, Legal Aspects of Business, 4th Edition, Tata McGraw Hill, 2016.
4. Verma S, K, Mittal Raman, Legal Dimensions of Cyber Space, Indian Law Institute, New Delhi, (2019)

**REFERENCE BOOKS**

1. Jonthan Rosenoer, Cyber Law, Springer, New York, (2015).
2. P. P. S. Gogna, Mercantile Law, S. Chand & Co. Ltd., India, Fourth Edition, 2018.
3. Richard Stim, Intellectual Property- Copy Rights, Trade Marks, and Patents, Cengage Learning, 2020.
4. P. C. Tulsian, “Business and Corporate Law for CA PE – II”, New Delhi: Tata McGraw Hill, 2019.
5. Satish B. Mathur, “Business Law”, New Delhi: Tata McGraw Hill, 2016.

**COURSE OUTCOMES:**

- CO1** To understand the provisions of the law of contract, sale of Goods Act and Negotiable Instruments Act
- CO2** To understand the company law and documents to be maintained by a firm.
- CO3** To understand the various provisions of labor law and the industrial environment
- CO4** To learn about corporate tax planning and GST
- CO5** To understand the Consumer Protection Act, Information Technology Act and Competition Act

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	1	2	2	-	-	1	2	2
CO2	3	1	2	2	-	-	1	3	3
CO3	3	1	2	2	-	-	1	2	3
CO4	3	1	2	2	-	-	1	3	2
CO5	3	1	2	2	-	-	1	3	3

**MB25104                      MANAGEMENT PRINCIPLES AND ORGANISATIONAL BEHAVIOUR                      L T P C**  
**4 0 0 4**

**OBJECTIVES:**

- To familiarize the students to the basic concepts of management in order to aid in understanding how an organization functions, and in understanding the complexity and wide variety of issues managers face in today's business firms.
- To acquaint the students with the fundamentals of managing business and to understand individual and group behavior at the workplace to improve the effectiveness of an organization. The course will focus on Indian experiences, approaches and cases.

**UNIT I                      INTRODUCTION TO MANAGEMENT                      12**

Management: Nature, Levels and Functions - Management as an Art or Science - Managerial Skills and Roles - Evolution of Management thought – Theories of Management. **CO1**

**UNIT II                      PLANNING AND ORGANISING                      12**

Planning, Planning Process, Forecasting – Objectives, Management by Objectives - Policies and Strategies - Decision Making, Techniques and Process - Organization Structure - Authority and Responsibility. **CO2**

**UNIT III                      STAFFING, DIRECTING AND CONTROLLING                      12**

Staffing Process- Directing- Motivation theories and Job Performance - Leadership, Styles and Approaches - Communication, Process, Barriers – Making Communication Effective- Controlling- Process and Techniques. **CO3**

**UNIT IV                      ORGANIZATIONAL BEHAVIOUR                      12**

Organizational behavior - OB Model- Contributing disciplines, Perception and Learning - Personality and Individual Differences - Values, Attitudes and Beliefs - Groups and Teams. **CO4**

**UNIT V                      DYNAMICS OF ORGANIZATIONAL BEHAVIOUR                      12**

Organizational Climate and Culture - Conflict, Management of conflict- Organizational Change and Development - Power and Politics - Cross cultural communication, Management of Diversity. **CO5**

**TOTAL : 60 PERIODS**

**TEXT BOOKS**

1. Andrew J. Dubrin, Essentials of Management, Thomson Southwestern, 10th edition, 2016.
2. Samuel C. Certo and S. Trevis Certo, Modern Management: Concepts and Skills, Pearson education, 15th edition, 2018.
3. Charles W. L Hill and Steven L Mc Shane, Principles of Management, McGraw Hill Education, Special Indian Edition, 2017.

**REFERENCE BOOKS**

1. Harold Koontz and Heinz Weihrich, Essentials of Management: An International, Innovation, and Leadership Perspective, 10th edition, Tata McGraw – Hill Education, 2015.
2. Stephen P. Robbins, Timothy A. Judge, Organisational Behavior, PHIL earning / Pearson Education, 16th edition, 2014.
3. Fred Luthans, Organisational Behavior, McGraw Hill, 12th Edition, 2013.
4. Don Hellriegel, Susan E. Jackson and John W, Jr Slocum, Management: A competency – Based Approach, Thomson South Western, 11th edition, 2008.
5. Heinz Weihrich, Mark V Cannice and Harold Koontz, Management – A global entrepreneurial perspective, Tata McGraw Hill, 12th edition, 2008.

**COURSE OUTCOMES**

- CO1** To describe and understand fundamental elements of management.  
**CO2** To apply the planning, organizing knowledge in management processes.  
**CO3** To describe various theories to the development of leadership skills, motivation techniques, and effective communication.  
**CO4** To understand the individual and group behaviour in an organisation.  
**CO5** To describe and manage the organisational climate and culture.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
3	2	1	1	-	-	1	1	2	3
2	3	1	3	1	1	1	2	2	2
3	2	2	1	1	1	1	2	2	3
2	1	2	3	-	2	2	2	2	2
2	1	3	1	-	-	1	1	3	2

**MB25105**

**MANAGERIAL ECONOMICS**

**L T P C**  
**4 0 0 4**

**OBJECTIVES**

- To introduce the concepts of scarcity and efficiency;
- To explain principles of microeconomics relevant to managing an organization;
- To describe principles of macroeconomics to have an understanding of the economic environment of business.

**UNIT I INTRODUCTION**

**12**

The themes of economics – fundamental economic problems – Society’s capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency – Concepts of Microeconomics and Macroeconomics - Economic growth and stability - the role of markets and government – Externalities. **CO1**

<b>UNIT II</b>	<b>CONSUMER AND PRODUCER BEHAVIOUR</b>	<b>12</b>
Market – Demand and Supply – Concepts – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium – Approaches to consumer behaviour –Production – Short-run and long-run Production Function – Returns to scale – economies vs diseconomies of scale – Analysis of cost – Short-run and long-run cost function – Relation between Production and cost function.		<b>CO2</b>
<b>UNIT III</b>	<b>PRODUCT AND FACTOR MARKET</b>	<b>12</b>
Product market – different market structures – Firm’s equilibrium and supply – Market efficiency – Economic costs of imperfect competition –factor market – Land, Labour and capital – Demand and supply – determination of factor price – Interaction of product and factor market – General equilibrium and efficiency of competitive markets.		<b>CO3</b>
<b>UNIT IV</b>	<b>PERFORMANCE OF AN ECONOMY</b>	<b>12</b>
Macroeconomic aggregates – circular flow of macroeconomic activity –National income determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – multiplier effect – Demand side management – Fiscal policy.		<b>CO4</b>
<b>UNIT V</b>	<b>AGGREGATE SUPPLY AND THE ROLE OF MONEY</b>	<b>12</b>
Short–run and Long–run supply curve – Unemployment and its impact – Okun’s law – Inflation reasons – types – Demand vs. supply factors –Inflation vs. unemployment trade-off – Phillips’s curve – short-run and long-run – Supply side Policy and management - Money market - Demand and supply of money – market equilibrium and national income – monetary policy.		<b>CO5</b>

**TOTAL: 60 PERIODS**

#### **TEXT BOOKS**

1. D N Dwivedi, Managerial Economics, Vikas Publishing House PVT Ltd, Ninth Edition, 2023.
2. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri, Anindya Sen, Economics, McGraw-Hill, Twentieth Edition, 2019.
3. Maheshwari Y, Managerial Economics, Third Edition, Prentice Hall India Learning, New Delhi, 2012.

#### **REFERENCE BOOKS**

1. Karl E. Case, Ray C. Fair, Sharon E. Oster, Principles of Macroeconomics, Pearson Education, Twelfth Edition, 2019.
2. Keat Paul, K Young Philip), Erfle Steve, College Dickinson, Banerjee Sreejatha, Managerial Economics, Pearson Education, Seventh Edition, 2017.
3. Froyen, Macroeconomics: Theories and Policies, Pearson Education India, 10th Edition, 2013.
4. Richard Lipsey and Alec Charystal, Economics, 12th edition, Oxford, University Press, New Delhi, 2011.
5. Karl E. Case and Ray C., Principles of Economics, 8th edition, Pearson, Education Asia, New Delhi, 2002.

#### **COURSE OUTCOMES**

**Upon completion of the course, students will be able**

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- CO1** To understand the utility concepts of micro and macroeconomics.
- CO2** To analyse the consumer and producer behaviours and cost analysis
- CO3** To apply the factors of production can be used optimally to produce products and service and; to analyze market structure.
- CO4** To evaluate the performance of a macro-economic activity and macro-economic environment
- CO5** To understand economic policies that regulate economic variables

**MAPPING OF COs WITH POs AND PSOs**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	1	1	-	1	-	3	2	1
<b>CO2</b>	3	3	1	-	1	-	3	2	1
<b>CO3</b>	3	3	1	-	1	-	3	2	1
<b>CO4</b>	3	2	1	1	2	-	3	2	1
<b>CO5</b>	3	1	1	1	3	-	3	2	1

**MB25106**

**STATISTICS FOR MANAGEMENT**

**L T P C**  
**4 1 0 4**

**OBJECTIVES**

- To learn the applications of statistics in business decision making

**UNIT I PROBABILITY & RANDOM VARIABLES** **12**

Basic definitions and rules for probability, conditional probability independence of events, Baye's theorem, and random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions. **CO1**

**UNIT II PARAMETRIC TESTS** **12**

Introduction to sampling distributions, sampling techniques, Hypothesis testing: one sample and two sample tests for means and proportions of large samples(z-test), one sample and two sample tests for means of small samples (t-test), F- test for two sample standard deviations. ANOVA one and two way. **CO2**

**UNIT III NON-PARAMETRIC TESTS** **12**

Chi-square tests for independence of attributes and goodness of fit. Sign test for paired data. Rank sum test: Kolmogorov-Smirnov – test for goodness of fit, comparing two populations. Mann – Whitney U test and Kruskal Wallis test. One sample run test. **CO3**

**UNIT IV CORRELATION & REGRESSION ANALYSIS** **12**

Correlation – Karl Pearson co-efficient of correlation – Properties. Simple Linear Regression – Types of Regression, Determining the Simple Linear Regression Equation, Measures of Variation, Method of least square – Lines of Regression – Regression equations. **CO4**

**UNIT V TIME SERIES ANALYSIS & INDEX NUMBER** **12**

Time series analysis: Variation in time series, trend analysis, cyclical variations, seasonal variations and irregular variations. Index Numbers – Laspeyre's, Paasche's and Fisher's Ideal index **CO5**

**TOTAL : 60 PERIODS**

## Master of Business Administration R 2025-CBCS

### TEXT BOOKS :

1. Richard I. Levin, David S. Rubin, Masood H. Siddiqui, Sanjay Rastogi, Statistics for Management, Pearson Education, 8th Edition, 2017.
2. Prem S. Mann, Introductory Statistics, Wiley Publications, 9th Edition, 2015.
3. T N Srivastava and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 3rd Edition 2017.

### REFERENCE BOOKS:

1. Ken Black, Applied Business Statistics, 7th Edition, Wiley India Edition, 2012.
2. David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, Jeffrey D. Camm, James J. Cochran, Statistics for business and economics, 13th edition, Thomson (South – Western) Asia, Singapore, 2016.
4. Anderson, Sweeney, Williams, Camm, Cochran, “Statistics for Business and economics”, 12e, Cengage Learning

### COURSE OUTCOMES

Upon completion of the course, students will be able to

- CO1** Understand and apply the concepts of probability distributions.
- CO2** Apply and analyse sampling techniques for research and analyse various parametric tests for hypothesis testing.
- CO3** Apply and analyse various non-parametric tests for hypothesis testing.
- CO4** Apply and analyse correlation, regression techniques.
- CO5** Apply and analyse time series for making business decisions and index number.

### MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	-	3	-	-	-	-	1	1	-
CO2	-	3	-	-	-	-	1	1	-
CO3	-	3	-	-	-	-	1	1	-
CO4	-	3	-	-	-	-	1	1	-
CO5	-	3	-	-	-	-	1	1	-

MB25P11

### EXECUTIVE COMMUNICATION

L T P C  
0 0 4 2

#### OBJECTIVES:

- To enhance the standard of written communications both personally and professionally.
- To train the students to speak fluently and clearly both in personal and official communication.
- To nurture their presentation skills in representing organization.

#### EXERCISES

##### 1.PRINCIPLES AND BARRIERS OF COMMUNICATION

Role Play for Principles of Communication - Barriers to Communication

8  
CO1

##### 2.PROFESSIONAL BUSINESS CORRESPONDENCE AND DOCUMENTATION

Enquiries and Replies Letter -Orders and Their Executions Letter- Credit and Status Enquiries Letter -Complaints and Adjustments Letter -Collection Letters- Circular Letters -Sales Letters -

16  
CO2

## ***Master of Business Administration R 2025-CBCS***

Bank Correspondence - Insurance Correspondence - Import-Export Correspondence -Agency Correspondence

### **3.PROFESSIONAL DOCUMENTATION AND FORMAL REPORTING 12**

Report writing – Proposals – Notification – Agenda – Minutes -Press Release

### **4.EMPLOYMENT COMMUNICATION AND DOCUMENTATION 12**

Job Application Letters and Resumes - Call for Interview Letters - Appointment Orders - Joining Report **CO3**

### **5.INTERACTIVE COMMUNICATION AND SOFT SKILLS 12**

Telephone Skill - Just a Minute - Group Discussions - Negotiating and Bargaining - Presentation Skills **CO4**

**TOTAL : 60 PERIODS**

#### **SUGGESTED READINGS:**

1. Rajendra Pal, J S Korlahahi, Essentials of Business Communication, Sultan Chand & Sons,New Delhi, 2013.
2. Kelly M. Quintanilla and Shawn T. Wahl, Business and Professional Communication, Sage Publications, 4e, 2020.
3. Mallika Nawal, Business Communication, Cengage Learning, 2e, 2020.
4. Varinder Kumar, Bodh Raj, Business Communication, Kalyani Publishers,6e,2019.
5. Ober Newman, Communicating in Business, Cengage Learning, 2015.
6. Rebecca Moore Howaward, Writing Matters, 3e, Mc Graw Hill Education, 2018.
7. Jeff Butterfield, Soft Skills for Everyone, Cengage Learning, 2017.

#### **COURSE OUTCOMES:**

**Upon completion of the course, students will be able to**

**CO1** To understand the essential principles of communication.

**CO2** To write letters related to business daily process.

**CO3** To create professional documentation and formal reporting

**CO4** To create employment communication and documentation

**CO5** To demonstrate interactive communication and soft skills

#### **MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	1	-	-	-	1	2	-
<b>CO2</b>	3	2	1	-	-	-	1	2	-
<b>CO3</b>	3	2	1	-	-	-	1	2	-
<b>CO4</b>	3	2	1	-	-	-	1	2	-
<b>CO5</b>	3	2	1	-	-	-	1	2	-

**SEMESTER II**

**MB25201**

**BUSINESS ANALYTICS**

**L T P C**  
**4 0 0 4**

**OBJECTIVES**

- The course provides a comprehensive understanding of business analytics by covering foundational concepts, data analytics fundamentals, descriptive, predictive, and prescriptive analytic techniques, and their application in improving organizational decision-making and performance.

**UNIT I INTRODUCTION TO BUSINESS ANALYTICS 12**

Meaning, Definition, Importance of Business Analytics - Relationship with Organizational Decision Making – Types of Analytics Method – Types of Analytical Tools. **CO1**

**UNIT II INTRODUCTION TO DATA ANALYTICS 12**

Data Analysis - Data and Technology- data quality and change in BA- Interpretation – Reporting - Functional Applications. **CO2**

**UNIT III DESCRIPTIVE ANALYTICS 12**

Introduction to Descriptive analytics - Visualizing and Exploring Data - Descriptive Statistics – Sampling and Estimation – Probability Distribution for Descriptive Analytics- Analysis of Descriptive analytics. **CO3**

**UNIT IV PREDICTIVE ANALYTICS 12**

Introduction to Predictive analytics – Logic and Data Driven Models Forecasting techniques – Predictive Analysis Modeling and procedure – Data Mining for Predictive analytics - Analysis of predictive analytics. **CO4**

**UNIT V PRESCRIPTIVE ANALYTICS 12**

Introduction to Prescriptive analytics – Prescriptive Modeling – Non Linear Optimization – Demonstrating Business Performance Improvement - Analysis of prescriptive analytics. **CO5**

**TOTAL : 60 PERIODS**

**TEXT BOOKS**

1. Business Analytics, H.K. Dangi, Gurveen Kaur , Taxmann publishing , 2024
2. Business Analytics: Methods, Models and Decisions, 3e, Dr. James Evans, Pearson publishing, 2021

**REFERENCE BOOKS**

1. Business Intelligence and Big Data: Drivers of Organizational Success [Hardcover], Olszak, Celina, Auerbach Publications ,2020
2. Business Analytics :The Science of Data-Driven Decision Making, 2ed, Wiley , 2021

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO1** To understand the Basics of Business Analytics
- CO2** To understand the importance of Data Analysis and uses of Python in Data Analytics
- CO3** To apply the knowledge on Data Exploration
- CO4** To analyses the importance of Predictive Analysis
- CO5** To analyses and evaluate the applications of Prescriptive Analytics

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	2	3	2	-	-	3	2	1
CO2	3	2	3	1	-	-	3	1	2
CO3	3	3	1	2		1	3	2	3
CO4	2	3	3	1	-	-	3	2	1
CO5	3	1	2	1	1	1	2	1	1

MB25202

FINANCIAL MANAGEMENT

L T P C  
4 0 0 4

OBJECTIVES

- This course enables learners to understand financial management fundamentals, apply capital budgeting techniques, analyze capital structure and dividend decisions, explore long-term financing sources, and manage short-term financing and working capital for effective financial decision-making.

**UNIT I FOUNDATIONS OF FINANCE 12**

Financial management – Concepts - Financial decisions in an organization – Role of finance managers in emerging business scenarios - Risk – Return trade-off - Profit maximization and Wealth Maximization - Time value of money – Basic valuation of bonds and shares. **CO1**

**UNIT II CAPITAL BUDGETING 12**

Capital Budgeting Techniques - Payback period, Accounting rate of return, Net present value, Internal Rate of Return, Profitability Index, merits and demerits of capital budgeting techniques - Project selection under Capital rationing - Inflation and Capital budgeting. **CO2**

**UNIT III CAPITAL STRUCTURE AND ITS COMPONENTS 12**

Financial and operating leverage - Measurements of leverages - Degree of operating, financial leverage and Combined leverages, EBIT - EPS Analysis - Indifference point. Capital Structure - Theories - Net income approach, Net operating income approach, MM Approach - Determinants of Capital Structure - Dividend decision - Factors determining dividend policy - Types of dividend - Issues in dividend decisions – Dividend Theories. **CO3**

**UNIT IV LONG TERM FINANCING SOURCES 12**

Fund based financing: Indian Capital & Stock market-debt, equity and preference shares - Term loans, Private equity - Asset based financing - Hire purchase, Leasing, Idea based Financing- Venture capital financing. **CO4**

**UNIT V SHORT TERM FINANCING 12**

Working capital & Its Estimation - Accounts Receivables - Management - Factoring - Inventory Management - Cash Management- Trade credit - Bank finance - Overdraft facility - Commercial paper. **CO5**

**TOTAL : 60 PERIODS**

TEXT BOOKS :

- M.Y. Khan and P.K.Jain Financial management, Text, Problems and cases Tata McGraw Hill, 9<sup>th</sup> edition, 2021.
- M. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 10th edition, 2022.

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**REFERENCE BOOKS:**

1. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2022.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understanding basic concepts of financial management such as decisions and functions of financial management.
- CO2** Evaluate investments using techniques of payback period, accounting rate of return, net present value, profitability index and internal rate of return. To estimate specific cost of capital and weighted average cost of capital.
- CO3** Analyze capital structure and leverages of various firms, to understand the concepts of dividend and examine impact of dividend policy of a firm.
- CO4** Understand the different financial long term financial sources of investment.
- CO5** Apply the knowledge of short-term investment for the working capital requirement.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	3	3	3	-	-	3	3	-
<b>CO2</b>	3	2	3	3	-	-	3	3	-
<b>CO3</b>	2	2	3	3	-	-	3	3	-
<b>CO4</b>	2	3	2	3	-	-	3	3	-
<b>CO5</b>	2	3	2	3	-	-	3	3	-

**MB25203**

**HUMAN RESOURCE MANAGEMENT**

**L T P C**  
**4 0 0 4**

**OBJECTIVE:**

- To provide knowledge about management issues related to staffing, training, performance, compensation, human factors consideration and compliance with human resource requirements.

**UNIT I INTRODUCTION OF HUMAN RESOURCE MANAGEMENT 12**

Concepts – The importance of the human capital – Role and Challenges for human resource managers - Human resource policies – Computer applications in human resource management – Human resource accounting and audit. **CO1**

**UNIT II HUMAN RESOURCE PLANNING, RECRUITMENT AND SELECTION 12**

Concepts – Forecasting human resource requirement –Matching supply and demand - Internal and External sources - Organizational Attraction - Recruitment, Selection, Induction and Socialization - Theories, Methods and Process. **CO2**

**UNIT III TRAINING AND DEVELOPMENT 12**

Concepts Types of training methods – Resistance, Executive development programme – concepts, Self-development – Knowledge management. **CO3**

## Master of Business Administration R 2025-CBCS

### UNIT IV EMPLOYEE ENGAGEMENT 12

Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring - Development of mentor – Protégé relationships- Job Satisfaction, Employee Engagement, Organizational Citizenship Behavior: Theories, Models. **CO4**

### UNIT V PERFORMANCE EVALUATION AND CONTROL 12

Method of performance evaluation – Feedback – Industry practices. Promotion – Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods – Requirement of effective control systems - Grievances – Causes – Implications – Redressal methods. **CO5**

**TOTAL : 60 PERIODS**

#### TEXT BOOKS

1. Gary Dessler and Biju Varkkey, Human Resource Management, 16t Edition, Pearson Education Limited, 2020.
2. Aswathappa, Human Resource Maagemet Himalaya Publications 2021
3. David A. Decenzo, Stephen.P.Robbins, and Susan L. Verhulst, Human Resource Management, Wiley, International Learner Edition, 14th Edition, 2019.
4. Luis R.Gomez-Mejia, David B.Balkin, Robert L Cardy. Managing Human Resource. PHI Learning. 2019
5. Bernadin , Human Resource Management,Tata Mcgraw Hill ,8th edition 2021.

#### REFERENCE BOOKS

1. Wayne Cascio, Managing Human Resource, McGraw Hill, 2019.
2. Ivancevich, Human Resource Management, McGraw Hill 2020.
3. Uday Kumar Halidar, Juthika Sarkar. Human Resource management. Oxford. 2021.

#### COURSE OUTCOMES

Upon completion of course students can able to

**CO1** To demonstrate competence in development and problem-solving in the area of HR Management

**CO2** Ability to apply knowledge of human resource planning , recruitment and selection

**CO3** To evaluate/justify the applicability of various techniques of Training

**CO4** To identify and describe the meaning of employee engagement and its different components

**CO5** To develop competency to appraise the performance of employees and handle employee issues.

#### MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	2	2	2	1	-	-	2	1	2
CO2	2	2	3	1	-	-	3	2	1
CO3	3	2	2	3	-	-	3	2	3
CO4	1	2	2	1	-	-	2	1	1
CO5	1	1	2	3	-	-	2	3	2

<b>MB25204</b>	<b>MARKETING MANAGEMENT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**COURSE OBJECTIVES**

- This course provides a comprehensive understanding of core marketing concepts, strategy formulation, marketing mix decisions, buyer behavior, and marketing research along with emerging trends to support effective marketing decision-making.

**UNIT I INTRODUCTION** **12**

Core concepts of Marketing - Evolution of Marketing - Marketing Planning Process Scanning Business environment - Internal and External - Value chain - Core Competencies PESTEL SWOT Analysis Marketing interface with other functional areas Production, Finance, Human Relations Management, Information System - International Marketing - Rural Marketing. **CO1**

**UNIT II MARKETING STRATEGY** **12**

Marketing strategy formulations - Key Drivers of Marketing Strategies - Strategies for Industrial Marketing - Consumer Marketing - Services Marketing, Competition Analysis - Analysis of consumer and industrial markets, Influence of Economic and Behavioral Factors - Strategic Marketing Mix components. **CO2**

**UNIT III MARKETING MIX DECISIONS** **12**

Product planning and development - Product life cycle - New product Development - Market Segmentation - Targeting - Positioning, Brand Positioning and Differentiation, Pricing - Objectives, Policies - Methods, Channel Management - Managing Integrated Marketing Channels - Retailing, Wholesaling, Advertising - Sales Promotions. **CO3**

**UNIT IV BUYER BEHAVIOR** **12**

Buyer Behavior - concepts - Industrial and Consumer products - Buyer Behavior Models, Online buyer behavior, Building and measuring customer satisfaction - Customer relationships management - Customer acquisition - Retaining - Defection - loyalty. **CO4**

**UNIT V MARKETING RESEARCH & TRENDS IN MARKETING** **12**

Marketing Research Process-Concepts and applications - Product - Advertising - Promotion - Consumer Behavior - Retail, Trends in marketing - Online - social media - digital marketing - Corporate Social Responsibility (CSR) - Ethics in marketing, **CO5**

**TOTAL: 60 PERIODS**

**TEXT BOOKS**

1. Sherlekar S.A, Marketing Management, Himalaya Publishing House, 17<sup>th</sup> edition 2022
2. Philip Kotler and Kevin Lane Keller, Marketing Management , PHI 18th Edition, 2021

**REFERENCE BOOKS:**

1. V.S. Ramaswamy & S. Namakumari, Marketing Management Global Perspective, Indian Context, MacMillan Publishers India, 7th edition, 2021
2. S.H.H. Kazmi, Marketing Management Excel Books India, 2019.
3. Dr. C.B.Gupta & Dr. N.Rajan Nair, Marketing Management- text and Cases 18th edition, 2020.

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO 1** To understand the fundamentals in marketing
- CO 2** To apply the marketing strategies followed in organizations
- CO 3** To analyze the applications marketing mix decisions
- CO 4** To evaluate the buyer behavior in marketing
- CO 5** To analyze and evaluate the applications of marketing research & trends in marketing

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	-	3	-	-	-	3	3	-
CO2	3	-	3	-	-	-	3	3	-
CO3	3	-	3	-	-	-	3	3	-
CO4	3	-	3	-	-	-	3	3	-
CO5	3	-	3	-	-	-	3	3	-

MB25205

OPERATIONS MANAGEMENT

L T P C

4 0 0 4

**OBJECTIVES**

- To provide a broad introduction to operations management and explain the concepts, strategies, tools, and techniques for managing the transformation process that can lead to competitive advantage.

**UNIT I INTRODUCTION TO OPERATION MANAGEMENT 12**

Operations Management – concepts - evolution, production and service system - services and goods - system perspective - functions - challenges, current priorities, recent trends, Operations Strategy – Strategic fit - framework, Productivity, World-class manufacturing - concepts. **CO1**

**UNIT II OPERATIONS AND THE VALUE CHAIN 12**

Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning; Facility Location – Theories, Steps in Selection, Location Models; Sourcing and Procurement - Strategic sourcing, make or buy decision, procurement process, managing vendors. **CO2**

**UNIT III DESIGNING AND OPERATIONS 12**

Product Design - Criteria, Approaches; Product development process - stage-gate approach - tools for efficient development; Process - design, strategy, types, analysis; Facility Layout – Principles, Types, Planning tools, and techniques. **CO3**

**UNIT IV PLANNING AND CONTROL OF OPERATIONS 12**

Demand Forecasting – Need, Types, Objectives, Steps, and Overview of Qualitative and Quantitative methods; Operations planning - Resource planning, Inventory Planning and Control; Operations Scheduling - Theory of constraints - bottlenecks, capacity constrained resources, synchronous manufacturing. **CO4**

**UNIT V QUALITY MANAGEMENT 12**

Definitions of quality, The Quality revolution, quality gurus; Quality management tools. Lean Management - philosophy, elements of JIT manufacturing, continuous improvement. **CO5**

**TOTAL: 60 PERIODS**

**TEXT BOOKS**

## ***Master of Business Administration R 2025-CBCS***

1. William J. Stevenson, “Operations Management” (13<sup>th</sup> Edition), McGraw-Hill Education, 2020.
2. Lee J. Krajewski, Manoj K. Malhotra and Larry P. Ritzman, “Operations Management: Processes and Supply Chains” (12<sup>th</sup> Edition) Pearson, 2023.
3. Jay Heizer, Barry Render, and Chuck Munson, “Principles of Operations Management: Sustainability and Supply Chain Management” (12<sup>th</sup> Edition), Pearson, 2023.
4. F. Robert Jacobs and Richard B. Chase, “Operations and Supply Chain Management” (16<sup>th</sup> Edition), McGraw-Hill Education, 2021.
5. James A. Fitzsimmons and Mona J. Fitzsimmons, “Service Management: Operations, Strategy, and Information Technology”, (9<sup>th</sup> Edition), McGraw-Hill Education, 2021

### **REFERENCE BOOKS**

1. B. Mahadevan “Operations Management: Theory and Practice” (12<sup>th</sup> Edition), Pearson, 2023
2. Richard B. Chase, Nicholas J. Aquilano, and F. Robert Jacobs “Operations Management for Competitive Advantage” (12<sup>th</sup> Edition), McGraw-Hill Education, 2021.
3. Robert Johnston, Graham Clark, and Michael Shulver, “Service Operations Management: Improving Service Delivery” (5<sup>th</sup> Edition), Pearson, 2023.
4. Steven Nahimias and Tava Lennon Olsen “Production and Operations Analysis” (8<sup>th</sup> Edition), Waveland Press, 2021.
5. Jeffrey K. Liker and Gary L. Convis “The Toyota Way to Lean Leadership: Achieving and Sustaining Excellence through Leadership Development”, McGraw-Hill Education, 2022.

### **COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO1** Understand the evolution of operations management practices and world-class manufacturing processes
- CO2** Gain knowledge about capacity planning, strategic sourcing, and procurement in organizations
- CO3** Enhance the understanding of product development and design process
- CO4** Forecast demand and overcome bottlenecks
- CO5** Provide insight into Quality management tools and practices.

### **MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	-	2	-	-	3	-	-
<b>CO2</b>	3	3	-	2	2	-	3	3	-
<b>CO3</b>	3	3	-	2	-	2	3	-	3
<b>CO4</b>	3	3	-	2	1	-	3	2	3
<b>CO5</b>	3	3	-	2	-	-	-	-	1

<b>MB25206</b>	<b>QUANTITATIVE TECHNIQUES FOR DECISION MAKING</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>1</b>	<b>0</b>	<b>4</b>

**OBJECTIVES**

- This course enables students to apply key quantitative techniques including linear programming, transportation and assignment models, decision and game theory, job sequencing, simulation, queuing theory, and replacement models to support effective managerial decision-making.

**UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP) 12**

Relevance of quantitative techniques in management decision making. Linear Programming - formulation - Maximization and Minimization cases, Graphical and Simplex methods (Primal, Penalty). **CO1**

**UNIT II TRANSPORTATION AND ASSIGNMENT MODELS 12**

Transportation Models (Minimising and Maximizing Problems) – Balanced and unbalanced Problems – Initial Basic feasible solution by North West Corner Rule, Least cost and Vogel’s approximation methods. Check for optimality - MODI method. Case of Degeneracy. Assignment Models (Minimising and Maximizing Problems) – Balanced and Unbalanced Problems - Hungarian Algorithm, Travelling Salesman problem. **CO2**

**UNIT III DECISION AND GAME THEORY 12**

Decision making under risk – Decision trees – Decision making under uncertainty. Game Theory – Two-person Zero sum games - Saddle point - Dominance Rule - Convex Linear Combination (Averages) - Methods of Matrices, Graphical solutions. **CO3**

**UNIT IV JOB SEQUENCING MODELS AND SIMULATION 12**

Job Sequencing algorithm (Johnson) - n jobs 2 machines, n jobs 3 machines and n jobs m machines. Monte Carlo Simulation **CO4**

**UNIT V QUEUING THEORY AND REPLACEMENT MODELS 12**

Queuing Theory – single channel model –infinite number of customers and infinite calling source. Replacement Models – Individual replacement Models (With and without time value of money) – Group Replacement Models. **CO5**

**TOTAL : 60 PERIODS**

**TEXT BOOKS**

1. P K Gupta, D S Hira, Operations Research, S.Chand, 8th Edition, 2023
2. R. Panerselvam, Operations Research, PHI, 5th Edition, 2023
3. N. D Vohra, Quantitative Techniques in Management, Tata Mcgraw Hill, 7th Edition, 2023

**REFERENCE BOOKS**

1. Hiller, Liebermann, Nag and Basu, Introduction to Operations Research, TataMcGraw-Hill, 11th Edition, 2021
2. David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, and Kathryn A. Martin, An Introduction to Management Science: A Quantitative Approach to Decision Making, Cengage Learning India Pvt. Ltd, 15th Edition, 2022
3. Hamdy A Taha, Operations Research: An Introduction, Pearson Education, 10th Edition, 2021

**COURSE OUTCOMES**

**Upon completion of the course, students will be able**

**Master of Business Administration R 2025-CBCS**

- CO1** To analyze optimal solutions to real-world problems by allocating resources efficiently to minimize costs.
- CO2** To apply transportation and assignment optimization techniques in the field of management and logistics.
- CO3** To create a structured and systematic approach to decision-making in complex and uncertain situations using decision and game theory models.
- CO4** To implement and analyze job sequencing algorithms in multi-machine environments
- CO5** To understand the applications of queuing theory and replacement models in areas like service quality improvement and asset management.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	1	3	-	-	3	3	-
<b>CO2</b>	3	3	1	3	-	-	3	3	-
<b>CO3</b>	3	3	1	3	-	-	3	3	-
<b>CO4</b>	3	3	1	3	-	-	3	3	-
<b>CO5</b>	3	3	1	3	-	-	3	3	-

**MB25207**

**RESEARCH METHODOLOGY AND IPR**

**L T P C**

**4 0 0 4**

**OBJECTIVES**

- The goal is to help the students understand the principles of scientific methodology in research inquiry, develop their analytical skills, prepare scientific reports, and get patents and copyrights on their research work.

**UNIT I INTRODUCTION**

**12**

Business Research - Research process - Types of Research: Exploratory and Causal Research- Theoretical and Empirical Research- Cross-sectional and time - series Research - Research questions / Problems - Research objectives - Research hypotheses - Research in an evolutionary perspective - Role of theory in research.

**CO1**

**UNIT II RESEARCH DESIGN AND MEASUREMENT**

**12**

Research design – types of research design – Exploratory and Causal research design – Descriptive and Experimental design – Types of experimental design – Variables in Research – Measurement and scaling.

**CO2**

**UNIT III DATA COLLECTION AND SAMPLING DESIGN**

**12**

Types of Data – Sources of data - Methods of data collection – Construction of questionnaire and instrument – Validation of questionnaire – Sampling plan – Sample size - Sampling techniques.

**CO3**

**UNIT IV DATA ANALYSIS AND REPORT WRITING**

**12**

Data processing – Checking – Editing – Coding – Data entry – Data analyses: Parametric and Non-parametric techniques - Applications of bivariate and multivariate statistical techniques. Research

**CO4**

## Master of Business Administration R 2025-CBCS

report – Executive summary – Types of report - Ethics in research.

### UNIT V INTELLECTUAL PROPERTY RIGHTS ACT

IPR – Meaning - Objectives - Types of IPR: Patent, Copyright, Trademark – Procedure for registration – Offence & Penalties.

12

CO5

**TOTAL : 60 PERIODS**

#### TEXTBOOKS :

1. C R Kothari, Research Methodology, Viswa Prakasam Publication, 2014.
2. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research Methods, 12<sup>th</sup> Edition, Tata Mc Graw Hill, New Delhi, 2018..
3. S. N. Murthy & U. Bhojanna Business Research Methods :, Excel Books, 3<sup>rd</sup> Edition e, 2016
4. William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari, Mitch Griffin, Business Research Methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2016.

#### REFERENCE BOOKS:

1. N.S. Gopalakrishnan & T.G. Ajitha, Principles of Intellectual Property Eastern Book Company, 2<sup>nd</sup> Edition, 2014.
2. Kothari, C. R. Research Methodology - Methods and Techniques, New Age International publishers, New Delhi, 2004.
3. M M Munshi & K Gayathri Reddy, Research Methods: HPH, 2015.

#### COURSE OUTCOMES

**Upon completion of the course, students will be able to**

- CO1** To understand various types of research and process techniques to create the research objectives and hypothesis.
- CO2** To apply a range of research designs and measurement of scaling techniques to business management problems.
- CO3** To demonstrate knowledge of data collection and sampling techniques to Validate the questionnaire.
- CO4** To analyse data using parametric and non-parametric techniques and prepare the research report writing.
- CO5** To discuss various forms of IPR and apply patents and copyrights for research work.

#### MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
CO1	-	1	2	1	2	-	1	2	1
CO2	2	3	1	-	2	-	3	2	1
CO3	1	2	2	1	3	-	2	1	1
CO4	1	-	2	-	2	-	1	3	2
CO5	-	1	1	2	2	-	2	1	3





3. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the importance of international business environment and globalization
- CO2** To understand the different theories of international trade and investment
- CO3** To apply global entry strategies
- CO4** To analyse the different functional strategies for effective global business
- CO5** To evaluate the cultural aspects of international business

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	2	-	-	2	2	1
<b>CO2</b>	3	2	3	2	-	-	2	2	1
<b>CO3</b>	3	2	3	2	-	-	2	2	1
<b>CO4</b>	3	2	3	2	-	-	2	2	1
<b>CO5</b>	3	3	3	2	2	-	2	2	1

**MB25302**

**STRATEGIC MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Provide students with a comprehensive understanding of strategic management, strategy formulation; environmental analysis; competitive and corporate strategies; strategy implementation, evaluation & control.

**UNIT I INTRODUCTION TO STRATEGIC MANAGEMENT 9**

Concept of Strategy - Conceptual framework for strategic management - Strategy Management Process -Strategic Intent : Vision, Mission and Goals **CO1**

**UNIT II COMPETITIVE ADVANTAGE 9**

External Analysis - Porter's Five Forces Model - Strategic Groups - Competitive advantage: Resources - Capabilities and Competencies - Generic Building Blocks of Competitive Advantage - Distinctive Competencies - Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage - Case study. **CO2**

**UNIT III TYPES OF STRATEGIES 9**

The generic strategic alternatives - Stability, Expansion, Retrenchment and Combination strategies - Business level strategy - Strategy in the Global Environment - Corporate Strategy - Vertical Integration - Diversification and Strategic Alliances - Case study. **CO3**

**UNIT IV STRATEGIC ANALYSIS AND CHOICE 9**

Strategic analysis and choice - Environmental Threat and Opportunity Profile (ETOP) - Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis - GE 9 Cell Model - GAP Analysis - SWOT Analysis - Mc Kinsey's 7s Framework - Balance Score Card - Case study **CO4**

**UNIT IV STRATEGY IMPLEMENTATION, EVALUATION & CONTROL 9**

Strategy implementation process - Designing organizational Structure - Resource Allocation - Designing Strategic Control System - Techniques of Strategic Evaluation and Control - Case study **CO5**

TOTAL : 45 PERIODS

**TEXT BOOKS :**

1. Gregory G. Dess, Gerry McNamara, Alan B. Eisner, Seung-Hyun Lee, Strategic Management: Text and Cases, McGraw Hill, 9<sup>th</sup> Edition, 2021.
2. Richard Lynch, Strategic Management, SAGE, 9<sup>th</sup> Edition, 2021.
3. Hill. Strategic Management: An Integrated approach, 2009 Edition Wiley, 2012.
4. John A.Parnell. Strategic Management, Theory and practice Biztantra, 2012.
5. Azhar Kazmi, Strategic Management and Business Policy, 3<sup>rd</sup> Edition, Tata McGraw Hill, 2012.

**REFERENCE BOOKS:**

1. Adriauf HAbenberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2008.
2. Fred R. David, Forest R. David, Strategic Management: A Competitive Advantage, Approach, concepts and cases, Pearson 18<sup>th</sup> Edition, 2020.
3. Dr.Dharma Bir Singh, Strategic Management & Business Policy, KoGent Learning Solutions Inc., Wiley, 2012.
4. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, McGraw Hill, 12<sup>th</sup> Edition, 2012

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understand strategic management process.
- CO2** Analyse competitive advantage
- CO3** Analyse corporate, business and functional level strategies.
- CO4** Evaluate the strategic analysis and choice
- CO5** Understand the process of strategic implementation, evaluation & control

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	2	2	-	2	2	1
<b>CO2</b>	3	2	3	2	2	-	2	2	1
<b>CO3</b>	3	2	3	2	2	-	2	2	1
<b>CO4</b>	3	2	3	2	2	-	2	2	1
<b>CO5</b>	3	3	3	2	2	-	2	2	1

**PROFESSIONAL ELECTIVES**

**MARKETING MANAGEMENT**

<b>MB25M01</b>	<b>BRAND MANAGEMENT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVE**

- To understand the methods of managing brands and strategies for brand management.

<b>UNIT I</b>	<b>INTRODUCTION</b>				<b>9</b>
	Basic understanding of Brands - Definitions - Branding Concepts - Functions of Brand - Significance of Brands - Different Types of Brands - Co branding - Store brands.				<b>CO1</b>
<b>UNIT II</b>	<b>BRAND STRATEGIES</b>				<b>9</b>
	Strategic Brand Management process - Building a strong brand - Brand positioning - Establishing Brand values - Brand vision - Brand Elements - Branding for Global Markets - Competing with foreign brands				<b>CO2</b>
<b>UNIT III</b>	<b>BRAND COMMUNICATION</b>				<b>9</b>
	Brand image Building - Brand Loyalty programme - Brand Promotion Methods - Role of Brand ambassadors, celebrities- On line Brand Promotions.				<b>CO3</b>
<b>UNIT IV</b>	<b>BRAND EXTENSION</b>				<b>9</b>
	Brand Adoption Practices - Different type of brand extension - Factors influencing Decision for extension - Re-branding and Re-launching - Brand Revitalization - Building Global Brands				<b>CO4</b>
<b>UNIT V</b>	<b>BRAND PERFORMANCE</b>				<b>9</b>
	Measuring Brand Performance - Brand Equity Management - Global Branding strategies - Brand Audit - Brand Equity Measurement - Brand Leverage - Role of Brand Managers - Branding challenges & opportunities				<b>CO5</b>

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- Keller, K.L., Strategic Brand Management, 6<sup>th</sup> Edition, Pearson, 2020.
- Aaker, D., Building Strong Brands, Simon & Schuster, 2021.
- Dutta, K., Brand Management: Principles and Practices, Oxford University Press, 2019.

**REFERENCE BOOKS:**

- Chevalier, M. and Mazzalovo, G., Luxury Brand Management: A World of Privilege, 5<sup>th</sup> Edition, John Wiley and Sons, 2020.
- Gupta, N.R., The Seven Principles of Brand Management, Tata McGraw-Hill Education, 2021.
- Kapferer, J.N., The New Strategic Brand Management: Advanced Insights and Strategic Thinking, 7<sup>th</sup> Edition, Kogan Page, 2019.
- Kumar, R., Consumer Behaviour and Branding: Concepts, Readings and Cases - The Indian Context, Pearson, 2019.
- Rosenbaum-Elliott, R., Percy, L. and Pervan, S., Strategic Brand Management, Oxford University Press, 2022.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the meaning and significance of brand management
- CO2** To understand strategic brand management process and apply branding elements and create global branding strategies.

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- CO3** To create brand communication for brand promotion.  
**CO4** To understand the types of brand extension and remember the factors influencing brand extension decision.  
**CO5** Understand and apply various brand equity measurement techniques to evaluate brand performance, and critically analyze the challenges and opportunities associated with branding in a global market context.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	-	1	1	-	3	2	-
<b>CO2</b>	3	2	-	3	1	-	2	-	2
<b>CO3</b>	3	2	-	3	2	-	3	2	3
<b>CO4</b>	2	2	-	1	1	-	3	3	2
<b>CO5</b>	3	2	-	3	2	-	3	2	2

**MB25M02**

**CONSUMER BEHAVIOR**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To understand the consumer behaviour in-order to effectively utilise the marketpotential

**UNIT I INTRODUCTION 9**

Understanding Consumer behavior, Consumption, Consumer orientation, Interpretive and Quantitative approaches - Effects of Technology, Demographics and Economy on Consumer **CO1**

**UNIT II INTERNAL INFLUENCES 9**

Influences on consumer behavior - motivation - perception - Attitudes and Beliefs - learning Experience - Personality & Self Image. **CO2**

**UNIT III EXTERNAL INFLUENCES 9**

Socio-Cultural, Cross Culture - Family group - Reference group - Communication - Influences on Consumer behavior **CO3 C**

**UNIT IV CONSUMER BEHAVIOR MODELS 9**

Traditional and Contemporary Consumer behavior model for Individual and Industrial buying - behavior and decision making. **CO4**

**UNIT V PURCHASE DECISION PROCESS 9**

Consumer decision making process - Steps, Levels and decision rules - Evolving Indian consumers - Opinion Leadership - Diffusion and Adoption- Online and offline purchases decision process- online sentiment- diffusion of innovation - managing dissonance - emerging issues. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- Ramanuj Majumdar, Consumer Behaviour —Insights from Indian Market, PHI, 2021
- Leon G.Schiffman and Leslie Lasar Kanuk, Consumer Behaviour, Pearson Education, India, ninth edition, 2019.

**REFERENCE BOOKS:**

- BarryJ.B., Eric G.H.,Ashutosh M.,Consumer Behaviour-A South Asian Perspective, Cengage Learning, 2018.

**Master of Business Administration R 2025-CBCS**

2. P.C.Jain and Monika Bhatt., Consumer Behavior in Indian Context, S.Chand & Company, 2020.
3. Srabanti Mukhejee, Consumer behavior, Cengage Learning, 2019.
4. Assael, Consumer Behavior - A Strategic Approach, Biztranza, 2020
5. Leon G. Schiffman and Leslie Lasar Kanuk, Consumer Behaviour, 10 Edition, Pearson Education, India, 2019.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

**CO1** To understand concepts and theories of consumer behaviour and apply them to marketing strategy

**CO2** To apply the internal factors influences in consumer behavior

**CO3** To analyse the effects of external influences in consumer behavior

**CO4** To evaluate the consumer behavior models in consumer behavior

**CO5** To analyse and evaluate the purchase decision process in consumer behavior

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	1	1	-	3	3	2
<b>CO2</b>	3	2	3	1	1	-	3	2	2
<b>CO3</b>	3	2	3	1	1	-	3	2	2
<b>CO4</b>	3	2	3	1	1	-	3	2	2
<b>CO5</b>	3	2	3	1	1	-	3	2	2

**MB25M03**

**CUSTOMER RELATIONS MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVE**

- To understand the customer relationship management concepts and marketing strategy.

**UNIT I INTRODUCTION**

**9**

CRM-Definition, Emergence of CRM Practice, Factors responsible for CRM growth, CRM process, framework of CRM, Benefits of CRM, Types of CRM, Scope of CRM, Features Trends in CRM, CRM and Cost Benefit Analysis, Transactional Vs Relationship Approach, Significance Stakeholders in CRM.

**CO1**

**UNIT II UNDERSTANDING THE CUSTOMER**

**9**

Customer Information Database - Data Warehousing - Data Mining for CRM; Customer Profile Analysis - Customer Perception, Expectation's Analysis - Customer Behavior in Relationship Perspectives; Individual and Group Customer's - Customer Life Time Value - Selection of Profitable Customer Segments.

**CO2**

**UNIT III PLANNING FOR CRM**

**9**

Steps in Planning-Building Customer Centricity, Setting CRM Objectives - Relevant Issues while planning the CRM, Elements of CRM Plan, CRM Strategy: The Strategy Development Process, Strategies for Customer Acquisition, Retention and Prevention of Defection - Models of CRM.

**CO3**

**UNIT IV CRM AUTOMATION AND MARKETING STRATEGY**

**9**

CRM Marketing Initiatives, Sales Force Automation, Campaign Management, Call Centers Management, CRM Tools- Analytical CRM - Operational CRM - Role of CRM Managers. Practice

**CO4**

**Master of Business Administration R 2025-CBCS**

of CRM: CRM in Consumer Markets, CRM in Services Sector, CRM in Mass Markets, CRM in Manufacturing Sector.

**UNIT V CRM IMPLEMENTATION 9**

Issues and Problems in implementing CRM, Information Technology tools in CRM, Challenges of CRM Implementation. CRM Implementation Roadmap, Road Map (RM) Performance: Measuring CRM performance, CRM Metrics **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Kincaid, J., Customer Relationship Management: Getting it right, Pearson, 2019.
2. G.Shainesh, Jagdish, N.Sheth, Customer Relationship Management A Strategic Prespective, Macmillan 2020
3. Makkar, U. and Makkar, H.K., Customer Relationship Management, Tata McGraw-Hill Education, 2022

**REFERENCE BOOKS:**

1. H.Peeru Mohamed and A.Sahadevan, Customer Relation Management, Vikas Publishing 2018
2. Jim Cathcart, The Eight Competencies of Relationship selling, Macmillan India, 2019.
3. Kumar, Customer Relationship Management - A Database Approach, Wiley India, 2018.
4. Francis Buttle, Customer Relationship Management: Concepts & Tools, Elsevier, 2023.
5. Zikmund. Customer Relationship Management, Wiley 2019

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understand the strategic importance of CRM in customer retention and business growth.
- CO2** Analyze customer data to improve acquisition and retention outcomes.
- CO3** Understand the alignment of CRM initiatives with overall business objectives.
- CO4** Describe the functionalities and benefits of CRM automation tools and technologies.
- CO5** Identify CRM processes and tools applicable to various organizational contexts.

**MAPPING OF COs WITH PO AND PSO**

Cos	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	-	1	1	-	3	2	-
<b>CO2</b>	3	2	-	3	1	-	3	-	2
<b>CO3</b>	3	2	-	3	2	-	3	2	3
<b>CO4</b>	2	2	-	1	1	-	3	3	2
<b>CO5</b>	3	2	-	3	2	-	3	2	2

**MB25M04**

**DIGITAL MARKETING**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Aims to equip students with a comprehensive understanding of digital marketing strategies, tools, and platforms, enabling them to effectively plan, implement, and analyze digital campaigns to build brand presence and drive business growth in the evolving digital landscape.

<b>UNIT I</b>	<b>INTRODUCTION</b>	<b>9</b>
	Definition of digital marketing; origin of Digital Marketing, Traditional VS Digital Marketing, Benefits of Digital Marketing, the Internet micro and macro-environment, Internet users in India, Online Market space - Digital Marketing Strategy - Components Opportunities for building Brand-Website.	<b>CO1</b>
<b>UNIT II</b>	<b>SEARCH ENGINE OPTIMIZATION</b>	<b>9</b>
	Search Engine Optimization - Keyword Strategy - SEO Strategy - SEO success factors - On Page Techniques - Off-Page Techniques. Search Engine Marketing - How Search Engine works - SEM components - advantages and disadvantages of SEO; best practice in SEO - Paid search engine marketing - pay per click (PPC) advertising - Display Advertisement.	<b>CO2</b>
<b>UNIT III</b>	<b>E-MAIL MARKETING</b>	<b>9</b>
	E-Mail Marketing - Types of E-Mail Marketing - Email Automation - Lead Generation - Integrating Email with social media and Mobile - Measuring and maximizing email campaign effectiveness. Mobile Marketing- Mobile Inventory/channels - Location-based; Context-based; Coupons and offers, Mobile Apps, Mobile Commerce, SMS Campaigns Profiling and targeting.	<b>CO3</b>
<b>UNIT IV</b>	<b>SOCIAL MEDIA MARKETING</b>	<b>9</b>
	Social Media Marketing - Social Media Channels - Leveraging social media for brand conversations and buzz. Successful benchmark social media campaigns. Engagement Marketing - Building Customer relationships - Creating Loyalty drivers - Influencer Marketing. Digital Transformation & Channel Attribution - Analytics- social media, Web Analytics - Changing your strategy based on analysis.	<b>CO4</b>
<b>UNIT V</b>	<b>DESIGN DIGITAL MARKETING PLAN</b>	<b>9</b>
	Design digital marketing plan, SWOT, situational analysis, key performance Indicators in internet marketing, Digital Landscape, Paid, Owned, and Earned Media (P-O-E-M) Framework. Segmenting and Customizing Messages, Digital Advertising Market in India - Recent trends in Digital marketing.	<b>CO5</b>
		<b>TOTAL : 45 PERIODS</b>

**TEXT BOOKS :**

1. Ryan, D. Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, Kogan Page Limited, 2020.
2. Pulizzi, J Beginner's Guide to Digital Marketing, Mcgraw Hill Education, 2014.
3. Barker, Barker, Bormann, and Neher, Social Media Marketing: A Strategic Approach, 2<sup>nd</sup> Edition South-Western, Cengage Learning, 2019.

**REFERENCE BOOKS:**

1. Fundamentals of Digital Marketing by Puneet Singh Bhatia; Publisher: Pearson Education; 1<sup>st</sup> edition 2017.
2. Digital Marketing by Vandana Ahuja; Publisher: Oxford University Press, 2017.
3. Marketing 4.0: Moving from Traditional to Digital by Philip Kotler; Publisher: Wiley; 1<sup>st</sup> edition 2017.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To examine and explore the role and importance of digital marketing in today's rapidly changing business environment.
- CO2** To focus on how organizations can utilise digital marketing and how its effectiveness can be measured.
- CO3** To know the key elements of a digital marketing strategy.
- CO4** To study how the effectiveness of a digital marketing campaign can be measured.
- CO5** To demonstrate advanced practical skills in common digital marketing tools.



**TEXT BOOKS :**

1. Dr Niraj Kumar, Integrated Marketing Communication, Himalaya Publishing House 2021
2. Jaishri Jephwaney, Advertising Management, Oxford University Press, 2<sup>nd</sup> Edition, 2019
3. Belch, G. and Belch, M: Advertising and Promotion: An Integrated Marketing Communications Perspective, 7<sup>th</sup> Edition, Mc-Graw Hill, 2009.

**REFERENCE BOOKS:**

1. S. A. Chunawalla and K. S. Sethia, Foundations of Advertising: Theory and Practice, 7<sup>th</sup> Edition HPH, 2011.
2. Ogilvy, David: Confessions of an Advertising Man, Atheneum: New York, 2011.
3. John Wright: Advertising, Kogan Page 2025

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand IMC concept and stakeholders of the advertising industry.  
**CO2** To design and develop an effective Integrated Marketing Communication.  
**CO3** To apply and analyse the marketing communication programme.  
**CO4** To develop integrated marketing communications tools  
**CO5** To develop and evaluate digital media & advertising

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	3	1	-	-	2	2	2	-
<b>CO2</b>	2	3	2	-	-	2	2	3	-
<b>CO3</b>	2	3	2	-	-	3	2	2	-
<b>CO4</b>	2	3	1	-	-	3	2	3	-
<b>CO5</b>	2	3	1	-	-	2	2	2	-

**MB25M06**

**MARKETING ANALYTICS**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Aims to develop students' ability to apply data-driven analytical tools and models across key marketing functions such as strategy, product, pricing, distribution, promotion, and sales to make informed and impactful marketing decisions in a competitive business environment.

**UNIT I MARKETING ANALYTICS FRAMEWORK 9**

Introduction to Marketing Analytics and Models. Market Insight - Market Data Source - treatment of outliers, Market sizing, PESTLE Market analysis, Porter Five Force Analysis Market segment identification, targeting and positioning - Tools and Techniques: Regression, Cluster Analysis, and Perceptual Mapping Techniques. **CO1**

**UNIT II BUSINESS STRATEGY AND OPERATIONS 9**

Analytics based strategy selection with strategic models - Strategic Scenarios, Strategic Decision Models, and Strategic Metrics. **CO2**

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Business Operations: Forecasting - Predictive Analytics - Data Mining - Balanced Scorecard - Critical Success Factors.

**UNIT III PRODUCT AND PRICE ANALYTICS 9**

Product analytics: Conjoint Analysis model - Decision Tree Model - Portfolio Resource Allocation - Product/ service Metrics, Attribute Preference testing. **CO3**

Price Analytics: Pricing Techniques - Pricing Assessment - Profitable pricing - Pricing for Business Markets - Price Discrimination.

**UNIT IV DISTRIBUTION AND PROMOTIONS ANALYTICS 9**

Distribution Analytics: Distribution Channel Characteristics - Retail Location selection, Channel Evaluation and Selection - Multi-channel Distribution. **CO4**

Promotion Analytics: Promotion Budget estimation - Promotion Budget Allocation - Ad value equivalence model - Promotion Metrics for traditional Media - Promotion Metrics for social media.

**UNIT V SALES ANALYTICS 9**

E commerce sales model, sales metrics, profitability metrics and support metrics - Rapid decision models - data driven presentations - contemporary issues and opportunities in application of marketing analytics in different sectors. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. SL France, S Ghose, Marketing analytics: Methods, practice, implementation, and links to other fields - Expert Systems with Applications, Elsevier 2019.
2. Stephen Sorger, Marketing Analytics, Strategic Models and Metrics, 1<sup>st</sup> Edition, Admiral Press,2020.
3. Gary L. Lilien and Arvind Rangaswamy, Marketing Engineering: Computer Assisted Marketing Analysis and Planning, 2nd edition, Trafford Publishing UK, 2019.

**REFERENCE BOOKS:**

1. Wayne L. Winston, Marketing Analytics: Data-Driven Techniques with Microsoft Excel, 1<sup>st</sup> Edition, Wiley, Indianapolis, 2021.
2. Paul W. Farris, Neil T. Bendle, Phillip E. Pfeifer, David J. Reibstein, Marketing Metrics, 2<sup>nd</sup> Edition, Pearson USA, 2010.
3. Mike Grigsby, Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques, 2<sup>nd</sup> Edition, NY: Kogan Page Limited, New York, 2018.
4. Rajkumar Venkatesan, Paul W. Farris, Ronald T. Wilcox, Marketing Analytics Essential Tools for Data-Driven Decisions, University of Virginia Press, 1<sup>st</sup> Edition, 2021.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

**CO1** Understand the basic concepts of Marketing Analytics.

**CO2** Analyse and Implement Business Strategies.

**CO3** Use differential Product and Price Analytics.

**CO4** Compare and employ on Distribution Analytics.

**CO5** Use appropriate Sales Analytics.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	3	3	-	2	-	3	1	2

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<b>CO2</b>	2	3	2	-	2	-	3	1	3
<b>CO3</b>	2	3	3	-	2	-	3	2	2
<b>CO4</b>	2	3	3	-	2	-	3	2	3
<b>CO5</b>	2	3	2	-	2	-	3	2	3

**MB25M07**

**RETAIL MARKETING**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Aims to equip students with a comprehensive understanding of global and Indian retailing practices, formats, operations, shopper behavior, and emerging trends, enabling them to make strategic decisions in retail management and adapt to the dynamic retail environment.

**UNIT I INTRODUCTION**

**9**

An overview of Global Retailing - Challenges and opportunities - Retail trends in India -Socio economic and Digital transformation of Retailing - Technological Influences on retail management- Government of India policy implications on retails.

**CO1**

**UNIT II RETAIL FORMATS**

**9**

Organized and Unorganized formats - Different organized retail formats - Characteristics of each format- Emerging trends in retail formats - MNC's role in organized retail formats.

**CO2**

**UNIT III RETAILING DECISIONS**

**9**

Choice of retail locations - internal and external atmospherics - Positioning of retail shops - Building retail store image - Retail service quality management - Retail Supply Chain Management - Retail Pricing Decisions. Merchandizing and category management.

**CO3**

**UNIT IV RETAIL SHOP MANAGEMENT**

**9**

Visual Merchandise Management - Space Management - Retail Inventory Management - Retail accounting and audits - Retail store brands - Retail advertising and promotions - Retail Management Information Systems - Online retail - Emerging trends.

**CO4**

**UNIT V RETAIL SHOPPER BEHAVIOUR**

**9**

Understanding of Retail shopper behaviour - Shopper Profile Analysis - Shopping Decision Process - Factors influencing retail shopper behaviour - Complaints Management - Retail sales force Management.

**CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Ramkrishnan and Y.R. Srinivasan, Indian Retailing Text and Cases, McGraw Hill Education, 2012
2. Dr.Jaspreet Kaur, Customer Relationship Management, Dreamtech Press. 2012

**REFERENCE BOOKS:**

1. Dunne, Patrick M., Lusch, Robert F., Carver, James R. published by Cengage Learning 8<sup>th</sup> edition, 2013.
2. Swapna Pradhan, Retail Management -Text and Cases, Tata McGraw Hill, 3<sup>rd</sup> Edition, 2009.
3. Patrick M. Dunne and Robert Flusch, Retailing, Thomson Learning, 4<sup>th</sup> Edition 2008.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand basic knowledge about the retail industry and its impact on country's economy.  
**CO2** To analyze the characteristics and strategies of retail formats in diverse market environments.

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**CO3** To Understand and evaluate key retailing decisions

**CO4** To analyse and implement effective store layout and visual merchandising techniques.

**CO5** To apply shopper behavior insights to design effective retail merchandising, promotions, and customer engagement tactics.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	2	2	-	-	3	2	-
<b>CO2</b>	3	2	2	2	-	-	3	2	-
<b>CO3</b>	3	2	2	2	1	-	3	2	-
<b>CO4</b>	3	2	2	2	1	-	3	2	-
<b>CO5</b>	3	2	2	2	-	-	3	2	-

**MB25M08**

**SALES AND DISTRIBUTION MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- This course aims to provide students with a comprehensive understanding of sales and distribution management, covering personal selling, salesforce management, channel strategies, and logistics, with a focus on integrating traditional practices with emerging digital and technological advancements.

**UNIT I INTRODUCTION 9**

Sales management - Nature and scope. Sales management positions. Personal Selling - Scope, theories and strategies. Sales forecasting and budgeting decisions - Online selling - scope, potential, Merits and Demerits **CO1**

**UNIT II PERSONAL SELLING PROCESS 9**

Selling process and relationship selling. Designing Sales Territories and quotas. Sales organization structures. **CO2**

**UNIT III MANAGING THE SALESFORCE 9**

Sales Force Size & Workload planning, Job Analysis, Recruitment and Selection of Sales Force, Sales Training, Motivating Sales Personnel- Concepts, Types of rewards, Compensating Sales Personnel - Objectives, Its Components, designing a Compensation Plan, Productivity Analysis, Evaluating Sales Performance by developing suitable metrics, Sales force for B2B markets **CO3**

**UNIT IV MANAGING DISTRIBUTION CHANNELS 9**

Distribution Management - Introduction need and scope. Channels - Strategies and levels, retailing and wholesaling. Designing channel systems and channel management. **CO4**

**UNIT V BASIC OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT 9**

Logistics - Scope, definition and components. Managing Inventory & warehousing. Transportation, Scope, Modes and role in Supply Chain effectiveness. Use of Information Technology in Online Selling and Goods tracking **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Krishna K. Havaldar, Vasant M. Cavale, Sales and Distribution Management - Text and Cases, 3<sup>rd</sup> Edition, McGraw Hill Education, 2020

**Master of Business Administration R 2025-CBCS**

2. Panda Tapan, Sales and Distribution Management, 2<sup>nd</sup> edition, , Publisher: OUP India, 2019
3. Sapiro, Stanton & Rich, Management of Sales force,12<sup>th</sup> Edition Tata Mcgraw Hill, 2007.

**REFERENCE BOOKS:**

1. Pingali Venugopal, Sales and Distribution Management - An Indian Perspective, Response Books from Sage Publications, 2019.
2. Richard R Still and Edward W Cundiff, Sales and Distribution Management 6<sup>th</sup> Edition Pearson India, 2020.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understand basics of sales management, theories and strategies  
**CO2** To understand and explain the key stages of the personal selling process, from prospecting to closing the sale.  
**CO3** Analyze salesforce metrics and use CRM tools to monitor and improve sales effectiveness.  
**CO4** Evaluate channel performance and resolve conflicts to ensure effective distribution management.  
**CO5** To apply basic supply chain management principles to optimize processes and decision-making in real-world scenarios.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	-	1	1	-	3	2	-
<b>CO2</b>	3	2	-	3	1	-	2	-	2
<b>CO3</b>	3	2	-	3	1	-	3	2	3
<b>CO4</b>	2	2	-	1	1	-	3	3	2
<b>CO5</b>	3	2	-	3	1	-	3	2	2

**MB25M09**

**SERVICES MARKETING**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Aims to equip students with the knowledge and skills to effectively design, market, and manage services across various sectors by understanding the unique characteristics of services, customer expectations, and strategic service marketing practices.

**UNIT I INTRODUCTION 9**

Introduction - Definition - Service Economy - Evolution and growth of service sector - Nature and Scope of Services - Unique characteristics of services - Challenges and issues in Services Marketing. **CO1**

**UNIT II SERVICE MARKETING OPPORTUNITIES 9**

Assessing service market potential Classification of services Expanded marketing mix Service marketing Environment and trends Service market segmentation, targeting and positioning. **CO2**

**UNIT III SERVICE DESIGN AND DEVELOPMENT 9**

Service Life Cycle New service development Service Blue Printing GAP model of service quality- Measuring service quality - SERVQUAL - Service Quality functional development. **CO3**

**UNIT IV SERVICE DELIVERY AND PROMOTION 9**

Positioning of services - Designing service delivery system, Service Channel - Pricing services, methods - Service marketing triangle. Managing demand. Managing supply. Managing Demand CO4  
CO4 and Supply of Service-Integrated Service marketing communication.

**UNIT 5 SERVICE STRATEGIES 12**

Service Marketing Strategies for Health Hospitality Tourism Financial Logistics- Educational Marketing of Online Services Entertainment & public utility Information COS technical services. CO5

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. VinnieJauhari & Kirtu Duttat, Services Marketing, Text and cases, 4<sup>th</sup> edition, 2019.
2. Valarie Zeithaml et al. Services Marketing. 9th International Edition. Tata McGraw-Hill, 2019.
3. Gronroos. Service Management and Marketing-Wiley India. 6th Edition, 2020.

**REFERENCE BOOKS:**

1. Kenneth EClow, etal. Services Marketing Operation Management and Strategy, 7th edition, New Delhi, 2018.
2. Christopher Lovelock and Jochen Wirtz Services Marketing, Pearson Education, New Delhi, 9<sup>th</sup> edition. 2020.
3. Hoffman, Marketing of Services. Cengage 7<sup>th</sup> Edition, 2018.
4. Kenneth F Clow et al. Services Marketing Operation Management and Strategy Biztantra, 2<sup>nd</sup> Edition, New Delhi, 2020.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand and analyze the basic concepts of service marketing and the evolution of service sector
- CO2** To analyze customer needs and expectations unique to service marketing.
- CO3** To apply tools and techniques for service blueprinting, prototyping, and service process modeling.
- CO4** To analyze the role of service personnel, technology, and processes in enhancing service quality and customer satisfaction.
- CO5** To understand and evaluate various strategic approaches to managing and growing service organizations.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	1	1	-	3	2	-
<b>CO2</b>	3	2	3	1	1	-	3	2	-
<b>CO3</b>	3	2	3	1	1	-	3	2	-
<b>CO4</b>	3	2	3	1	1	-	3	2	-
<b>CO5</b>	3	2	3	1	1	-	3	2	-



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1. Gopinath. M. N. Banking Principles & Operations, Snow White Publications, 7<sup>th</sup> Edition, 2021.
2. Meera Sharma, “Management of Financial Institutions - with emphasis on Bank and Risk Management”, PHI Learning Pvt. Ltd., New Delhi, Latest Edition.
3. Finance Indian Institute Of Banking, Banking Products And Services, Taxmann Allied Services Pvt. Ltd. 2010.
4. Tripathy and Nalini Prava, Financial Services, PHI, Latest Edition.
5. Financial Markets and Financial Services, Vasant Desai, Himalaya, Latest Edition.
6. Madura, Financial Institutions & Markets, 10<sup>th</sup> edition, Cengage, 2016.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand functions of banks and analyze the bank financial statement.  
**CO2** To evaluate the various risk associated with inflow and outflow of funds.  
**CO3** To apply and analyse the risk associated with the modern e-banking.  
**CO4** To evaluate financial service offered by banks and creating revenues from those services.  
**CO5** To analyze the various types of financial products and services and their functions.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	1	-	2	-	3	-	2
<b>CO2</b>	3	3	3	2	2	1	3	2	1
<b>CO3</b>	3	2	2	-	-	2	-	2	2
<b>CO4</b>	3	1	3	2	2	2	2	-	1
<b>CO5</b>	3	3	3	3	2	2	3	2	3

**MB25F02**

**BEHAVIORAL FINANCE**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Aims to deepen students' understanding of behavioral finance by exploring the psychological influences on investment decisions, market anomalies, decision-making biases, and their impact on financial markets and managerial choices.

**UNIT I INTRODUCTION: WHY BEHAVIORAL FINANCE 9**

The role of security prices in the economy - EMH - Failing EMH - EMH in supply and demand framework-Equilibrium expected return models - Investment decision under uncertainty- Introduction to neo classical economics and expected utility theory - Return predictability in stock market-Limitations to arbitrage. **CO1**

**UNIT II DECISION AND BEHAVIORAL THEORIES 9**

Nash Equilibrium: Keynesian Beauty Context and The Prisoner’s Dilemma- The Monthly Hall Paradox - The St. Petersburg Paradox - The Allais Paradox - The Ellsberg Paradox - Prospects theory - Rational investors - Empirical and statistical detection test - behavioral portfolio theory - SP/A theory - Pascal - Fermat to Friedman - savage. **CO2**

**UNIT III DECISION MAKING BIASES 9**

Information is screening bias - Heuristics and behavioral biases of investors - Bayesian decision making - cognitive biases - forecasting biases - sunk cost fallacy - emotion and neuroscience - group behavior - investing styles and behavioral finance. **CO3**



<b>UNIT II</b>	<b>FUTURE &amp; FORWARD CONTRACT</b>	<b>9</b>
	Structure of forward and future market- Differences valuation of future, long and short forward contract - Types of future contract - Stock index future - Trading process - Price quotation - Basic principles of pricing forwards - Hedging - Hedging in futures and forwards - Techniques of Arbitrage stock index - Pricing of index future contract.	<b>CO2</b>
<b>UNIT III</b>	<b>OPTIONS</b>	<b>9</b>
	Definition - Exchange Traded Options, OTC Options - Specifications of Options - Call and Put Options-American and European Options -Intrinsic Value and Time value of Options - Basic and complex option strategies - Option payoff, options on Securities, Stock Indices Currencies and Futures - Options pricing models - Differences between future and Option contracts.	<b>CO3</b>
<b>UNIT IV</b>	<b>SWAPS</b>	<b>9</b>
	Definition of SWAP - Interest Rate SWAP - Currency SWAP - Liquidity swaps - Equity swaps - Role of Financial Intermediary - Mechanisms of swap transactions -Valuation of Interest rate SWAPs and Currency SWAPs Bonds	<b>CO4</b>
<b>UNIT V</b>	<b>DERIVATIVES IN INDIA</b>	<b>9</b>
	Evolution of Derivatives Market in India - Regulations - framework - Exchange Trading in Derivatives - Commodity Futures - Contract Terminology and Specifications for Stock Options and Index Options in NSE - Contract Terminology and Specifications for Stock futures and Index futures in NSE - Factors contributing to the growth of Derivatives market in India.	<b>CO5</b>
<b>TOTAL : 45 PERIODS</b>		

**TEXT BOOKS :**

1. Prakash B Yaragol, Financial derivatives, Vikas Publishing, 2018.
2. John C Hull & Shankarshan Basu, Options, futures, and other derivatives, 8<sup>th</sup> Edition, Pearson, 2018.

**REFERENCE BOOKS:**

1. David Dufresne- Option and Financial Futures - Valuation and Uses, McGraw Hill International Edition, 2020.
2. Stulz, Risk Management and Derivatives, Cengage Learning, 2<sup>nd</sup> Edition, 2011.
3. Varma, Derivatives and Risk Management, 2<sup>nd</sup> Edition, 2011.
4. Don M. Chance, Robert Edwin Brooks, An Introduction to Derivatives and Risk Management, South-Western Cengage Learning, 2013.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand of future market and its concepts.  
**CO2** To know the forward contract, hedging and Arbitrage stock index  
**CO3** To Learn about options in derivatives  
**CO4** To analyze about the swaps and financial intermediary  
**CO5** To evaluate the swap concepts in derivatives market of India.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	2	2	3	1	2	3	-
<b>CO2</b>	3	3	2	2	3	1	2	3	-
<b>CO3</b>	3	3	2	2	3	1	2	3	-
<b>CO4</b>	3	3	2	2	3	1	2	3	-
<b>CO5</b>	3	3	2	2	3	1	2	3	-

<b>MB25F04</b>	<b>FINANCIAL MODELLING AND ANALYSIS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES**

- Aims to equip students with practical skills in financial modeling using Excel, enabling them to analyze financial statements, perform forecasting, capital budgeting, and sensitivity analysis for informed financial decision-making.

**UNIT I INTRODUCTION TO FINANCIAL MODELLING 9**

Basics of Financial Modelling - Financial modelling process and steps - Inputs and Outputs of a Financial Model - Complex Financial Models - Excel as a Financial Modelling Tool. **CO1**

**UNIT II ACCOUNTING EQUATION & RATIO ANALYSIS 9**

Accounting Equation - Balance Sheet and its components - Income Statement and its components - Financial Statement Analysis: Ratio Analysis - Analysing and interpreting the trend in ratios - Limitation of using ratios. **CO2**

**UNIT III FORECASTING & FINANCIAL STATEMENTS 9**

Introduction to Forecasting - Statistical Methods - Straight line Model - Moving Average - Simple linear regression - Multiple linear regression - Time Series Analysis. **CO3**

**UNIT IV CAPITAL BUDGETING 9**

Time value of money - Annuities - Capital Budgeting - Company Valuation - Theories - Net Asset Approach - Market Approach - Comparison of market based multiples. **CO4**

**UNIT V SENSITIVITY ANALYSIS 9**

Introduction to Sensitivity Analysis - One-Dimensional and 2-Dimensional Sensitivity Analysis - Choosing correct variable to Change - Building the sensitivity table - Scenario Analysis - Creating a scenario analysis. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Samonas, M.. Financial forecasting, analysis, and modelling: A framework for long-term forecasting. John Wiley & Sons, 2015.
2. Rishi Mehra and Ruchi Arora, Corporate Finance with financial modelling, Taxmann's, 2024.

**REFERENCE BOOKS:**

1. Timothy R. Mayes and Todd M. Shank., 8<sup>th</sup> edition, Financial analysis with Microsoft excel. Cengage Learning, 2023.
2. Benninga, S., & Mofkadi, T. Principles of finance with excel (Vol. 2). New York, NY: Oxford University Press, 2006.

**COURSE OUTCOMES**

Upon completion of course students can able to

- CO1** To understand the basics of financial modelling.
- CO2** To analyze the financial statements of the company.
- CO3** To develop technical skills to embark on any financial forecasting and capital budgeting decisions of the firm.
- CO4** To apply the firm's equity value using different valuation techniques.
- CO5** To evaluate sensitivity and scenario analysis in finance using tools

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	3	3	2	2	-	3	2	-
CO2	2	2	3	2	2	-	1	1	-
CO3	1	3	2	2	2	-	2	3	-
CO4	2	2	2	2	2	-	2	1	-
CO5	3	2	3	2	2	-	3	3	-

**MB25F05 INTERNATIONAL FINANCE AND FOREX MANAGEMENT L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To develop students' understanding of international finance principles, foreign exchange markets, risk management techniques, and multinational financial operations to effectively manage financial challenges in a global business environment.

**UNIT I INTERNATIONAL TRANSACTIONS 9**

Overview and Evolution of International Finance - Institutions for International Finance - **CO1**  
 Internationalization process - International Monetary and Financial System - Balance of Payments -  
 Exchange rate and money supply - International parity relations - Purchasing power parity - Interest  
 rate parity - Forward rate parity.

**UNIT II MULTINATIONAL FINANCIAL MANAGEMENT 9**

Process of overseas expansion - Reasons for cross border investment - The theories of investment - **CO2**  
 techniques of project evaluation - Approaches for investment under uncertainty - FDI - Measuring  
 and Managing Risk - International M&A - Financial Techniques in M&A - Regulations of M&A in  
 major countries.

**UNIT III FOREIGN EXCHANGE MARKET 9**

Introduction - Forex trading volume - Forex trading locations - Major traded currencies - Evolution **CO3**  
 of foreign exchange market and foreign exchange - Currency systems.

**UNIT IV MANAGING FOREIGN EXCHANGE RATE RISK 9**

Strategies for managing foreign exchange rate's risk and its instruments - Currency forwards - **CO4**  
 Currency options - Put Options - Call Options - Covering Exchange Risk with Options - Currency  
 futures - futures pricing and behavior - Cost of carry and expectations approach.

**UNIT V SWAP OPERATIONS 9**

Swaps - Development of the swaps market - Characteristics and uses of swap - Interest rate and **CO5**  
 currency swaps - Flavoured Swaps - Legal and regulatory issues - Short-term interest rate and risk  
 management.

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Jeevanandam C., Foreign Exchange & Risk Management, Sultan Chand & Sons, 2020.
2. Bimal Jaiswal., International Finance/Foreign Exchange Management, 2020.
3. A. V. Rajwade , H. G. Desai., Foreign Exchange, International Finance and Risk Management, Fifth Edition, 2014.
4. Srivastava, R. International Finance, Oxford University Press, Latest Edition.

**REFERENCE BOOKS:**

1. Dr. Paresh Shah., Forex Management., Dreamtech Press, 2015
2. Alan C. Shapiro, Multinational Financial Management, PHI Learning, 5<sup>th</sup> Edition, 2010.
3. Eunand Resnik, International Financial Management, Tata McGraw Hill, 5<sup>th</sup> Edition, 2011.
4. Website of Indian Government on EXIM policy.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the conceptual clarity of the theoretical aspects of international trade and transactions.  
**CO2** To know the international investment, risk, mergers and acquisitions.  
**CO3** To apply the clear understand about the foreign exchange markets.  
**CO4** To analyze foreign exchange rate risk and its strategies.  
**CO5** To evaluate the operations relating currency swap and futures.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	1	1	2	1	3	2	2
<b>CO2</b>	3	3	2	2	2	2	3	3	2
<b>CO3</b>	3	2	2	2	2	1	2	2	3
<b>CO4</b>	3	3	3	3	3	2	3	3	3
<b>CO5</b>	3	3	3	3	3	3	3	3	2

**MB25F06**

**MICROFINANCE AND FINANCIAL INCLUSION**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Aims to provide students with a comprehensive understanding of microfinance and financial inclusion, focusing on products, regulations, government schemes, and the role of microfinance institutions in promoting inclusive economic development in India.

**UNIT I INTRODUCTION TO MICROFINANCE**

**9**

Fundamentals of Microfinance - Evolution of Microfinance - Need and Objectives of the Microfinance Institution - Regulations of Microfinance - Government Mandates for Sectoral Credit Allocations - Strategic Issues in Microfinance, Micro finance models - Govt sponsored programme involved in SHG.

**CO1**

**UNIT II PRODUCTS AND SERVICES**

**9**

Financial Intermediaries - NABARD, RRB, Co-operative banks; Financial products: Credit - Savings - Insurance - Kisan Credit Card and Smart Cards - Payment Services.

**CO2**

**UNIT III FINANCIAL INCLUSION**

**9**

Financial inclusion: Relevance for development - financial literacy and importance in financial inclusion - financial education - essential components of financial counselling, financial inclusion through microfinance.

**CO3**

**UNIT IV FINANCIAL INCLUSION SCHEMES IN INDIA**

**9**

Pradhan Mantri Jan Dhan Yojana (PMJDY), Atal Pension Yojana (APY), Pradhan Mantri Mudra Yojana (PMMY), Sukanya Samridhi Yojana (SSY), Pradhan Mantri Suraksha Yojana (PMSY), Standup India; Financial inclusion programmes organized by RBI.

**CO4**



**UNIT III TECHNICAL ANALYSIS 9**

Introduction to Technical Analysis: Dow theory-Charting methods-Chart patterns-Technical indicators. Efficient market theory: Random Walk, Efficient market Hypothesis - Forms of market efficiency-Empirical tests of market efficiency. **CO3**

**UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION 9**

Portfolio analysis: Modern Portfolio Theory (MPT): Markowitz efficient frontier, minimum variance portfolio, and optimal portfolios. Capital asset pricing model (CAPM) : Lending and borrowing-CML-SML-Pricing with CAPM. Arbitrage pricing theory-Single and multi index model-Construction of optimum portfolio. **CO4**

**UNIT V PORTFOLIO EVALUATION AND REVISION 9**

Portfolio Performance Evaluation: Risk-adjusted return measures - Sharpe, Treynor, and Jensen's alpha - Mutual funds. Portfolio revision: Active vs. passive portfolio management, portfolio rebalancing techniques. Risk Management in Portfolio: Hedging, insurance, and diversification techniques. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publications Pvt. Ltd, New Delhi. 2020.
2. Yogesh Maheshwari, Investment Management, PHI, Delhi, 2021

**REFERENCE BOOKS:**

1. Donald E. Fischer & Ronald J. Jordan, Security Analysis & Portfolio Management, PHI Learning., New Delhi, 8<sup>th</sup> edition, 2021.
2. Prasanna Chandra, Investment analysis and Portfolio Management, Tata McGraw Hill, 2019.
3. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage, 10<sup>th</sup> edition, 2019.
4. S. Kevin , Securities Analysis and Portfolio Management, PHI Learning , 2020.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understanding the basic environment of Indian financial systems especially investment options and their risk and return.
- CO2** Ability to analyze and predict securities risk and return using fundamental analysis.
- CO3** Skill to predict share price movements and make decisions using different methods of technical analysis.
- CO4** Ability to analyze, evaluate and manage portfolio of securities based on various techniques.
- CO5** Ability to analyze, evaluate portfolio evaluation and Revision.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	1	1	1	-	3	2	1
<b>CO2</b>	3	3	2	2	1	-	3	2	3
<b>CO3</b>	3	3	2	2	3	-	2	2	3
<b>CO4</b>	2	2	1	2	2	-	3	3	3
<b>CO5</b>	3	2	1	1	1	-	3	2	1

HUMAN RESOURCES MANAGEMENT

**MB25H01**                      **DIGITAL HUMAN RESOURCE MANAGEMENT**                      **L T P C**  
**3 0 0 3**

**OBJECTIVES:**

- Aims to develop students' understanding of digital HRM concepts and tools, enabling them to effectively manage recruitment, compensation, performance, and learning through advanced technologies and data visualization techniques.

**UNIT I                      INTRODUCTION TO DIGITAL HRM                      9**

Digital HRM - Concepts, Definitions, Evolution, Fundamentals, Importance - Benefits - Understand the shift from traditional HRM to digital HRM - HR Skills of the future, Creation of Digital HR functions - Digital HR transformation challenges. **CO1**

**UNIT II                      DIGITAL RECRUITMENT AND SELECTION                      9**

Applicant Tracking System (ATS) - Job opening, Job publishing, Assessment, Interview scheduling, Job offer - Digital on-boarding - Candidate vs. Employee on-boarding. **CO2**

**UNIT III                      DIGITAL COMPENSATION MANAGEMENT AND EMPLOYEE BENEFITS                      9**

Digital compensation management - Types - Importance - Payroll management - Leave management - Types of leave, Approval - Holidays - Automated attendance management - Sign-in options. **CO3**

**UNIT IV                      DIGITAL PERFORMANCE MANAGEMENT, LEARNING AND DEVELOPMENT                      9**

Digital Performance management - KPI, Criteria, Methods, Appraisal scheduling, e-learning - Learning Management System (LMS) - Evaluation, certifications. **CO4**

**UNIT V                      DIGITAL HR TRANSFORMATION TECHNOLOGIES AND VISUALIZATION                      9**

Transformation using technologies - Blockchain applications - IoT, AR/VR, Big data, Artificial Intelligence, and Machine Learning. Visualization - Importance, techniques, Visualization tools - Excel, Power BI, Tableau **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Henning Tirrel, Lothar Winnen, Ralf Lanwehr, Digital Human Resource Management, Springer Gabler. 2022.
2. Abhigyan Bhattacharjee, Human Resource Management and Development in the Digital Age, Mittal Publications, 2018.

**REFERENCE BOOKS**

1. Susana de Juana-Espinosa, Jose Antonio Fernandez-Sanchez, Encarnacion Manresa-Marhuenda, Jorge Valdes-Conca Human Resource Management in the Digital Economy: Creating Synergy between Competency Models and Information (Advances in Human Resources Management and Organizational Development), Business Science Reference; 1<sup>st</sup> edition, 2011.
2. Amy Lui Abel, Denise Rotatori, and Lyle Yorks Strategic Human Resource Development in Practice: Leveraging Talent for Sustained Performance in the Digital Age of AI (Management for Professionals), Springer Nature Switzerland AG; 1<sup>st</sup> edition, 2022

**Master of Business Administration R 2025-CBCS**

3. Md Mehedi Hasan Emon, Most. Sharmin Ara Chowdhury, Avishek Nath, Md. Nafis Fuad, Saleh Ahmed Jalal Siam The Digital Evolution of Human Resources Tools, Trends, and Technologies, Notion Press, 2024

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the basic concepts of digital HRM.
- CO2** To apply the concept of digital recruitment and selection.
- CO3** To understand and apply the concept of digital compensation management and employee benefits.
- CO4** To evaluate digital performance management, learning, and development.
- CO5** To apply the concept of digital HR transformation technologies and visualization

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	3	1	1	1	-	2	3	1
<b>CO2</b>	3	3	2	3	2	-	3	3	1
<b>CO3</b>	1	3	3	3	1	-	3	3	2
<b>CO4</b>	2	3	2	3	2	-	3	3	1
<b>CO5</b>	3	3	2	3	2	-	3	3	1

**MB25H02**

**HUMAN RESOURCE ANALYTICS**

**L T P C**  
**3 0 0 3**

**OBJECTIVES:**

- This course aims to equip students with a comprehensive understanding of HR Analytics, focusing on the use of data-driven metrics and KPIs to enhance decision-making across key HR functions. It emphasizes practical applications of analytics in recruitment, training, employee engagement, diversity, and workforce development to drive organizational performance.

**UNIT I INTRODUCTION TO HR ANALYTICS 9**

HR analytics - People Analytics: Definition - context - stages of maturity - Human Capital in the Value Chain: impact on business. HR Analytics vs HR Metrics - HR metrics and KPIs. **CO1**

**UNIT II HR ANALYTICS I: RECRUITMENT 9**

Recruitment Metrics: Fill-up ratio - Time to hire - Cost per hire - Early turnover - Employee referral hires - Agency hires - Lateral hires - Fulfillment ratio - Quality of hire - Recruitment to HR cost - Recruitment analysis. **CO2**

**UNIT III HR ANALYTICS II: TRAINING AND DEVELOPMENT 9**

Training & Development Metrics: Percentage of employees trained - Internally and externally trained - Training hours and cost per employee - ROI - Optimising the ROI of HR Programs - Training and Development Analysis. **CO3**

**UNIT IV HR ANALYTICS III: EMPLOYEE ENGAGEMENT AND CAREER PROGRESSION 9**

Employee Engagement Metrics: Talent Retention - Retention index - Voluntary and involuntary turnover by department, grades, performance, and service tenure - Internal hired index-Engagement Survey Analysis. Career Progression Metrics: Promotion index - Rotation Index-Career path index - Level-wise succession readiness index. **CO4**

**UNIT V HR ANALYTICS IV: WORKFORCE DIVERSITY AND DEVELOPMENT 9**

Workforce Diversity and Development Metrics: Employees per manager - Workforce age profiling - Workforce service profiling - Churn over index - Work force diversity index - Gender mix - Differently abled index - Revenue per employee - Operating cost per employee - PBT per employee - HR cost per employee - HR budget variance - Compensation to HR cost. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Dipak Kumar Bhattacharyya, HR Analytics, Understanding Theories and Applications, SAGE Publications India, 2017.
2. Sesil, J. C., Applying advanced analytics to HR management decisions: Methods for selection, developing incentives, and improving collaboration. Upper Saddle River, New Jersey: Pearson Education, 2014.
3. Pease, G., & Beresford, B, Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments. Wiley, 2014.

**REFERENCE BOOKS**

1. JacFitzenz, The new HR Analytics, AMACOM, 2010.
2. Edwards M. R., & Edwards K, Predictive HR Analytics: Mastering the HR Metric. London: Kogan Page. 2016.
3. Human Resources kit for Dummies, 3<sup>rd</sup> edition, Max Messmer, 2012
4. Phillips, J., & Phillips, P.P, Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and Outcomes. McGrawHill, 2014.
5. HR Score card and Metrics, HBR, 2001.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To remember the basic concepts of HR Analytics
- CO2** To understand, apply, and analyse how HR Analytics applies to recruitment
- CO3** To apply, and analyze how HR Analytics applies in training and development
- CO4** To apply and analyze how HR analytics help in employee engagement and career progression
- CO5** To evaluate the HR Analytics in workforce diversity and development

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	2	1	1	-	3	3	3
<b>CO2</b>	3	3	2	1	1	-	3	3	3
<b>CO3</b>	3	3	2	2	1	-	3	3	3
<b>CO4</b>	3	3	2	1	1	-	3	3	3
<b>CO5</b>	3	3	2	2	1	-	3	3	3

<b>MB25H03</b>	<b>INDUSTRIAL RELATIONS AND LABOUR LEGISLATIONS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES:**

- To understand industrial relations and labor laws in India, emphasizing their significance in managing workforce dynamics and covers key legislations to ensure legal compliance and promote harmonious employer-employee relations.

**UNIT I INTRODUCTION 9**

Concepts- Importance - Industrial relations problems in the public sector - Growth of Trade union - Code of conduct. **CO1**

**UNIT II INDUSTRIAL RELATIONS 9**

Trade Unions Act, 1926 - Industrial Employment (Standing Orders) Act, 1946 - The Industrial Disputes Act, 1947. **CO2**

**UNIT III OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS 9**

Factories Act 1948 - Contract Labour Act, 1970 - Inter-State Migrant Workmen Act, 1979 - Unorganised Workers' Social Security Act, 2008. **CO3**

**UNIT IV WAGES & COMPENSATION 9**

Payment of Wages Act, 1936 - Payment of Bonus Act, 1965 - Equal Remuneration Act, 1976 - Workmen's Compensation Act in 1923. **CO4**

**UNIT V SOCIAL SECURITY 9**

Employees' Provident Fund and Miscellaneous Provisions Act, 1952 - Employees' State Insurance (ESI) Act, 1948 - Maternity Benefit Act, 1961 - Payment of Gratuity Act, 1972 **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS**

1. Mamoria C.B. and Sathish Mamoria, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2016.
2. Kapoor N. D , Elements of Mercantile Law, Sultan Chand, 2014.
3. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations & Labour Laws. Tata McGraw Hill. 2016
4. P.K. Padhi, Industrial Laws, PHI, 2017.

**REFERENCE BOOKS**

1. P.R.N Sinha, Indu Bala Sinha, Seema Priyadarshini Shekhar. Industrial Relations, Trade Unions and Labour Legislation. Pearson. 2017
2. Tax Mann, Labour Laws, 2018.
3. Srivastava, Industrial Relations and Labour laws, Vikas, 2015.
4. P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson. 2011.
5. Ratna Sen, Industrial Relations in India, Shifting Paradigms, Macmillan India Ltd., New Delhi, 2013
6. C.S.VenkataRatnam, Globalisation and Labour Management Relations, Response Books, 2015

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the industrial relations system and trade unions
- CO2** To gain knowledge about industrial Disputes and labour welfare measures
- CO3** To understand about the labour legislation related to trade unions, interstate migrant workers and unorganised workers.



**REFERENCE BOOKS**

1. Milkovich and Newman, Compensation, McGraw-Hill International, 2005.
2. Blanchard and Thacker, Effective Training Systems, Strategies and Practices Pearson 2006.
3. Dubrin, Leadership, Research Findings, Practices & Skills, Biztantra, 2008.
4. Joe Tidd , John Bessant, Keith Pavitt, Managing Innovation, Wiley 3<sup>rd</sup> edition, 2006.
5. T.V.Rao, Appraising and Developing Managerial Performance, Excel Books, 2002.
6. R.M.Omkar, Personality Development and Career Management, S. Chand, 1<sup>st</sup> edition, 2008.
7. Richard L.Daft, Leadership, Cengage, 1<sup>st</sup> Indian Reprint 2008.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To gain knowledge about appropriate styles of managerial behavior.
- CO2** To understand the different streams of managerial effectiveness.
- CO3** To analyse the current practices of managerial effectiveness.
- CO4** To examine the various environmental issues in managerial effectiveness
- CO5** To develop a winning edge in creativity and innovation.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	3	2	2	-	3	3	3
<b>CO2</b>	3	3	3	3	1	-	3	3	3
<b>CO3</b>	3	3	3	3	1	-	3	3	3
<b>CO4</b>	3	3	3	3	1	-	3	3	3
<b>CO5</b>	3	3	3	3	1	-	3	3	3

**MB25H05**

**ORGANIZATIONAL DESIGN, CHANGE AND DEVELOPMENT**

**L T P C**

**3 0 0 3**

**OBJECTIVES:**

- Provide a comprehensive understanding of organizational design, change, and development, equipping them with the knowledge and tools to drive transformation, foster innovation, and ensure long-term organizational effectiveness and sustainability.

**UNIT I ORGANIZATIONAL DESIGN 9**

Organizational Design – Determinants – Components - Basic Challenges of design - Differentiation, Integration, Centralization, Decentralization, Standardization, Mutual adjustment - Mechanistic and Organic Structures - Technological and Environmental Impacts on Design - Importance of Design - Success and Failures in design **CO1**

**UNIT II ORGANIZATIONAL CHANGE 9**

Concept, Definitions, Need and Importance of change in the organization - Nature, Forces for change - Role of change agents- Change Process - Types and forms of change - Models of change, Kurt Lewin (Unfreeze, Move and Re-freeze); Burke and Litwin’s model of Drivers of Change, J.P. Kotter’s eight stages; - Resistance to change - individual factors - organizational factors -techniques to overcome change - Change programs. **CO2**

**UNIT III ORGANIZATIONAL DEVELOPMENT 9**

Introduction – evolution - basic values and assumptions - foundations of OD - Process of OD managing the phases of OD - Organizational diagnosis - Process - stages - Techniques- Questionnaire, interview, workshop, task-force - collecting, analyzing - feedback of diagnostic information **CO3**

**UNIT IV OD INTERVENTION 9**

Human process interventions - Individual, group and inter-group human relations - structure and technological interventions - strategy interventions-sensitivity training-survey feedback, process consultation-team building - inter-group development **CO4**

**UNIT V ORGANIZATIONAL EVOLUTION AND SUSTENANCE 9**

Organizational life cycle - Models of transformation - Models of Organizational Decision making - Organizational Learning - Innovation, Intrapreneurship and Creativity-HR implications. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Palmer. I, Dunford. R, Akin. G, Managing organizational change: A multiple perspectives approach, 3rd edition, McGraw-Hill Irwin Cummings, 2016.
2. Worley, Organization Development, 10<sup>th</sup> Edition, Cengage Learning, 2015.
3. R. G. Priyadarshini, Organizational Change and Development, Cengage Learning, 2015.
4. Wendell L. French, Cecil H. Bell, Jr, Veena Vohra, Organization Development : Behavioral Science Interventions for Organizational Improvement, 6<sup>th</sup> Edition, 2017.

**REFERENCE BOOKS:**

1. French & Bell Organisational Development, McGraw-Hill, 2005.
2. Thomas G. Cummings, Christopher G. Worley: Organisation Development and Change, Thomson Learning, 2008.
3. R.L. Nandeshwar, Bala Krishna Jayasimha, Change & Knowledge Management, Excel Books, 1<sup>st</sup> editon, 2010.
4. K Harigopal Management of Organizational Change, Response Books, 2<sup>nd</sup> edition, 2006.
5. Gareth R. Jones, Organizational, Design, and Change, 5<sup>th</sup> Edition, Pearson Education,2016.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the fundamental components of organizational structure and design
- CO2** To analyze the various dimensions of organizational change and techniques to overcome it
- CO3** To remember the concepts of organizational development and apply it techniques
- CO4** To apply the OD intervention techniques
- CO5** To understand the evolution and reason the sustenance of the organization

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	2	2	3	-	-	3	3	2
<b>CO2</b>	2	3	3	3	-	-	3	3	2
<b>CO3</b>	2	3	3	3	-	-	3	3	1
<b>CO4</b>	2	3	3	3	-	-	3	3	2
<b>CO5</b>	2	3	3	3	-	-	3	3	1

<b>MB25H06</b>	<b>REWARD AND COMPENSATION MANAGEMENT</b>	<b>L T P C</b>
		<b>3 0 0 3</b>

**OBJECTIVES:**

- Aims to equip students with comprehensive knowledge of compensation management, including wage structures, employee benefits, performance-based pay, and specialized executive and sales compensation plans within the Indian labor market context.

<b>UNIT I</b>	<b>INTRODUCTION TO COMPENSATION</b>	<b>9</b>
Compensation - Definition – objectives - principles of compensation formulation - Compensation Design and strategy - Wage Structure - types of wages - compensation trends and reward system in India. Compensation Policy, Base of Compensation Management, The Psychological Contract, Compensation and Legal Issues in Compensation Management, Factors Affecting Employee Compensation -Wage Rates - Wage Structure - Levels of Pay		<b>CO1</b>
<b>UNIT II</b>	<b>EMPLOYEE COMPENSATION AND LABOUR MARKET</b>	<b>9</b>
Meaning of Compensation Management, Methods of Wage Payment, Essentials of a Satisfactory Wage System, Wage Policy at the Organisational Level, Wage Problems in India, Components - Functions of Compensation Management - Unemployment and its impact on labour market- Implications on employee compensation		<b>CO2</b>
<b>UNIT III</b>	<b>MANAGING EMPLOYEE BENEFITS AND REWARDS</b>	<b>9</b>
Nature and types of employee benefits - statutory employee benefits in India - Non-monetary benefits. Reward - Meaning, Elements, Types - Basic concepts of reward management - Approaches to reward system. Management Strategy; Fringe Benefits, Fringe Benefits and Current Practices, Internal Audit of Compensation and Benefits; Different types of Direct and Indirect compensation.		<b>CO3</b>
<b>UNIT IV</b>	<b>PERFORMANCE RELATED COMPENSATION</b>	<b>9</b>
Performance management system (PMS) - performance objectives – indicators - standards and metric - competency based pay. Team Compensation - Gain Sharing Incentive Plan - Enterprise Incentive Plan - Profit Sharing Plan - ESOPs.		<b>CO4</b>
<b>UNIT V</b>	<b>EXECUTIVE AND SALES COMPENSATION PLAN</b>	<b>9</b>
Executive Compensation - Components - Relationship between Fixed and variable pay-Executive Incentive Programmes. Sale Compensation plan- design and administration - sales incentives and motivations.		<b>CO5</b>

**TOTAL : 45 PERIODS**

**TEXT BOOKS**

1. B. D. Singh , Compensation and Reward Management, Excel Books, 2017.
2. Richard.I. Henderson: Compensation Management In A Knowledge Based World - Prentice Hall, 2019.
3. Richard Thrope& Gill Homen: Strategic Reward Systems - Prentice-Hall, 2020
4. Armstrong, Michael and Marlis, Reward Management: A Handbook of salary administration, Kogan page business books, 2018

**REFERENCE BOOKS**

1. Michael Armstrong & Helen Murlis: Hand Book of Reward Management - Crust Publishing House, 2007
2. Joseph.J. Martocchio: Strategic Compensation - A Human Resource Management Approach - Prentice-Hall, 2014.
3. Edwarde .E.Lawler III, Rewarding Excellence (Pay Strategies for the New Economy) - Jossey Bass, 2020.

**COURSE OUTCOMES**

- CO1 To understand the basics of compensation management, theories and strategies
- CO2 To understand, analyze, and manage compensation systems within organizations.
- CO3 To analyse the employee benefits and rewards
- CO4 To gain knowledge about the performance related compensation
- CO5 To study about the executive and sales compensation plans, theories and design.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	1	-	3	2	-	1	-	2	2
CO2	1	-	2	2	-	1	2	1	1
CO3	1	-	2	2	-	2	-	2	1
CO4	1	-	2	2	-	-	-	2	1
CO5	1	-	2	2	-	2	-	2	1

**MB25H07**

**STRATEGIC HUMAN RESOURCE MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVES:**

- Aims to develop strategic HRM expertise by integrating human capital management, HR development, digital HR practices, career and competency planning, and employee coaching and counseling to align HR functions with organizational goals..

**UNIT I CONTEXT OF SHRM**

**9**

SHRM - SHRM models - strategic HRM vs Traditional HRM - Barriers to Strategic HR - Adopting an Investment Perspective - Understanding and Measuring Human capital - Human side of corporate strategies - strategic work redesign - Strategic Capability - Bench Marking

**CO1**

**UNIT II HUMAN RESOURCE DEVELOPMENT**

**9**

Meaning-Strategic framework for HRM and HRD-Vision, Mission and Values - Importance - Challenges to Organisations - HRD Functions - Roles of HRD Professionals - HRD Needs Assessment - HRD practices - Measures of HRD performance - Links to HR, Strategy and Business Goals - HRD Program Implementation and Evaluation - Recent trends - HRD Audit.

**CO2**

**UNIT III E-HRM**

**9**

e-Employee profile - e-selection and recruitment - Virtual learning and Orientation - e-training and development - e-learning strategies - e- Performance management and Compensation design - Use of mobile applications in HR functions - Development and Implementation of HRIS - Designing HR portals - Issues in employee privacy - Employee surveys online.

**CO3**

**UNIT IV CAREER & COMPETENCY DEVELOPMENT**

**9**

Career Concepts - Roles - Career stages - Career planning and Process - Career development Models - Career Motivation and Enrichment - Managing Career plateaus - Designing Effective Career Development Systems - Competencies and Career Management Competency Mapping Models - Equity and Competency based Compensation.

**CO4**

**UNIT V EMPLOYEE COACHING & COUNSELING**

**9**

Need for Coaching - Role of HR in coaching - Coaching and Performance - Skills for Effective Coaching-Coaching Effectiveness-Need for Counseling - Role of HR in Counseling - Components of Counseling Programs - Counseling Effectiveness - Employee Health and Welfare Programs. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Mathur S P, Strategic Human Resource Management, New Age international (P) Ltd. 1<sup>st</sup> Edition 2015
2. Randy L. Desimone, Jon M. Werner - David M. Mathis, Human Resource Development, Cengage Learning, 7<sup>th</sup> edition, 2016.

**REFERENCE BOOKS:**

1. Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning, 3<sup>rd</sup> edition, 2011.
2. Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill, 2011
3. Robert L. Mathis and John H. Jackson, Human Resource Management, Cengage Learning, 2007.
4. Pulak Das. Strategic Human Resource Management- A Resource Driven Perspective Cengage Learning 4<sup>th</sup> Indian Reprint-2013.
5. Teresa Torres Coronas & Mario Arias Olivia. e-Human Resource Management Managing Knowledge People- Idea Group Publishing, 2005.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To analyse the barriers to strategic HR, and; to create strategic capability
- CO2** To measure HRD performance and to create HRD programs
- CO3** To design, develop and implement HRIS; to create e-employee profile, e-selection and recruitment - virtual learning and orientation, e-training and development, e-learning strategies, e-performance management and compensation design
- CO4** To design, develop and evaluate career development systems, competencies and career management
- CO5** To design, develop and evaluate coaching, counseling and employee health and welfare Programs.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	3	2	-	-	3	3	3
<b>CO2</b>	3	3	3	2	-	-	3	3	3
<b>CO3</b>	3	3	3	2	-	-	3	3	3
<b>CO4</b>	3	3	3	2	-	2	3	3	3
<b>CO5</b>	3	3	3	2	-	2	3	3	3

<b>MB25H08</b>	<b>TALENT ACQUISITION AND MANAGEMENT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES:**

- Aims to equip students with comprehensive knowledge and skills in talent management, covering planning, acquisition, retention, and development strategies to effectively align talent practices with organizational goals.

**UNIT I BASIC CONCEPTS TO TALENT MANAGEMENT 9**

Talent Management- Concepts, Definitions, scope, need, importance, objectives, Challenges and opportunities - Talent management process - Focus areas in talent management - Talent Management System - Components and benefits of Talent Management System and challenges in developing TMS. **CO1**

**UNIT II TALENT PLANNING 9**

Objectives of Talent Planning, Steps in Strategic Talent Planning, Succession Planning Program, Innovative Talent Planning, Job analysis - Method of collecting information, developing questionnaires, interviews, developing job description & job specification. Developing HR planning process- Manpower Planning. **CO2**

**UNIT III TALENT ACQUISITION 9**

Talent Acquisition Process and Workflow- Talent Acquisition Maturity Model (Bersin by Deloitte) - Recruitment Cycle for Employee / Contract and Metrics - Latest Trends in Sourcing Candidates - Talent Acquisition Strategies - Best Practices in Talent Acquisition in Industries - Technology Adoption in Talent Acquisition. Selection process, Use of assessment centres, selection errors & minimizing selection errors, Reliability & Validity tests, Choosing the types of interviews. **CO3**

**UNIT IV TALENT RETENTION 9**

A comprehensive approach to Retaining employees, Managing Voluntary Turnover, dealing with Job Withdrawal, Strategic Compensation plan for Talent Engagement, Defining the elements of Total Rewards, Integrated Rewards Philosophy, Designing Integrated Rewards, Sustainable Talent Management, and the Reward Model. **CO4**

**UNIT V TALENT DEVELOPMENT 9**

Talent development strategy. Competency Mapping and assessment techniques - Potential appraisal, Training Need appraisal, Performance diagnosis, and self-development initiatives. Mapping Business Strategies and Talent Management Strategies. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Lance A Berger, Dorothy R Berger Talent Management Hand Book, Mc.Graw Hill 13<sup>th</sup> edition, 2017.
2. Masood Hasan , Anil Kumar Singh , Somesh Dhamija Talent management in India: Challenges and opportunities Atlantic Publication, 2017
3. Lance A. Berger, Dorothy R. Berge, rThe Talent Management Handbook, 2<sup>nd</sup> Edition Tata McGraw-Hil, 2011.

**REFERENCE BOOKS:**

1. Rob Silzer, Ben E. Dowel, Strategy-Driven Talent Management: A leadership Imperative, Wiley, 2010.
2. Harrington Brad, Hall, Douglas T, Career Management and Work-Life Integration: Using Self-Assessment to Navigate Contemporary Careers. Sage Pub, 2008.
3. Paul Sparrow, Hugh Scullion, Ibraiz Tarique, Strategic Talent Management, Contemporary Issues in International Context Cambridge University Press, 2014.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

**CO1** To understand the basic concepts of talent management practices.

**CO2** To analyze the various perspectives of talent planning.

**CO3** To evaluate the talent acquisition techniques.

**CO4** To apply the strategies and model of talent retention.

**CO5** To remember the strategies of talent development in the organization.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	3	2	3	1	-	3	3	1
<b>CO2</b>	3	3	2	3	2	-	3	3	3
<b>CO3</b>	2	3	1	3	1	-	3	3	3
<b>CO4</b>	3	3	2	3	1	-	3	3	3
<b>CO5</b>	2	3	1	3	1	-	3	3	3

**BUSINESS ANALYTICS**

**MB25B01**

**BIG DATA ANALYTICS**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- Provide a comprehensive understanding of Big Data concepts, analytics tools, Hadoop ecosystem, data processing frameworks, and visualization techniques to effectively analyze and interpret large datasets.

**UNIT I INTRODUCTION TO BIG DATA 9**

Introduction to Big Data Platform - Challenges of Conventional Systems - Intelligent data analysis  
-Nature of Data- Analytic Processes and Tools - Analysis vs Reporting. **CO1**

**UNIT II INTRODUCTION TO DATA ANALYTICS 9**

Big Data Overview - Characteristics of Big Data - Business Intelligence v/s Data Analytics - Need of Data Analytics - Data Analytics in Industries - Role of the Data Scientist - Data Analytics Life Cycle- Main phases of the lifecycle **CO2**

**UNIT III HADOOP 9**

Hadoop: History of Hadoop - the Hadoop Distributed File System - Components of Hadoop - Developing a Map Reduce Application - How Map Reduce Works - Anatomy of a Map Reduce Job run – Failures - Job Scheduling - Shuffle and Sort - Task execution - Map Reduce Types and Formats - Map Reduce Features - Hadoop environment. **CO3**

**UNIT IV FRAMEWORKS 9**

Applications on Big Data Using Pig and Hive - Data processing operators in Pig - Hive services - Hive QL - Querying Data in Hive - fundamentals of HBase and Zoo Keeper - IBM Info Sphere Big Insights and Streams **CO4**

**UNIT V VISUALIZATION TECHNIQUES 9**

Predictive Analytics- Simple linear regression - Multiple linear regression - Interpretations of regression coefficients. Visualizations - Visual data analysis techniques - interaction techniques - Systems and applications **CO5**

**TEXT BOOKS :**

1. Frank J Ohlhorst, “Big Data Analytics: Turning Big Data into Big Money”, Wiley and SAS Business Series, 2013.
2. Colleen Mccue, “Data Mining and Predictive Analysis: Intelligence Gathering and Crime Analysis”, Elsevier, 2<sup>nd</sup> Edition, 2015.
3. Michael Berthold, David J. Hand, “Intelligent Data Analysis”, Springer, 2<sup>nd</sup> Edition, 2007.
4. Anand Rajaraman and Jeffrey David Ullman, “Mining of Massive Datasets”, Cambridge University Press, 2014.

**REFERENCE BOOKS**

1. BillFranks, “Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics”, Wiley and SAS Business Series,2012.
2. Paul Zikopoulos, Chris Eaton “Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data”, McGraw Hill, 2012.
3. Paul Zikopoulos, Dirk de Roos, Krishnan Parasuraman, Thomas Deutsch , James Giles, David Corrigan, “Harness the Power of Big data - The big data platform”, McGraw Hill, McGraw-Hills born e Media, 2012.
4. Glenn J. Myatt, “Making Sense of Data I: A Practical Guide to Exploratory Data Analysis and Data Mining”, John Wiley & Sons, 2<sup>nd</sup> Edition, 2014.
5. Pete Warden, “Big Data Glossary”, O’Reilly, 2011.
6. Jiawei Han, Micheline Kamber “Data Mining Concepts and Techniques”, Elsevier, 3<sup>rd</sup> Edition, 2011.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To Understand the computational software’s and techniques for handling big data and to analyze the various report formats.
- CO2** Student produces original ideas with minimal guidance. Implementation solutions have strong evidential support.
- CO3** To Understand core technical concepts related to business intelligence, big data analytics along with hadoop architecture and analyze to data for analytics
- CO4** To Understand and create the various application in big data
- CO5** To Understand the visualization Techniques and analysis with various charts

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	2	3	2	-	-	2	3	-
<b>CO2</b>	3	1	2	1		1	2	3	1
<b>CO3</b>	2	1	2	3	1	-	2	3	-
<b>CO4</b>	1	3	1	2	-	1	2	3	-
<b>CO5</b>	1	1	3	1	-	1	2	3	1

<b>MB25B02</b>	<b>BUSINESS ANALYTICS AND TEXT MINING</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES**

- To equip students with foundational knowledge and practical skills in text mining, including document representation, text categorization, topic modeling, sentiment analysis, and implementation using Python's NLTK library.

**UNIT I OVERVIEW OF TEXT MINING 9**

Prediction problems using unstructured text data - Data Mining vs. Text Mining - Text Mining and Text Characteristics - Predictive Text Analytics - Text Mining Problems - Prediction & Evaluation-Python for Analytics **CO1**

**UNIT II DOCUMENT REPRESENTATION AND SUMMARIZATION 9**

Topic Representation - Frequency driven - Knowledge based automatic summarization - Impact of content in summarization - Indicator Representations - Summary Evaluation. **CO2**

**UNIT III TEXT CATEGORIZATION AND CLUSTERING 9**

Supervised text categorization, Naïve Bayes, k Nearest Neighbour (KNN) and Logistic Regression - clustering-connectivity-based clustering, centroid-based clustering. **CO3**

**UNIT IV TOPIC MODELLING AND SENTIMENTAL ANALYSIS 9**

Text modelling - probabilities latent Semantic indexing (PLSI), Latent Dirichlet Allocation (LDA)- imagine annotation, collaborative filtering - hierarchical structure modelling. **CO4**

**UNIT V TEXT MINING MODELLING USING NLTK 9**

Text Corpus - Sentence Tokenization - Word Tokenization - Removing special Characters - Expanding Contractions - Removing Stopwords - Correcting words: repeated characters - Stemming & lemmatization - Part of Speech Tagging - Feature Extraction - Bag of words model -TF - IDF model - Text classification problem - Building a classifier using support vector machine **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Charu C.Aggarwal and Cheng Xiang Zhai, Mining Text Data, Springer, 2012.
2. Dan Jurafsky and James H Martin, "Speech and Language Processing". Person Education India, 2000

**REFERENCE BOOKS:**

1. Benjamin Bengfort, Rebecca Bilbro, Tony Ojeda, Applied text analysis with Python", O'Reilly Media, Inc, 2018.
2. Sholom M. Weiss, Nitin Indurkha, & Tong Zhang Fundamentals of Predictive Text Mining , Springer Publishing Company 2015.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understanding of predictive text analytics.
- CO2** Understanding the concepts of data representation and summarization.
- CO3** Get to know about text categorization and clustering with the help of real time data sets.
- CO4** Ability to understand and apply the knowledge of text modelling and analysis using annotation and structural modeling.
- CO5** Ability to understand text mining modelling using nltk.

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	2	3	1	-	-	3	1	0
CO2	2	2	2	2	1	-	3	1	1
CO3	3	2	-	3	1	-	3	2	1
CO4	3	2	1	1	-	1	2	2	2
CO5	2	2	2	1	-	1	2	2	2

MB25B03

BUSINESS TOOLS FOR PREDICTIVE ANALYSIS

L T P C  
3 0 0 3

**OBJECTIVES:**

- To develop students' proficiency in using Python and its core libraries for business analytics, including data exploration, visualization, and building machine learning models to derive actionable business insights.

**UNIT I INTRODUCTION TO BUSINESS ANALYTICS TOOLS 9**

Introduction to Business Analytics Tools - Categories of Analytics Tools - Comparative Analysis - Strengths and Limitations. Getting Started with Python - Installation of Python and Setting Up the Development Environment - Introduction to Python Environment - Defining Functions - Operators in Python - Data Types and Their Applications - Essential Data Structures - Conditional Execution - Iterative Statements. **CO1**

**UNIT II CORE PYTHON LIBRARIES FOR BUSINESS ANALYTICS 9**

Overview of NumPy - Fundamentals of pandas - Working with Series and Data frames - Indexing and Reindexing Techniques - Data Selection and Sub setting - Filtering and Sorting Data - Identifying Unique Values - Counting Value Occurrences - Data Import and Storage Options - Introduction to Data Frames Optimization. **CO2**

**UNIT III EXPLORATORY DATA ANALYSIS USING PYTHON 9**

Introduction to EDA - Importance and Process of EDA - Data Cleaning Techniques - Handling Missig Data - Methods for Replacing Values - Deduplication Strategies - Outlier Detection and Treatment - Feature Scaling and Normalization - Encoding Categorical Variables - Data Transformation - Data Merging and Joining - Implementing Pivot Tables - Grouping and Aggregating Data - Introduction to Feature Engineering. **CO3**

**UNIT IV DATA VISUALIZATION USING PYTHON 9**

Introduction to Data Visualization - Types of Visualizations and Their Applications - Overview of Visualization Libraries - Introduction to Matplotlib - Understanding and Implementing Plotting Functions - Creating Visualizations with Seaborn - Box Plots and Histograms - Count Plots and Pie Charts - Violin and Line Plots - Scatter Plots and Pairwise Analysis - Facet Grids for Multi- Plot Visualizations - Creating Heatmaps - Interactive Visualizations using Plotly - Building Dashboards for Business Insights. **CO4**

**UNIT V MACHINE LEARNING MODELING WITH PYTHO 9**

Introduction to SciPy for Statistical Computing - Understanding Clustering Techniques - Overview of stats models for Statistical Analysis - Implementing Linear Regression - Introduction to scikit- **CO5**

## *Master of Business Administration R 2025-CBCS*

learn Library - Logistic Regression and Its Applications - Evaluating Model Performance - Introduction to Decision Trees - Cross-Validation Techniques for Model Assessment.

**TOTAL : 45 PERIODS**

### TEXT BOOKS :

1. Umesh R. Hodeghatta and Umesha Nayak, Practical Business Analytics Using R and Python: Solve Business Problems Using a Data-driven Approach Apress, 2023.
2. Galit Shmueli; Peter C. Bruce; Peter Gedeck; Nitin R. Patel; O.P. Wali, Data Mining for Business Analytics, (An Indian Adaptation): Concepts, Techniques and Applications in Python, Wiley, 2023.

### REFERENCE BOOKS

1. George Snypes, Python Data Wrangling for Business Analytics, Fiel LLC, 2024.
2. Bharti Motwani, Data Analytics using Python, Wiley, 2020.

### COURSE OUTCOMES

**Upon completion of course students can able to**

**CO1** Apply business analytics tools effectively in real-world scenarios.

**CO2** Apply core Python libraries for data manipulation and analysis.

**CO3** Apply Exploratory Data Analysis (EDA) techniques to prepare data for analysis.

**CO4** Evaluate and justify the creation of effective data visualizations and dashboards.

**CO5** Evaluate the performance and effectiveness of machine learning models for predictive analytics.

### MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	3	-	1	2	1	1	2	1
<b>CO2</b>	3	2	-	1	3	1	1	3	1
<b>CO3</b>	1	3	1	-	2	-	1	2	1
<b>CO4</b>	1	3	1	-	2	-	1	1	2
<b>CO5</b>	1	2	1	1	1	2	1	2	1

**MB25B04**

**DATA MINING FOR BUSINESS INTELLIGENCE**

**L T P C**  
**3 0 0 3**

### OBJECTIVES

- To equip students with comprehensive knowledge of data mining, predictive modeling, classification, clustering techniques, and advanced machine learning algorithms to analyze and extract meaningful insights from complex datasets.

#### UNIT I INTRODUCTION

**9**

Data mining, Text mining, Web mining, Spatial mining, Process mining, Data warehouse and data marts.

**CO1**

#### UNIT II DATA MINING PROCESS

**9**

Data mining process-KDD, CRISP- DM, SEMMA and Domain-Specific, Classification and Prediction performance measures- RSME, MAD, MAP, Confusion matrix, Receiver Operating Characteristic curve & AUC; Validation Techniques - hold-out, k-fold cross- validation, Stratified K flood cross validation, random sub sampling.

**CO2**

#### UNIT III PREDICTION TECHNIQUES

**9**

Data visualization, Time series- ARIMA, Winter Holts, Vector Autoregressive analysis.

**CO3**

**UNIT IV CLASSIFICATION AND CLUSTERING TECHNIQUES 9**  
 Classification - Decision trees, k nearest neighbor, Logistic regression, Discriminant analysis; Clustering; Market basket analysis. **CO4**

**UNIT V MACHINE LEARNING AND AI 9**  
 Genetic algorithms, Neural network, Fuzzy logic, Support Vector Machine, Optimization techniques- Ant Colony, **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Jaiwei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers 2006
2. Efraim Turban, Ramesh Sharda, Jay E.Aronson and David King, Business Intelligence, Prentice Hall, 2008.
3. W.H.Inmon, Building the Data Warehouse, fourth edition Wiley India Pvt.Ltd. 2005.
4. Ralph Kimball and Richard Merz, The data warehouse toolkit, John Wiley, 3<sup>rd</sup> edition, 2013.
5. Michel Berry and Gordon Linoff, Mastering Data mining, John Wiley and Sons Inc, 2<sup>nd</sup> edition, 2011

**REFERENCE BOOKS**

1. Michel Berry and Gordon Linoff, Data mining techniques for Marketing, Sales and Customer support, John Wiley, 2011
2. G.K.Gupta, Introduction to Data mining with Case Studies, Prentice hall of India, 2011
3. Giudici, Applied Data mining - Statistical Methods for Business and Industry, John Wiley, 2009
4. Elizabeth Vitt, Michael Luckevich Stacia Misner, Business Intelligence, Microsoft, 2011
5. Larose, D.T. & Larose, C.D. Data Mining and Predictive Analytics, Wiley, 2016.
6. Galit Shmueli, Nitin R. Patel and Peter C. Bruce, Data Mining for Business Intelligence - Concepts, Techniques and Applications Wiley, India, 2010.
7. Data Mining: Concepts and Techniques, Jiawei Han, Micheline Kamber and Jian Pei, Science Direct, 2012

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To remember and understand the various data mining techniques used in different domains.  
**CO2** To understand importance of data mining process in business decision-making  
**CO3** To analyze and implement the various prediction techniques  
**CO4** To evaluate the classification and clustering techniques and its uses in business decision making  
**CO5** To develop and understand the basics of basics of trainable neural network and fuzzy logic system for design and manufacturing

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	1	-	-	-	3	3	-
<b>CO2</b>	3	2	2	-	-	2	3	2	-
<b>CO3</b>	2	3	2	1	-	-	3	2	3
<b>CO4</b>	1	-	3	-	2	1	3	-	3
<b>CO5</b>	3	2	2	2	-	-	1	2	-

*Master of Business Administration R 2025-CBCS*

<b>MB25B05</b>	<b>DEEP LEARNING AND ARTIFICIAL INTELLIGENCE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES**

- To provide students with a deep understanding of neural networks, optimization techniques, intelligent systems, knowledge representation, and practical applications of AI and machine learning paradigms.

**UNIT I MATHEMATICAL PRELIMINARIES 9**

Linear models (SVMs and logistic regression)-Intro to Neural Nets; Shallow Network-Connect and train a network loss function, Back propagation and stochastic gradient descent-Neural networks as universal function approximates. **CO1**

**UNIT II MODELS 9**

. Optimization for Training Deep Models: How Learning Differs from Pure Optimization - Challenges in Neural Network Optimization - Basic Algorithms - Parameter Initialization Strategies - Algorithms with Adaptive Learning Rates - Approximate Second-Order Methods - Optimization Strategies and Meta Algorithms. **CO2**

**UNIT III INTELLIGENT SYSTEMS 9**

Introduction-Definition - Future of Artificial Intelligence - Characteristics of Intelligent Agents: Typical Intelligent Agents - Problem Solving Approach to Typical AI problems. - Applications - Tic Tac-Toe Game Playing - Problem Solving: State-Space Search and Control Strategies: Introduction General Problem Solving - Exhaustive Searches - Heuristic Search Techniques. **CO3**

**UNIT IV KNOWLEDGE REPRESENTATION 9**

Advanced Problem-Solving Paradigm: Planning: Introduction - Types of Planning Systems - Knowledge Representation: Introduction - Approaches to Knowledge Representation -Knowledge Representation using Semantic Network - Knowledge Representation using Frames. **CO4**

**UNIT V APPLICATIONS 9**

Expert Systems and Applications: Blackboard Systems - Truth Maintenance Systems - Applications of Expert Systems - Machine-Learning Paradigms: Machine-Learning Systems - Supervised and Unsupervised Learnings. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- Ian Goodfellow, Yoshua Bengio, Aaron Courville, "Deep Learning", MIT Press, 2016.
- Elaine Rich, Kevin Night, Shivashankar B Nair, "Artificial Intelligence" 3<sup>rd</sup> Edition, McGrawHill, 2008.

**REFERENCE BOOKS**

- Jared P.L., R for Everyone - Advanced Analytics and Graphics, Addison Wesley Data and Analytics series, 2015.
- Saroj Kaushik,"Artificial Intelligence", Cengage Learning India Pvt.Ltd.
- S. Russell and P. Norvig, "Artificial Intelligence: A Modern Approach, Prentice Hall, 3<sup>rd</sup> Edition, 2009.
- Deepak Khemani,"A First Course in Artificial Intelligence", McGraw Hill Education (India) Private Limited, New Delhi.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the Deep Learning algorithms and their limitations.
- CO2** Employ optimization strategies, such as parameter initialization, adaptive learning rates, and approximate second-order methods, to optimize deep models and improve their performance.
- CO3** Demonstrate proficiency in utilizing problem-solving techniques, such as state- space search and control strategies, to develop intelligent systems that can address real-world challenges.

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- CO4** Utilize various approaches to knowledge representation, such as semantic networks and frames, to effectively model and represent knowledge in intelligent systems.
- CO5** Analyze, design, and implement expert systems, including blackboard systems and truth maintenance systems, to solve domain-specific problems in diverse fields.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	1	2	1	-	-	3	1	0
<b>CO2</b>	1	-	2	2	1	-	0	1	1
<b>CO3</b>	1	3	-	3	1	-	0	2	1
<b>CO4</b>	3	1	1	1	-	1	1	2	-
<b>CO5</b>	2	1	2	1	-	1	0	2	1

**MB25B06**

**MULTIVARIATE DATA ANALYSIS**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To equip students with comprehensive knowledge and practical skills in multivariate statistical techniques, including regression, factor analysis, latent variable modeling, and advanced classification and clustering methods for effective data analysis and interpretation.

**UNIT I INTRODUCTION**

**9**

Introduction - Basic concepts - Uni-variate, Bi-variate and Multi-variate techniques- Types of multivariate techniques - Classification of multivariate techniques - Guidelines for multivariate analysis and interpretation - Approaches to multivariate model building.

**CO1**

**UNIT II PREPARING FOR MULTIVARIATE ANALYSIS**

**9**

Introduction - Conceptualization of research problem - Identification of technique - Examination of variables and data - Measurement of variables and collection of data - Measurement of errors - Statistical significance of errors. Missing data - Approaches for dealing with missing data - Testing the assumptions of multivariate analysis - Incorporating non-metric data with dummy variables.

**CO2**

**UNIT III MULTIPLE LINEAR REGRESSION ANALYSIS, FACTOR ANALYSIS**

**9**

Multiple Linear Regression Analysis - Introduction - Basic concepts - Multiple linear regression model - Least square estimation - Inferences from the estimated regression function - Validation of the model. Factor Analysis: Approaches to factor analysis - methods of estimation - Factor rotation - Factor scores - Sum of variance explained - interpretation of results

**CO3**

**UNIT IV LATENT VARIABLE TECHNIQUES**

**9**

Confirmatory Factor Analysis, Structural Equation modelling, Mediation models, Moderation models, Conditional processes, longitudinal studies, latent growth model, Bayesian inference

**CO4**

**UNIT V ADVANCED MULTIVARIATE TECHNIQUES**

**9**

Multiple Discriminant Analysis, Logistic Regression, Cluster Analysis, Conjoint Analysis, multidimensional scaling.

**CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS**

- Joseph F Hair, Rolph E Anderson, Ronald L. Tatham & William C. Black, Multivariate Data Analysis, Pearson Education, New Delhi, 2005.

## Master of Business Administration R 2025-CBCS

2. Barbara G. Tabachnick, Linda S. Fidell, Using Multivariate Statistics, 6<sup>th</sup> Edition, Pearson, 2012.
3. Rand R. Wilcox, Modern Statistics for the Social and Behavioral Sciences: A Practical Introduction, CRC Press, 2022

### REFERENCE BOOKS

1. Fabian H. Sinz, Jakob H Macke, Statistical Models and Machine Learning Methods for Neuroscience and Behavior, MIT Press, 2021.
2. Richard A Johnson and Dean W. Wichern, Applied Multivariate Statistical Analysis, Prentice Hall, New Delhi, 2005.
3. David R Anderson, Dennis J Seveency, and Thomas A Williams, Statistics for Business and Economics, Thompson, Singapore, 2002

### COURSE OUTCOMES

Upon completion of the course, students will be able to

- CO1 To understand the basic concepts and creating multivariate models using different models.  
CO2 To collect data for variables by creating survey instruments and evaluating the relationships between variables.  
CO3 To apply different multivariate analysis tools and techniques.  
CO4 To select and apply the latent variable techniques at the required places.  
CO5 To apply the advanced analyse techniques in organizational decision making

**MB25B07**

**SOCIAL MEDIA AND WEB ANALYTICS**

**L T P C**  
**3 0 0 3**

### OBJECTIVES

- To provide a comprehensive understanding of web and social media analytics, focusing on measuring user experience, business metrics, and leveraging data-driven insights for effective digital marketing and strategic decision-making.

### UNIT I INTRODUCTION TO WEB AND SOCIAL MEDIA 9

Introduction - Web and social media - Website, Web apps - AI in social media, Usability - User friendliness - Customer Experience - Web marketing, Competitive analysis - Web analytics framework -Analytics and outcomes, Competitive analysis. **CO1**

### UNIT II DATA ANALYSIS 9

Data - Types of Data - Big Data - Data Analysis - tools used for analysis - descriptive statistics, comparing means, correlations, nonparametric tests **CO2**

### UNIT III MEASURING USER EXPERIENCE 9

Usability metrics - performance metrics, issues-based metrics, self-reported metrics - Planning and performing a usability study - study goals, user goals, metrics and evaluation methods, participants, data collection, data analysis, comparing alternative designs, comparing with competition, completing a task or transaction **CO3**

### UNIT IV WEB ANALYSIS AND METRICS 9

PULSE metrics on business and technical issues - Page views, Uptime, Latency, Seven-day active users HEART metrics - Happiness, Engagement, Adoption, Retention, and Task success on user behaviour issues - On-site web analytics, off-site web analytics, the goal- signal-metric process **CO4**

### UNIT V SOCIAL MEDIA ANALYTICS 9

Social media analytics - Reasons for the growth - social media KPIs - Customer Lifetime Value (CLV) and Conversion Rate., Performing social media analytics - Business goal, KPIs, data gathering, analysis, measure and feedback. **CO5**

**TEXT BOOKS :**

1. Avinash Kaushik, Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity, John Wiley & Sons, 2009.
2. William Albert and Thomas Tullis Measuring the User Experience: Collecting, Analyzing, and Presenting Usability Metrics, Paperback, 2013
3. Digital Analytics for Marketing" by Chuck Hemann and Ken Burbary, Pearson, 2018.

**REFERENCE BOOKS:**

1. Jim Sterne, Social Media Metrics: How to Measure and Optimize Your Marketing Investment, John Wiley & Sons, 2010.
2. Brian Clifton, Advanced Web Metrics with Google Analytics, John Wiley & Sons; 3<sup>rd</sup> Edition edition, 2012
3. Data Science for Marketing Analytics" by Tommy Blanchard, Debashis Sahoo, and Pranshu Bhatnagar Packt Publishing, 2019.

**COURSE OUTCOMES**

Upon completion of course students can able to

- CO1 To understand the introduction and its impact in business process
- CO2 To understand the tools and applications of data analysis
- CO3 To understand the impact of data analysis and measuring in business process
- CO4 To understand the different analysis metrics used to measure business process
- CO5 To understand the various KPI to analyze the use and to achieve business goals

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	2	2	3	2	3	2	2	3	2
CO2	3	3	2	1	2	2	2	3	1
CO3	2	1	2	3	1	2	2	3	2
CO4	1	3	1	2	2	1	2	3	3
CO5	1	1	3	1	3	1	2	3	1

**OPERATIONS MANAGEMENT**

MB25001

LOGISTICS MANAGEMENT

L T P C  
3 0 0 3

**OBJECTIVE:**

- To provide comprehensive knowledge of logistics management, including distribution channels, transportation, packaging, performance measurement, and current trends to optimize supply chain efficiency and enhance competitive advantage.

**UNIT I**

**INTRODUCTION**

9

Meaning and Definition - Scope of Logistics - Functions and Objectives - Customer Value Chain - Service Phases and attributes - Value added logistics services - Role of logistics in Competitive strategy - Customer Service.

CO1

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<b>UNIT II</b>	<b>DISTRIBUTION CHANNELS AND OUTSOURCING</b>	<b>9</b>
Distribution Channel Structure - Channel Members, Channel Strategy - Role of Logistics and Support in Distribution Channels - Logistics Requirements of Channel Members - Logistics Outsourcing - Catalysts, Benefits, Value Proposition - 3PL, 4PL, 5PL, 6PL.		<b>CO2</b>
<b>UNIT III</b>	<b>TRANSPORTATION AND PACKAGING</b>	<b>9</b>
Transportation System - Infrastructure and Networks - Freight Management - Vehicle Routing - Containerization - Inter-Modal Operators and Transport economics- International Logistics - Global supply chains - Selection of service provider - Packaging - Design considerations, Material and Cost - Consumer and Industrial Packaging.		<b>CO3</b>
<b>UNIT IV</b>	<b>PERFORMANCE MEASUREMENT AND COSTS</b>	<b>9</b>
Performance Measurement - Need, System, Levels and Dimensions. Internal and External Performance Measurement - Logistics Audit - Total Logistics Cost, Concept - Accounting Methods - Cost -Identification, Time Frame and Formatting.		<b>CO4</b>
<b>UNIT V</b>	<b>CURRENT TRENDS</b>	<b>9</b>
Logistics Information Systems - Design - e-Logistics - Structure and Operation - Logistics Resource Management - e-LRM - Automatic Identification Technologies - Reverse Logistics - Scope, design and competitive tool - Global Logistics - Operational and Strategic Issues - ocean and air transportation - Strategic logistics - Green Logistics.		<b>CO5</b>

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Alan Harrison, Remko van Hoek & Heather Skipworth, Logistics Management and Strategy: Competing through the Supply Chain, Pearson, 6<sup>th</sup> Edition, 2023.
2. Saikumari V, Purushothaman S - Logistics and Supply Chain Management, Sultan Chand & Sons, 2<sup>nd</sup> Edition, 2023.
3. Donald J, Bowersox, David J Closs: Logistics Management - The Integrated Supply Chain Process, Tata Mc GrawHill, 2017.

**REFERENCE BOOKS**

1. Ailawadi C Sathish & Rakesh Singh, Logistics Management, PHI, 2<sup>nd</sup> Edition, 2023.
2. Sople Vinod V, Logistics Management: The Supply Chain Imperative, Pearson Education, 3<sup>rd</sup> Edition, 2012.
3. Coylee, Bardi, Langley: The Management of Business Logistics, Thomson Learning, 7<sup>th</sup> Edition, 2004.
4. Bloomberg David Jetal., Logistics, Prentice Hall India, 2005.
5. Pierre David, International Logistics, Biztantra, 2003.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understand the concepts of logistics
- CO2** Develop the skills in managing the distribution network and logistics partners to improve the supply chain practices
- CO3** Analyse the impact of transportation on logistics operations including carrier selection, route 79 optimization freight consolidation and understanding the role of packaging in efficient logistics management
- CO4** Understanding the importance of performance management and cost management in logistics including the role of performance metrics and cost analysis in improving the supply chain efficiency
- CO5** Evaluate the impact of new technologies or market trends on logistics management practices

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	2	2	2	2	-	1	3	3
CO2	3	2	3	2	2	-	1	3	3
CO3	3	2	3	2	2	-	1	3	3
CO4	3	2	3	2	2	-	1	3	3
CO5	3	2	3	2	2	-	1	3	3

MB25002

MATERIALS MANAGEMENT

L T P C  
3 0 0 3

**OBJECTIVES**

- To equip students with comprehensive knowledge and skills in production and materials management, including planning, inventory control, purchasing, and warehousing to optimize operational efficiency and decision-making in manufacturing environments.

**UNIT I INTRODUCTION 9**

Operating Environment - Aggregate Planning: Role, Need, Strategies, Cost Techniques, Approaches - Master Scheduling - Manufacturing Planning and Control System - Manufacturing Resource Planning - Enterprise Resource Planning - Making the Production Plan **CO1**

**UNIT II MATERIALS PLANNING 9**

Materials Requirements Planning - Bill of Materials - Resource Requirement Planning - Manufacturing Resource Planning - Capacity Management - Scheduling Orders - Production Activity Control - Codification. **CO2**

**UNIT III INVENTORY MANAGEMENT 9**

Policy Decisions - Objectives - Control - Retail Discounting Model - Newsvendor Model - EOQ and EBQ Models for Uniform and Variable Demand (with and without shortages) - Quantity Discount Models - Probabilistic Inventory Models - Inventory Management in E-commerce - Real-time Inventory Tracking Technologies. **CO3**

**UNIT IV PURCHASING MANAGEMENT 9**

Establishing Specifications - Selecting Suppliers - Price Determination - Forward Buying - Mixed Buying Strategy - Price Forecasting - Buying Seasonal Commodities - Purchasing under Uncertainty - Demand Management - Purchasing of Capital Equipment - International Purchasing. **CO4**

**UNIT V WAREHOUSE MANAGEMENT 9**

Warehousing Functions - Types - Stores Management - Stores Systems and Procedures - Incoming Materials Control - Stores Accounting and Stock Verification - Obsolete, Surplus and Scrap Management - Value Analysis - Material Handling - Transportation and Traffic Management - Operational Efficiency - Productivity - Cost Effectiveness - Performance Measurement. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- Amrik S. Sohal & Rajiv Lal, Strategic Materials and Supply Chain Management, Routledge, 2023.
- G. Raghuram & N. S. Jayashankar, Materials Management: An Integrated Systems Approach, Pearson Education, 2021
- A. K. Gupta & J. R. Gupta, Materials Management: An Integrated Approach, PHI Learning, 2021
- R. P. Mohanty & S. G. Deshmukh, Essentials of Materials Management, Prentice Hall, 2020

**REFERENCE BOOKS:**

1. P. Gopalakrishnan & S. Sundaresan, Fundamentals of Materials Management, Tata McGraw Hill, 2022
2. A.K. Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2006
3. Ajay K Garg, Production and Operations Management, Tata McGraw Hill , 2012
4. Ronald H. Ballou and Samir K. Srivastava, Business Logistics and Supply Chain Management, Pearson education, 5<sup>th</sup> Edition

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the concepts and techniques in materials management  
**CO2** To understand the concept of materials planning and apply it for optimized ordering of materials  
**CO3** To understand and apply inventory management models for optimization of inventory  
**CO4** To understand and analyse purchase decisions during certainty and uncertainty scenarios  
**CO5** To remember and understand warehousing function and apply the concepts for efficient warehousing

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	2	-	-	3	2	1
<b>CO2</b>	3	2	3	2	-	-	3	2	1
<b>CO3</b>	3	2	3	2	-	-	3	2	1
<b>CO4</b>	3	2	3	2	-	-	3	2	1
<b>CO5</b>	3	2	3	2	-	-	3	2	1

**MB25O03**

**PRODUCT DESIGN**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To provide a comprehensive understanding of product design and development processes, including concept generation, product data management, design tools, and intellectual property considerations to effectively innovate and manage product lifecycles.

**UNIT I PRODUCT DESIGN & DEVELOPMENT 9**

Product design & development - characteristics, duration and cost, challenges; Development Process - Generic Process, Concept development, Adapting to product types; Product Planning - Process, Understanding customer need, Product Specification; Concept Generation Evaluation - decay curve, cost expenditure curve; Technology Life Cycle; Disruptive Technologies **CO1**

**UNIT II PRODUCT CONCEPT 9**

Concept Selection - Importance, Methodology, concept Screening, Concept Scoring, Concept Testing; Product Architecture - Definition, Modularity, implication, Establishment, Delayed Differentiation, Platform Planning. **CO2**

**UNIT III PRODUCT DATA MANAGEMENT 9**

PDM - concept and benefits, functions, Product data and workflow, Product reliability, CIM data, Architecture of PDM systems, Product data interchange, Portal integration, PDM acquisition and implementation; Product Life Cycle management - strategy, Change management for PLM **CO3**

**UNIT IV DESIGN TOOLS 9**

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Design Approaches - Industrial Design, Design for Manufacturing, Value Engineering, Ergonomics, Robust Design, Design for Excellence; Collaborative Product development Prototyping, failure rate curve, product use testing-Product development economics, scoring model, financial analysis **CO4**

**UNIT V PATENTS 9**

Intellectual Property and Patents - Definitions, Patent Searches, Application, Patent Ownership and Transfer, Patent Infringement, New Developments and International Patents. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Product Design and Development: A Comprehensive Guide to Effective Product Design, Michael G. Smith and Richard A. Smith, Springer, 2023.
2. Product Design and Development, Karl T. Ulrich, Steven D. Eppinger, and Anita Goyal, McGraw-Hill Education, 7<sup>th</sup> Edition, 2020.
3. Designing Products and Services for a Sustainable Future, Colin M. Brown, David B. Lichtenstein, and David P. Wilson, Routledge, 2021.
4. Product Design: A Practical Guide to the New Product Development Process, Kevin Otto and Kristin Wood, Prentice Hall, 2021.

**REFERENCE BOOKS:**

1. Intellectual Property Rights in the New Technological Age, Robert P. Merges, Peter S. Menell, and Mark A. Lemley, Aspen Publishers, 2021
2. Kenneth B. Kahn, New Product Planning, Sage, 2010.
3. "Karl T. Ulrich, Steven D. Eppinger, Anita Goyal Product Design and Development, Tata McGraw - Hill, Fourth Edition, reprint 2009."
4. A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, PHI, 2008

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the needs of the customers and thereby develop characteristics of product to be designed
- CO2** To understand and analyze the methodology in the selection of product concept
- CO3** To analyze and evaluate the product data management and its implementation
- CO4** To apply the various tools available for design of product
- CO5** To understand the concept of patenting for new products and its procedure

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	2	-	-	3	2	1
<b>CO2</b>	3	2	3	2	-	-	3	2	1
<b>CO3</b>	3	2	3	2	-	-	3	2	1
<b>CO4</b>	3	2	3	2	-	-	3	2	1
<b>CO5</b>	3	2	3	2	-	-	3	2	1

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<b>MB25004</b>	<b>PROJECT MANAGEMENT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES**

- To equip students with the knowledge and skills necessary to effectively plan, execute, monitor, and complete projects by understanding project lifecycles, budgeting, scheduling, risk management, team dynamics, and evaluation techniques.

**UNIT I INTRODUCTION TO PROJECT MANAGEMENT 9**  
Project Management - Definition - Goal - Lifecycles. Project Environments. Project Manager - Roles- Responsibilities and Selection. **CO1**

**UNIT II PLANNING, BUDGETING AND RISK MANAGEMENT 9**  
The Planning Process - Work Breakdown Structure. Cost Estimating and Budgeting - Process, Summaries, Schedules and Forecasts. Managing Risks - Concepts, Identification, Assessment and Response Planning. **CO2**

**UNIT III SCHEDULING AND RESOURCE ALLOCATION 9**  
PERT & CPM Networks - Crashing - Resource Loading and Levelling. Simulation for Resource Allocation. Goldratt's Critical Chain. **CO3**

**UNIT IV PROJECT ORGANIZATION AND CONFLICT MANAGEMENT 9**  
Formal Organization Structure - Organization Design - Types of Project Organizations. Conflict - Origin & Consequences. Project Teams. Managing Conflict - Team Methods for Resolving Conflict. **CO4**

**UNIT V CONTROL AND COMPLETION 9**  
Project Control - Process, Monitoring, Internal and External Control, Performance Analysis, Performance Index Monitoring. Project Evaluation, Reporting and Termination. Project Success and Failure - Lessons. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- Clifford Gray and Erik Larson, Project Management: The Managerial Process, 8<sup>th</sup> Edition, Tata McGraw Hill, 2021.
- Kalpesh Ashar, Agile Essentials You Always Wanted to Know, Vibrant Publishers, 2021.
- John M. Nicholas & Herman Steyn, Project Management for Engineering, Business and Technology, 7<sup>th</sup> Edition, Routledge, 2024.

**REFERENCE BOOKS:**

- Jack R. Meredith, Samuel J. Mantel Jr., Scott M. Shafer, Margaret M. Sutton, and M.R. Gopalan, Project Management: A Managerial Approach, 10<sup>th</sup> Edition, Wiley India, 2023.
- Kathy Schwalbe, Information Technology Project Management, 10<sup>th</sup> Edition, Cengage, 2023.
- Gido and Clements, Successful Project Management, 8<sup>th</sup> Edition, Cengage Learning, 2022.
- Harold Kerzner, Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 13<sup>th</sup> Edition, Wiley, 2022.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Demonstrate the ability to understand and analyze the processes involved in project management and effectively manage project teams.
- CO2** Develop skills to plan and allocate resources efficiently, as well as accurately estimate budgets for successful project implementation.

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- CO3** Understand and evaluate strategies for timely project completion and effective resource scheduling.
- CO4** Gain an in-depth understanding of organizational structures and critically analyze conflict origins, along with methods for conflict resolution.
- CO5** Comprehend various reporting and control techniques, and apply them to monitor and manage project progress effectively.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	3	2	-	-	3	2	1
<b>CO2</b>	3	2	3	2	-	-	3	2	1
<b>CO3</b>	3	2	3	2	-	-	3	2	1
<b>CO4</b>	3	2	3	2	-	-	3	2	1
<b>CO5</b>	3	2	3	2	-	-	3	2	1

**MB25O05**

**QUALITY MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVES:**

- To provide a comprehensive understanding of Total Quality Management (TQM) principles, tools, systems, and practices to enhance organizational effectiveness, customer satisfaction, and continuous improvement across business processes.

**UNIT I INTRODUCTION 9**

Introduction - Need for quality - Evolution of quality - Definition of quality. Concept of Quality - different perspectives. Introduction to total Quality - Concept of total Quality - Attitude and involvement of top management - Customer Focus - customer perception - customer retention. Dimensions of product and service quality - Cost of quality. **CO1**

**UNIT II QUALITY GURUS 9**

Contributions of Crosby, Deming, Masaaki Imai, Feigenbaum, Ishikawa, Juran, Oakland, Shigeo Shingo, and Taguchi. **CO2**

**UNIT III QUALITY PRINCIPLES 9**

Leadership - Strategic quality planning, - Employee involvement - Motivation, Empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal - Continuous process improvement - PDSA cycle, 5s, Kaizen - Supplier partnership - Partnering, Supplier selection, Supplier Rating. **CO3**

**UNIT IV QUALITY TOOLS 9**

Overview of Quality Tools - The seven traditional tools of quality - New management tools – Sixsigma - Bench marking - FMEA - Quality circles - Quality Function Deployment (QFD) - Taguchi quality loss function - Total productive maintenance (TPM) - Tero-technology - Business process Improvement (BPI) **CO4**

**UNIT V QUALITY MANAGEMENT SYSTEMS 9**

Introduction Quality management systems - IS/ISO 9004:2000 - Quality System - Elements, Documentation guidelines for performance improvements. Quality Audits - QS 9000 - ISO 14000 - Concepts. TQM culture, TQM framework, benefits, awareness and obstacles **CO5**

**TOTAL : 45 PERIODS**

**Master of Business Administration R 2025-CBCS**

**TEXT BOOKS :**

1. Dale H.Besterfield, Carol Besterfield - Michna, Glen H. Besterfield, Mary Besterfield - Sacre, Hermant - Urdhwareshe, Rashmi Urdhwareshe, Total Quality Management, Revised 3<sup>rd</sup> edition, Pearson Education, 2011
2. Shridhara Bhat K, Total Quality Management - Text and Cases, Himalaya Publishing House, 2<sup>nd</sup> Edition 2010

**REFERENCE BOOKS:**

1. Suganthi,L and Anand Samuel, “Total Quality Management”, Prentice Hall (India) Pvt. Ltd. (2006)
2. Douglas C. Montgomery, Introduction to Statistical Quality Control, Wiley Student Edition, 4<sup>th</sup> Edition, Wiley India Pvt. Limited, 2008.
3. James R. Evans and William M. Lindsay, the Management and Control of Quality, 6<sup>th</sup> Edition, Thomson, 2005.
4. Poornima M. Charantimath, Total Quality Management, Pearson Education, 2<sup>nd</sup> Edition, 2011
5. Indian standard - quality management systems - Guidelines for performance improvement (5<sup>th</sup> Revision), Bureau of Indian standards, New Delhi.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the need for quality, evaluate the dimensions of quality and create quality products and services that delights the customers.
- CO2** To understand the principles and philosophies contributed by quality gurus and apply in practice.
- CO3** To apply TQM tools and techniques
- CO4** To understand the methods to analyse customer needs and create quality products and services that delights the customers by applying TQM tools.
- CO5** To understand the contents of quality standards and apply them in practice.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	2	2	2	2	-	3	3	-
CO2	3	2	2	2	2	-	3	3	-
CO3	3	2	2	2	2	-	3	3	-
CO4	3	2	2	2	2	-	3	3	-
CO5	3	2	2	2	2	-	3	3	-

**MB25O06**

**SUPPLY CHAIN ANALYTICS**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To equip students with analytical tools and quantitative models for effective decision-making in supply chain management, covering areas such as warehousing, inventory, transportation, risk assessment, and multi-criteria evaluation.

**UNIT I INTRODUCTION**

Introduction to analytics - descriptive, predictive and prescriptive analytics, Data driven supply chain - basics, transforming supply chain, Barriers to implementation

**9**  
**CO1**

<b>UNIT II</b>	<b>WAREHOUSING DECISIONS</b>	<b>9</b>
	Mathematical programming models - P-median methods - Guided LP approach - Balmer-Wolfe method, Greedy Drop heuristics, Dynamic location models, space determination and layout methods	<b>CO2</b>
<b>UNIT III</b>	<b>INVENTORY MANAGEMENT</b>	<b>9</b>
	Inventory aggregation models, Dynamic lot sizing methods, Multi-echelon inventory models, Aggregate inventory system and LIMIT, Risk Analysis in supply chain - Measuring transit risks, supply risks, delivering risks, risk pooling strategies.	<b>CO3</b>
<b>UNIT IV</b>	<b>TRANSPORTATION NETWORK MODELS</b>	<b>9</b>
	Notion of Graphs, Minimal Spanning Tree, Maximal Flow Multistage transshipment and transportation, Travelling salesman algorithm, Advanced vehicle routing	<b>CO4</b>
<b>UNIT V</b>	<b>MULTI-CRITERIA DECISION MAKING MODELS</b>	<b>9</b>
	Analytic Hierarchy Process (AHP), Data Envelopment Analysis (DEA), Fuzzy Logic and Technique, Analytical Network Process (ANP), TOPSIS - Application in SCM.	<b>CO5</b>

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. T A S Vijayaraghavan, Supply chain analytics, Wiley, 2021
2. Kurt Y Liu, Supply Chain Analytics, Springer, 2022
3. Nada R. Sanders, Big data driven supply chain management: A framework for implementing analytics and turning information into intelligence, Pearson Education, 2014

**REFERENCE BOOKS:**

1. Simchi-Levi, David, Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies, 4th Edition, McGraw Hill, 2021.
2. Nada R. Sanders, Supply Chain Analytics: Transforming Data into Insights, Wiley, 2020.
3. Jeremy Shapiro, Modelling the supply chain, Cengage Learning, 2<sup>nd</sup> edition, 2006

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To gain fundamental knowledge of supply chain analytics  
**CO2** To understand and demonstrate application of mathematical model to supply chain management  
**CO3** To acquire knowledge on inventory management models and risk pooling strategies  
**CO4** To examine transportation network models  
**CO5** To understand and apply advanced decision making models

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	3	-	-	-	-	3	2	-
<b>CO2</b>	3	3	-	-	-	-	3	2	-
<b>CO3</b>	3	3	-	-	-	-	3	2	-
<b>CO4</b>	3	3	-	-	-	-	3	2	-
<b>CO5</b>	3	3	-	-	-	-	3	2	-

<b>MB25007</b>	<b>SUPPLY CHAIN MANAGEMENT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES**

- To provide a comprehensive understanding of supply chain management principles, strategies, and technologies, focusing on sourcing, distribution, demand planning, performance measurement, and emerging trends for building efficient, sustainable, and resilient supply chains.

**UNIT I INTRODUCTION TO SUPPLY CHAIN MANAGEMENT 9**

Supply Chain - Fundamentals - Importance - Framework - Value chain. - Enablers/ Drivers of Supply Chain Performance; Supply chain strategy - Strategic fit - Obstacles to Supply chain management; Sustainability in Supply chain. **CO1**

**UNIT II SOURCING & PERFORMANCE MEASUREMENT 9**

Outsourcing - Make vs. Buy; Insourcing vs. Outsourcing; Single vs. Multiple sourcing. Global Supply chain- Challenges in establishing Global Supply Chain, Factors that influences designing Global Supply Chain Network; Supply Chain Performance: Bullwhip effect and reduction, Performance measurement: Dimensions - SCOR Model. **CO2**

**UNIT III DISTRIBUTION AND WAREHOUSING 9**

Distribution Network Design - Factors - Distribution strategies - E-commerce and distribution; Reverse logistics; Warehousing: Concept and types, Warehousing strategy; Models for Facility Location and network design; Supply Chain Network optimization models. **CO3**

**UNIT IV PLANNING DEMAND AND SUPPLY 9**

Forecasting - Role - Approaches - Role of IT; Managing Inventory - impact of supply uncertainty - aggregation and replenishment strategies - Vendor managed inventory; Supply chain redesign. **CO4**

**UNIT V EMERGING TRENDS 9**

Supply Chain Integration - Process restructuring - Role of Information Technology in Supply Chains. Agile Supply Chains - Leagile Supply Chains - Green Supply Chains - Closed-loop Supply Chains. Supply Chain Technology Trends: Artificial Intelligence (AI), Advanced Analytics, Robotic Process Automation (RPA), Blockchain. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Sunil Chopra, Peter Meindl and Dharam Vir Kalra, Supply Chain Management-Strategy Planning and Operation, Pearson Education, 7<sup>th</sup> edition, 2018.
2. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5<sup>th</sup> Edition, 2007.

**REFERENCE BOOKS:**

1. F. Robert Jacobs, Richard B. Chase, Operations and Supply Chain Management, McGraw Hill, 17<sup>th</sup> edition, 2023
2. Wisner, Keong Leong and Keah-Choon Tan, Principles Of Supply Chain Management Balanced Approach, Thomson Press, 2005

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand the fundamentals and strategic role of supply chain management
- CO2** To evaluate sourcing decisions and measure supply chain performance
- CO3** To design and optimize distribution networks and warehousing systems
- CO4** To plan demand and supply effectively within a supply chain
- CO5** To analyze current trends and technologies in supply chain management

MAPPING OF COs WITH PO AND PSO

Cos	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	2	1	-	2	1	3	2	-
CO2	3	3	1	-	3	1	3	2	-
CO3	3	3	1	-	3	1	3	2	-
CO4	3	3	1	-	2	1	3	2	-
CO5	3	2	1	-	3	3	3	2	-

MB25008

SERVICE OPERATIONS MANAGEMENT

L T P C  
3 0 0 3

OBJECTIVES:

- To equip students with the knowledge and tools to effectively manage service operations by exploring service design, quality, facility planning, capacity and demand management, and the strategic use of technology to enhance service performance and customer satisfaction.

**UNIT I UNDERSTANDING SERVICE OPERATIONS 9**

Services - Introduction, Importance; Nature & Role of Services in Economy; Service sector - nature, growth; Service Package; Service classification; Service Operations and their Management CO1 Fundamentals; Service Strategy; Stages in service firm competitiveness.

**UNIT II SERVICE DESIGN 9**

New Service Development - Design elements - Service Blue-printing - process structure - generic approaches. Service Encounter - triad, creating service orientation, service profit chain; Front-office Back-office Interface- service decoupling. Technology in services - self-service, automation, e-commerce, e-business, technology innovations. CO2

**UNIT III SERVICE QUALITY 9**

Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality -SERVQUAL, Walk-through Audit, Quality service by design, Service Recovery, Service Guarantees. Process Improvement -productivity improvement - DEA, quality tools, benchmarking, Quality improvement programs. CO3

**UNIT IV SERVICE FACILITY 9**

Supporting facility -Service scapes, Facility design - nature, objectives, process analysis, Service facility layout. Service Facility Location - considerations, facility location techniques - metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem. Vehicle routing and Scheduling. CO4

**UNIT V MANAGING CAPACITY AND DEMAND 9**

Managing Demand - Strategies. Managing Capacity - Basic strategies, supply management tactics, operations planning and control. Yield Management. Inventory Management in Services - Retail Discounting Model, Newsvendor Model. Managing Waiting Lines - Queuing systems, psychology of waiting. Managing for Growth - Expansion strategies, franchising, globalization. CO5

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- James A. Fitzsimmons, Mona J, Fitzsimmons, Sanjeev Bordoloi, Service Management - Operations, Strategy, Information Technology, McGraw-Hill Education - 8<sup>th</sup> Edition 2018.
- Richard D. Metters, Successful Service Operations Management, Cengage Learning, 2<sup>nd</sup> Edition, 2012.



## Master of Business Administration R 2025-CBCS

Distributed Databases - Queries - Optimization Access Strategies - Distributed Transactions Management - Concurrency Control - Reliability **CO3**

**UNIT IV OBJECT ORIENTED DATABASES 9**

Object Oriented Concepts - Data Object Models - Object Oriented Databases - Issues inOODBMS - Object Oriented Relational Databases - Object Definition Languages - Object Query Languages. **CO4**

**UNIT V EMERGING TRENDS 9**

Data Mining - Data warehousing - Star, Snowflake, Fact Constellation; open source database systems, Scripting Language, JDBC, ODBC **CO5**

**TOTAL : 45 PERIODS**

### TEXT BOOKS :

1. Peter Rob, Carlos Coronel, Database System and Design, Implementation and Management, 8<sup>th</sup> Edition, Cengage,
2. Ramez Elmasri and Shamkant B. Navethe, Fundamentals of Database Systems,7<sup>th</sup> edition, Pearson Education, 2015,
3. Jeffrey A Hofferetal, Modern Database Management, 12<sup>th</sup> Edition, Pearson Education, 2016.
4. Abraham Silberchatz, Henry F. Korth and S.Sudarsan, Database System Concepts, 6<sup>th</sup> Edition, McGraw-Hill, 2015.

### REFERENCE BOOKS

1. Thomas M. Connolly and Carolyn E. Begg, Database Systems - A Practical Approach to Design, Implementation and Management, 6<sup>th</sup> edition, Pearson Education, 2015.
2. Jefrey D. Ullman and Jenifer Widom, A First Course in Database Systems, 3<sup>rd</sup> edition, Pearson Education Asia, 2013.
3. Stefano Ceri and Giuseppe Pelagatti, Distributed Databases Principles and Systems, McGraw- Hill International Editions, 2008.
4. Rajesh Narang, Object Oriented Interfaces and Databases, 1<sup>st</sup> edition, Prentice Hall of India, 2004.
5. Mark L.Gillenson & el, Introduction to database management, 2<sup>nd</sup> edition, Wiley India Pvt. Ltd, 2012.
6. Charkrabarti, Advanced Database Management Systems, Wiley India Pvt Ltd, 2011.

### COURSE OUTCOMES

**Upon completion of course students can able to**

**CO1** To apply different databases for various purposes.

**CO2** To apply the steps in database query processing with the objective of accessing the data from the database.

**CO3** To analyze the concepts of databases used in different locations with the intricacies of data access and providing data security in various networks.

**CO4** To analyze the insights in Object Oriented Database structure with different models to store and retrieve the data from different models in an organisation.

**CO5** To evaluate the data mining and data ware housing.

### MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	2	2	1	1	-	2	2	-
<b>CO2</b>	2	2	2	1	1	-	2	2	-
<b>CO3</b>	2	2	2	1	1	-	2	2	-

**Master of Business Administration R 2025-CBCS**

<b>CO4</b>	2	2	2	1	1	-	2	2	-
<b>CO5</b>	2	2	2	1	1	-	2	2	-

**MB25S02 DATA MINING FOR BUSINESS ANALYTICS** **L T P C**  
**3 0 0 3**

**OBJECTIVES:**

- The course provides a comprehensive understanding of Business Intelligence by covering foundational BI concepts, data engineering and integration, modern data storage and cloud solutions, data modernization for business transformation, and the strategic role of data, AI, and analytics in enabling data-driven enterprises.

**UNIT I FOUNDATIONS OF BUSINESS INTELLIGENCE & ENTERPRISE DATA STRATEGY 9**

DIKW Pyramid - Types of Data - Why Data is the New Oil: The Role of BI in Business - Evolution of Business Intelligence: From Legacy BI to Modern BI - Key Components of Enterprise Data Strategy - Data Governance & Compliance, GDPR, Data Security, and Ethics **CO1**

**UNIT II DATA ENGINEERING & INTEGRATION FOR BUSINESS INTELLIGENCE 9**

Data Engineering - ETL vs. ELT: The Modern Approach to Data Integration - ETL Pipelines & Data Workflow Automation - Data Integration & APIs: Connecting Different Business Systems - Enterprise Data Architecture. **CO2**

**UNIT III DATA STORAGE & CLOUD SOLUTIONS FOR BI 9**

Data Warehouse vs. Data Lake vs. Lakehouse - Data Marts and Their Role in BI - Use Cases of Data Lakes in Business (Marketing, Finance, Supply Chain) - The Rise of the Lakehouse Architecture - Cloud Data Platforms: AWS, Azure, Google Cloud - Traditional Data Storage vs. Modern Data Platforms. **CO3**

**UNIT IV DATA MODERNIZATION & BUSINESS TRANSFORMATION 9**

Challenges of Legacy Data Systems - Cloud-Based vs. On-Premises Data Management - The Shift from Batch Processing to Real-Time Data - Understanding Data Maturity Levels Reactive - Predictive - Prescriptive - How Companies Scale Their Data Capabilities. **CO4**

**UNIT V DATA STRATEGY, AI, & THE FUTURE OF BUSINESS INTELLIGENCE 9**

Case Studies of Data Driven Enterprises (Amazon, Netflix, Unilever) - Building a Data Culture in Organizations - Aligning Data Strategy with Business Objectives - Data Monetization: How Companies Generate Revenue from Data - Role of AI & Machine Learning in Business Intelligence - The Future: Automated Decision-Making & Data-Driven Leadership. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

- Joe Reis and Matt Housley, Business Intelligence: The Ultimate Guide to BI, Artificial Intelligence, Machine Learning, Big Data, Cybersecurity, Data Science, and Predictive Analytics, O'Reilly Media, Inc., 2022.
- Dr. Naveen Kumar Singh and Shanu Gupta Business Intelligence and Analytics, SK Kataria & Sons, 2024.

**REFERENCE BOOKS**

- Tobias Zwingmann , AI-Powered Business Intelligence: Improving Forecasts and Decision Making with Machine Learning (Grayscale Indian Edition), Shroff/O'Reilly, 2022.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Explain the fundamental concepts of Business Intelligence, enterprise data strategy, and data governance.
- CO2** Describe the role of data engineering, ETL/ELT processes, and data integration techniques in business intelligence.
- CO3** Analyze different data storage architectures, including data warehouses, data lakes, and cloud-based platforms, and their impact on business intelligence.
- CO4** Evaluate the challenges of legacy data systems and assess strategies for data modernization and real-time data processing in business transformation.
- CO5** Examine case studies of data-driven enterprises to assess the impact of data strategy, AI, and machine learning on business intelligence and decision-making.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	-	2	2	-	-	-	-	2
<b>CO2</b>	3	2	2	3	-	-	-	-	2
<b>CO3</b>	3	-	2	2	-	-	-	-	2
<b>CO4</b>	3	-	2	3	-	-	-	-	2
<b>CO5</b>	3	-	2	2	-	-	-	-	2

**MB25S03**

**e-BUSINESS**

**L T P C**  
**3 0 0 3**

**OBJECTIVES:**

- The course provides a comprehensive understanding of e-business by covering its fundamentals, technological infrastructure, major applications, e-payment and security systems, and the legal, ethical, and privacy issues surrounding online business activities.

**UNIT I INTRODUCTION TO e-BUSINESS 8**

E-Business, e-business Vs e-commerce, Comparison between conventional Vs e-Business, Economic forces - advantages - myths - e-business models, design, develop and manage business, Web2.0 and Social Networking, Mobile Commerce, S-commerce **CO1**

**UNIT II TECHNOLOGY INFRASTRUCTURE 10**

Internet and World Wide Web, internet protocols - FTP, intranet and extranet, Information publishing technology - basics of web server hardware and software, Networking Technologies for e-Business **CO2**

**UNIT III BUSINESS APPLICATIONS 9**

Consumer oriented e-business - e-tailing and models - Marketing on web - Web marketing, web advertising - e-mail marketing, affiliated programs - e-CRM; online services, Business oriented e-business, governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals - Social media marketing. **CO3**

**UNIT IV e-BUSINESS PAYMENTS AND SECURITY 9**

E-payments - Characteristics of payment of systems, protocols, Types - e-cash, e cheque and Micro payment systems - internet security - cryptography - security protocols - Risk in digital payment - network security **CO4**

**UNIT V LEGAL AND PRIVACY ISSUES 9**

## Master of Business Administration R 2025-CBCS

Legal, Ethical and privacy issues - Protection needs and methodology - consumer protection, cyber laws, contract and warranties, Taxation and encryption policies. **CO5**

**TOTAL : 45 PERIODS**

### TEXT BOOKS :

1. Dr. Subhabrata De ,”Fundamentals of E-Commerce”, Arambagh Book House 2023
2. Harvey M.Deitel, Paul J.Deitel, Kate Steinbuhler, e - business and e - commerce for managers, Pearson, 2011.
3. Efraim Turban, Jae K.Lee, David King, Ting Peng Liang, Deborrah Turban, Electronic Commerce- A managerial perspective, Pearson Education Asia, 2010
4. Parag Kulkarni, Sunita Jahirabdkao, Pradeep Chande, ebusiness, Oxford University Press, 2012.

### REFERENCE BOOKS

1. Hentry Channel, E-Commerce - fundamentals and Applications, Wiley India Pvt Ltd, 2007.
2. Gary P.Schneider, Electronic commerce, Thomson course technology, 4<sup>th</sup> edition, 2007
3. Bharat Bhasker, Electronic Commerce Frame work technologies and Applications, 3<sup>rd</sup> Edition. Tata McGraw Hill Publications, 2009
4. Kamlesh K.Bajaj and Debjani Nag, Ecommerce - the cutting edge of Business,Tata McGraw Hill Publications, 7<sup>th</sup> reprint, 2009.
5. Kalakotaetal, Frontiers of Electronic Commerce, Addison Wesley, 2004
6. Micheal Papaloelon and Peter Robert, e-business, WileyIndia, 2006.

### COURSE OUTCOMES

**Upon completion of course students can able to**

- CO1** To understand the various concepts of E-business and to create the designs and business models
- CO2** To create different technology infrastructure and analyze basics of web server, hardware and software
- CO3** To analyze various business applications and understand virtual communities and web portals
- CO4** To analyze the tools for e-business and create cryptography and network security for payment systems
- CO5** To analyse the legal and privacy issues and understand the cyber laws with regards to taxation and encryption policies.

### MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	2	2	1	1	-	2	2	-
<b>CO2</b>	2	2	2	1	1	-	2	2	-
<b>CO3</b>	2	2	2	1	1	-	2	2	-
<b>CO4</b>	2	2	2	1	1	-	2	2	-
<b>CO5</b>	2	2	2	1	1	-	2	2	-

<b>MB25S04</b>	<b>ENTERPRISE RESOURCE PLANNING</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES:**

- The course provides a comprehensive understanding of enterprise systems by covering ERP fundamentals, functional modules, implementation processes, post-implementation factors, and emerging trends such as cloud-based and extended ERP solutions.

<b>UNIT I</b>	<b>INTRODUCTION</b>	<b>8</b>
Overview of enterprise systems - Evolution - Risks and benefits - Fundamental technology - warehouse management, Database Management.		<b>CO1</b>
<b>UNIT II</b>	<b>ERP SOLUTIONS AND FUNCTIONAL MODULES</b>	<b>9</b>
Overview of ERP software solutions, BPR, Project management, Functional Modules - Organizational data, master data and document flow, Functional modules based on the organisation requirements.		<b>CO2</b>
<b>UNIT III</b>	<b>ERP IMPLEMENTATION</b>	<b>10</b>
Planning Evaluation and selection of ERP systems - Methodologies to evaluate and selection of ERP Systems, Implementation lifecycle - ERP Implementation Life Cycle, Methodology and Framework - Training - Data Migration. People Organisation in implementation - Role of Consultants, Vendors and Employees.		<b>CO3</b>
<b>UNIT IV</b>	<b>POST IMPLEMENTATION</b>	<b>9</b>
Maintenance of ERP - Organizational and Industrial impact; Success and Failure factors of ERP Implementation.		<b>CO4</b>
<b>UNIT V</b>	<b>EMERGING TRENDS ON ERP</b>	<b>9</b>
Extended ERP systems and ERP add-ons - CRM, SCM, Business analytics - Future trends in ERP systems - web enabled, Wireless technologies, cloud computing and Augmented reality.		<b>CO5</b>
		<b>TOTAL : 45 PERIODS</b>

**TEXT BOOKS :**

1. Dr. P.C. Reddy ,”Enterprise Resource Planning”, S.K. Kataria & Sons, 2022
2. Alexis Leon, ERP demystified, second Edition Tata McGraw - Hill, 2008.
3. Simha R.Magal, JeffreyWord, Integrated Business processes with ERP systems, John Wiley & Sons, 2012.
4. Jagan Nathan Vaman, ERP in Practice, Tata McGraw - Hill, 2008

**REFERENCE BOOKS**

1. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2009.
2. Vinod Kumar Grag and N.K.Venkitakrishnan, ERP-Concepts and Practice, Prentice Hall of India, 2006.
3. Summer, ERP, Pearson Education, 2008.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** To understand risk and benefits associated with Enterprise Resource Planning.
- CO2** To design and develop ERP solutions and functional modules.
- CO3** To analyse and implement ERP.
- CO4** To analyse and evaluate the post implementation of ERP.
- CO5** To have knowledge of emerging trends on ERP.

MAPPING OF COs WITH PO AND PSO

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	2	2	2	1	1	-	2	2	-
CO2	2	2	2	1	1	-	2	2	-
CO3	2	2	2	1	1	-	2	2	-
CO4	2	2	2	1	1	-	2	2	-
CO5	2	2	2	1	1	-	2	2	-

MB25S05

INTERNET OF THINGS

L T P C  
3 0 0 3

**OBJECTIVES:**

- The course provides a comprehensive understanding of IoT by covering its core concepts and architecture, internet communication principles, embedded and online prototyping skills, and the business models and ethical considerations involved in developing IoT solutions.

**UNIT I INTRODUCTION TO IoT**

9

Introduction of IoT, Physical Design of IoT; Things in IOT, Logical Design of IoT; IoT Functional Blocks, IoT Communication APIs, IoT Enabling Technologies; WSN, Cloud Computing, Big Data Analysis, Communication Protocols, Embedded Systems, Industry 4.0

CO1

**UNIT II INTERNET PRINCIPLES**

9

Internet Communications overview - IP - TCP - TCP/IP - UDP. IP Addresses: DNS - Static and Dynamic IP Address Assignment - MAC Addresses - TCP and UDP Ports - Application Layer Protocols. Thinking about Prototyping: Sketching - Familiarity - Prototypes and Production - Open Source versus Closed Source.

CO2

**UNIT III PROTOTYPING EMBEDDED DEVICES**

9

Electronics - Embedded Computing Basics - Arduino - Raspberry Pi - Beagle Bone Black - Electric Imp. Prototyping the Physical Design: Non-digital Methods - Laser Cutting - 3D printing - CNC Milling - Repurposing/Recycling.

CO3

**UNIT IV PROTOTYPING ONLINE COMPONENTS**

9

Getting started with an API - Writing a New API - Real-Time Reactions - Other Protocols. Techniques for Writing Embedded Code: Memory Management - Performance and Battery Life - Libraries - Debugging.

CO4

**UNIT V BUSINESS MODELS**

9

History of Business Models - Model - Internet of Starting up - Lean Startups. Moving to Manufacture: Designing Kits - Designing Printed circuit boards - Certification - Costs - Scaling Up Software. Ethics: Privacy - Control - Environment - Solutions

CO5

**TOTAL: 45 PERIODS**

**TEXT BOOKS:**

- Adrian McEwen and Hakim Cassimally, "Designing the Internet of Things", Wiley, 2014.
- V. Jeyalakshmi, "Internet of Things: An Easy Hands-on Approach", TechSar Pvt. Ltd, 2024
- Vijay Madiseti and Arshdeep Bahga, Internet of Things (A Hands-on-Approach) I, 1<sup>st</sup> Edition, VPT, 2014.

**REFERENCE BOOKS**



**UNIT III SOFTWARE QUALITY AND RISK ISSUES 9**

Quality in SW development - quality assurance - quality standards and certifications. The risk issues in SW development and implementation - identification of risks - resolving and avoiding risks - tools and methods for identifying risk **CO3**

**UNIT IV QUALITY PLANNING 9**

Planning Concepts - Integrating Business and Quality Planning - Prerequisites to Quality Planning- The Planning Process. Define, Build, Implement and Improve Processes: Process Management Concepts - Process Management Processes. **CO4**

**UNIT V QUALITY CONTROL PRACTICES 9**

Testing Concepts - Types of testing, Developing Testing Methodologies - Verification and Validation Methods - Software Change Control - Defect Management. Metrics and Measurement: Measurement Concepts - Measurement in Software - Variation and Process Capability - Risk Management - Implementing a Measurement Program. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS :**

1. Gerard O'Regan ,”Guide to Software Project Management”,Springer-Nature New York Inc 2025
2. Roger S. Pressman, Software Engineering A Practioners Approach, McGraw Hill, New Delhi, 7<sup>th</sup> Edition, 2010.
3. Richard H. Thayer(Edited), Software Engineering Project Management, IEEE, John Wiley & Sons, 2<sup>nd</sup> edition, 2000.

**REFERENCE BOOKS**

1. Bob Hughes, Mike Cotterell and Rajib Mall, Software Project Management, McGraw Hill Publishing Company, 6<sup>th</sup> Edition, 2017.
2. Alan Gillies, Software Quality - Theory and Management, Thomson Learning, 3<sup>rd</sup> edition, 2011.
3. Stephen Kan, Metrics and Models in Software Quality Engineering, Pearson Education Asia, 8<sup>th</sup> Impression 2009.

**COURSE OUTCOMES**

**Upon completion of course students can able to**

- CO1** Understand and apply the project management concepts & techniques.  
**CO2** To analyse & evaluate the software development process.  
**CO3** Understand the risk issues in software development.  
**CO4** Apply the concepts in preparing the quality plan & documents.  
**CO5** Analyse and evaluate the quality of software product.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	2	2	2	1	1	-	2	2	-
<b>CO2</b>	2	2	2	1	1	-	2	2	-
<b>CO3</b>	2	2	2	1	1	-	2	2	-
<b>CO4</b>	2	2	2	1	1	-	2	2	-
<b>CO5</b>	2	2	2	1	1	-	2	2	-

**NON FUNCTIONAL ELECTIVES**

<b>MB25N01</b>	<b>BUSINESS ETHICS AND CORPORATE GOVERNANCE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**OBJECTIVES**

- To have grounding on theory through the understanding of real-life situations and cases.

**UNIT I INTRODUCTION 9**

Definition & nature Business ethics, Characteristics, Myths about Ethics-Ethical theories; Causes of unethical behavior; Ethical abuses; Work ethics; Role of Ethics in Organisation-Code of conduct; Public good. **CO1**

**UNIT II ETHICS THEORY AND BEYOND 9**

Management of Ethics - Ethics analysis [ Hosmer model]; Ethical dilemma; Ethics in practice - ethics for managers; Role and function of ethical managers- Comparative ethical behaviour of managers; Code of ethics; Competitiveness, organizational size, profitability and ethics; Cost of ethics in Corporate ethics evaluation. Business and ecological / environmental issues in the Indian context and case studies. **CO2**

**UNIT III LEGAL ASPECTS OF ETHICS 9**

Political – legal environment; Provisions of the Indian constitution pertaining to Business; Political setup – major characteristics and their implications for business. Social – cultural environment and their impact on business operations, Salient features of Indian culture and values. Cyber Ethics- cyber Crime and Cyber Law **CO3**

**UNIT IV ENVIRONMENTAL ETHICS 9**

Understanding Corporate Governance, Corporate Governance -an overview, History of Corporate Governance – Concept of corporations- owners and stakeholders, Types of owners, Rights and privileges of shareholders, Structure and development of boards; Role of capital market and government; Governance ratings - Pyramids and Tunneling – Issues of Corporate control -Need for Investor protection. **CO4**

**UNIT V CORPORATE SOCIAL RESPONSIBILITY AND GOVERNANCE 9**

Definition- Evolution- Need for CSR; Theoretical perspectives; Corporate citizenship; Business practices; Strategies for CSR; Challenges and implementation; Global Corporate Governance practices and regulation: Anglo – American Model – German Model – Japanese model- Future of governance- innovative practices; Case studies. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS**

1. S S.A. Sherlekar, Ethics in Management, Himalaya Publishing House, 2014
2. P Kamatchi , Business Ethics Foundation For Corporate Social Responsibility And Governance by, Wiley India, 2020.
3. J.S. Nelson and Lynn A. Stout, Business Ethics: What Everyone Needs to Know, Oxford University Press, 2022.

**REFERENCE BOOKS**

1. A.C. Fernando, Business Ethics An Indian Perspective, Pearson Education, 2019.
2. W.H. Shaw, Business Ethics, Cengage Learning, 2017.
3. Robert A.G. Monks and Nell Minow, Corporate governance, John Wiley and Sons, 2011

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO1** Understand ethical theories and role of ethics in workplace.
- CO2** Analyse ethical issues and the behavior to be followed in the corporate.
- CO3** Understand ethical issues in legal and social environment.
- CO4** Understand concepts of Corporate Governance
- CO5** Analyse the practices of Corporate Social Responsibility and Corporate Governance and to equip with Global practices of Corporate Governance.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO 6	PS01	PS02	PS03
<b>CO1</b>	3	2	2	1	-	-	3	2	3
<b>CO2</b>	3	2	2	1	-	-	3	2	3
<b>CO3</b>	3	2	2	1	-	-	3	2	3
<b>CO4</b>	3	2	2	1	-	-	3	2	3
<b>CO5</b>	3	2	2	1	-	-	3	2	3

**MB25N02**

**ENTREPRENEURSHIP DEVELOPMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVE:**

- To equip and develop the learners’ entrepreneurial skills and qualities essential to undertake business.
- To impart the learners’ entrepreneurial competencies needed for managing business efficiently and effectively

**UNIT I ENTREPRENEURIAL COMPETENCE 9**

Entrepreneurship concept–Entrepreneurship as a Career–Entrepreneurial Personality- **CO1**  
Characteristics of Successful Entrepreneurs–Knowledge and Skills of an Entrepreneur.

**UNIT II ENTREPRENEURIAL ENVIRONMENT 9**

Environment – Features – Types – Role of Family and Society – Entrepreneurship Development **CO2**  
Training and Other Support Organizational Services – Central and State Government Industrial Policies and Regulations – International Business.

**UNIT III BUSINESS PLAN PREPARATION 9**

Sources of Product for Business – Prefeasibility Study – Criteria for Selection of Product – **CO3**  
Ownership – Capital – Budgeting – Project Profile Preparation – Matching Entrepreneur with the Project – Fundamentals and components of a good feasibility plan – Project Profitability Analysis.

**UNIT IV LAUNCHING OF SMALL BUSINESS 9**

Functional areas of business - Finance and Human Resource Mobilisation - Operations Planning **CO4**  
- Market and Channel Selection-Growth Strategies -Product Launching–Incubation, Venture capital, Start-ups.

**UNIT V MANAGEMENT OF SMALL BUSINESS 9**

**Master of Business Administration R 2025-CBCS**

Monitoring and Evaluation of Business - Business Sickness - Prevention and Rehabilitation of Business Units -Effective Management of small Business-Case Studies. **CO5**

**TOTAL : 45 PERIODS**

**TEXT BOOKS**

1. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, NewDelhi, 2016.
2. R.D. Hisrich, Entrepreneurship, Tata Mc Graw Hill, New Delhi, 2018.
3. Rajeev Roy, Entrepreneurship, Oxford University Press, 2nd Edition, 2011.
4. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning, 2012

**REFERENCE BOOKS**

1. Dr. Vasant Desai, “Small Scale Industries and Entrepreneurship”, HPH, 2006.
2. Arya Kumar. Entrepreneurship, Pearson, 2012.
3. Prasanna Chandra, Projects Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 8th edition, 2017.

**COURSE OUTCOMES**

- CO1 To understand about Foundation of Entrepreneurship Development and its theories.
- CO2 To explore entrepreneurial skills and management function of a company with special reference to SME sector.
- CO3 To identify the type of entrepreneur and the steps involved in an entrepreneurial venture.
- CO4 To understand various steps involved in starting a venture and to explore marketing methods and new trends in entrepreneurship
- CO5 To analyse and to monitor the business effectively towards growth and development.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	3	3	3	2	2	-	3	3	3
CO2	3	3	3	3	1	-	3	3	3
CO3	3	3	3	3	1	-	3	3	3
CO4	3	3	3	3	1	-	3	3	3
CO5	3	3	3	3	1	-	3	3	3

**MB25N03**

**EVENT MANAGEMENT**

**L T P C**  
**3 0 0 3**

**OBJECTIVES**

- To cultivate the practice of planning, organizing, budgeting and controlling events right from the idea conception till the final execution.
- To instruct the application of financial, marketing, human resource and operational knowledge in effective management of events.
- To create an awareness about need of safety and ethical practices in an event.

**UNIT I EVENT CONTEXT**

**9**

History & Evolution–Types of events–MICE Types of Meeting, Trade Shows, Conventions, Exhibitions- Structure of event industry – Event Management as a profession –Perspectives on event: Government, Corporate & Community – Code of Ethics. **CO1**

**UNIT II EVENT PLANNING & LEGAL ISSUES**

**9**

**Master of Business Administration R 2025-CBCS**

Conceptualizing the event – Host, sponsor, Media, Guest, Participants, Spectators – Crew –Design of concept – Theme and content development – Visualization – Event objectives –Initial planning – Budgeting – Event design and budget checklist – Preparation of functional sheets–Timing– Contracts and Agreements–Insurance, Regulation, License and Permits –Negotiation. **CO2**

**UNIT III EVENT MARKETING 9**

Role of StrategicMarketingPlanning–Pricing–MarketingCommunicationMethods& budget – **CO3**  
 Elements of marketing communication – Managing Marketing Communication –Role of Internet – Sponsorship – Event sponsorship – Strategy – Managing Sponsorships –Measuring & Evaluating sponsorship.

**UNIT IV EVENT OPERATION 9**

Site Selection–Types of location–Venue Requirements–Room, Stage, Audi- Visual, Lighting, **CO4**  
 Performers, Decors, Caterer, Photography & Videography – Protocols – Guest list –Guest demographics – Children at event – Invitation – Media – Freelance Event Operation –Road show - Food & Beverage – Entertainment – Event Logistics – Supply of facilities –Onsite logistics– Control of event logistics– Evaluation & Logistics

**UNIT V SAFETY & EVENT EVALUATION 9**

Risk assessment–Safety officer, Medical Manager –Venue, Structural safety –Food safety – **CO5**  
 Occupational safety–Fire Prevention–Sanitary facilities–Vehicle traffic Waste Management Event Impact– Event Evaluation Process–Service Quality – Customer Satisfaction

**TOTAL: 45 PERIODS**

**TEXT BOOKS**

1. Lynn Van Der Wagen, Event Management for Tourism, Cultural Business & Sporting Events, 4th Edition, Pearson Publications, 2014.
2. Dr. Savita Sharma & Dr. Sidharth Srivastava , Event Planning and Management, The Hospitality Press,2024
3. Dr. Priya Sachdeva, Dr. Archan Mitra, Event Management: Emerging Techniques and Practices, I I P Iterative International Publishers,2024

**REFERENCE BOOKS**

1. Dr. Rama Sarraf, Dr Preeti ,A Textbook of Event Management: From Concept to Completion, Astitva Prakashan,2024
2. Dr. Anukrati Sharma and Dr. Shruti Arora ,Event Management and Marketing: Theory, Practical Approaches and Planning, Bharti Publications; 1st, New edition,2018
3. Shannon Kilkenny, The complete guide to successful event planning

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO 1** To understand the evolution of event management and their types.  
**CO 2** To create event plans and analyse various activities relating to implementation of events and create budgets.  
**CO 3** To apply marketing mix for various types of events and analyse the various sponsorship requirements for an event.  
**CO 4** To analyse the various event operations requirements for the conduct of an event.  
**CO 5** To evaluate the various risk and safety issues associated with the event industry.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)	PROGRAMME SPECIFIC OUTCOMES (PSOs)
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**Master of Business Administration R 2025-CBCS**

Layouts .Advanced Visualizations: Histograms, Box Plots, Heatmaps ,Exporting Plots

**TOTAL: 45 PERIODS**

**TEXT BOOKS**

1. Allen B. Downey, “Think Python: How to Think Like a Computer Scientist“, 2nd edition, Updated for Python 3, Shroff/O’Reilly Publishers, 2016 (<http://greenteapress.com/wp/thinkpython/>)
2. Guido van Rossum and Fred L. Drake Jr, — An Introduction to Python – Revised and updated for Python 3.2, Network Theory Ltd., 2011.
3. Reema Thareja, Python Programming: Using Problem Solving Approach, Oxford University Press, 2019

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO 1** Develop algorithmic solutions to simple computational problems  
**CO 2** Read, write, and execute simple Python programs.  
**CO 3** Structure simple Python programs for solving problems. Decompose a Python program into functions.  
**CO 4** Represent compound data using Python lists, tuples, and dictionaries.  
**CO 5** Develop the data visualizations using python

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	1	3	2	-	2	-	1	2	-
<b>CO2</b>	1	3	-	-	2	-	2	3	-
<b>CO3</b>	1	2	1	-	2	-	1	1	-
<b>CO4</b>	1	2	1	-	2	1	2	1	-
<b>CO5</b>	2	3	-	-	3	1	2	2	-

**MB25N05**

**R PROGRAMMING**

**L T P C**  
**3 0 0 3**

**OBJECTIVE:**

- The course provides a comprehensive understanding of R programming by covering its core concepts, control structures, data manipulation and statistical analysis, linear and advanced modeling techniques, and methods for time-series and clustering analysis.

**UNIT I INTRODUCTION**

**9**

R Programming, overview and History of R ,Data Structures, Getting Help, R Packages; Loading, Installing and Managing . Graphics in R.

**CO1**

**UNIT II CONTROL STRUCTURES**

**9**

. If-else-For loops-Nested for loops-While loop-repeat-next-break

**CO2**

**UNIT III DATA MANIPULATION AND ANALYSIS**

**9**

. Group manipulation - Data Reshaping - Manipulating Strings - Basic Statistics using (Summaries, Correlation, t-tests, ANOVA)

**CO3**

<b>UNIT IV</b>	<b>LINEAR MODELS USING R</b>	<b>9</b>
Linear Models - Simple and Multiple regression, GLM - Logit Regression, Model diagnostics- Residuals, Cross validation, Bootstrapping		<b>CO4</b>
<b>UNIT V</b>	<b>NON-LINEAR MODELS, TIME SERIES AND CLUSTERING USING</b>	<b>9</b>
Nonlinear Models - Non-Linear least square, Splines, Generalized Additive Models, Decision trees, Random forests. Time Series - Autoregressive moving average, VAR, GARCH. Clustering – K means, PAM and Hierarchical Clustering		<b>CO5</b>
		<b>TOTAL : 45 PERIODS</b>

**TEXT BOOKS**

1. Jared P.L., R for Everyone - Advanced Analytics and Graphics, Addison Wesley Data and Analytics series, 2015.
2. Gardener, Mark. Beginning R: the statistical programming language. John Wiley & Sons, 2012.
3. Zumel, Nina, John Mount, and Jim Porzak. Practical data science with R. Manning, 2014

**REFERENCE BOOKS**

1. Sandip Rakshit, R Programming for Beginners, McGraw Hill Education, 2017.
2. Wickham, Hadley, and Garrett Golemund. "R for Data Science": Import, Tidy, Transform, Visualize, and Model Data. " O'Reilly Media, Inc.", 2016.
3. Matloff, Norman. The art of R programming: A tour of statistical software design. No Starch Press, 2011.
4. Garrett Golemund (2014), Hands-On Programming with R: Write your own functions and simulations, O'Reilly Publications.
5. Richard Cotton (2013), Learning R: A step-by-step function guide to Data Analysis, O'Reilly Publications.
6. Winston Chang (2018), R Graphics Cookbook, Second Edition, O'Reilly Publications

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

- CO1** Know about R programming overview.
- CO2** To apply the R functions, statements and loops in analyses
- CO3** To evaluate the basic statistical analytics like summary correlation, t-tests and ANOVA.
- CO4** To create the linear models using R in solving the business programs.
- CO5** To enhance the knowledge on Non-linear models in applying them to solve the organizational Problems.

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	-	2	1	-	-	-	-	-	-
<b>CO2</b>	-	3	2	-	-	-	-	-	-
<b>CO3</b>	-	2	2	-	-	-	-	-	-
<b>CO4</b>	-	3	1	-	-	-	-	-	-
<b>CO5</b>	-	2	3	-	-	-	-	-	-



**COURSE OUTCOMES**

Upon completion of the course, students will be able to

- CO1** To understand sustainability management as an approach to aid in evaluating and minimizing environmental impacts while achieving the expected social impact
- CO2** To apply sustainability into strategic planning and regular business practices
- CO3** To apply and evaluate sustainability management strategies
- CO4** Knowledge of innovative practices in sustainable business and community management
- CO5** Deep understanding of sustainable management of resources and commodities

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO1</b>	3	2	2	1	-	-	-	3	
<b>CO2</b>	3	2	2	1	-	-	-	3	
<b>CO3</b>	3	2	2	1	-	-	-	3	
<b>CO4</b>	3	2	2	1	-	-	-	3	
<b>CO5</b>	3	2	2	1	-	-	-	3	

**ENHANCED LEARNING EXPERIENCE**

**MB25E11**

**PROFIT CHALLENGE**

**L T P C**  
**0 0 4 2**

**OBJECTIVES:**

- To develop essential skills for forming and operating a startup, Gain hands-on experience in resource allocation, market research, and sales strategies.
- To understand the importance of financial accountability, learn the challenges and develop actionable steps for business growth.

**ACTIVITIES:**

- Team Formation
- Market Research
- Budget planning
- Procurement Process
- Marketing and Sales Execution
- Financial Reporting
- Final Presentation
- Report submission

**TOTAL PERIODS: 60**

**NOTE:**

Each group of students (minimum 4 & maximum 6) have to do a business and prepare a report and present to the department.

**COURSE OUTCOMES:**

Upon completion of the course, students will be able to

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- CO1** Create and execute a basic business model as a team.
- CO2** Engage in market research, purchasing, and sales processes.
- CO3** Maintain accurate records of financial transactions and analyze profit/loss outcomes.
- CO4** Reflect on and apply ethical and responsible business practices.
- CO5** Document and present challenges faced and learning outcomes, with plans for future growth.

### MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO1	PSO2	PSO3
<b>CO1</b>	1	2	2	1	1	1	1	-	1
<b>CO2</b>	1	2	3	1	1	1	1	-	1
<b>CO3</b>	1	2	2	1	1	1	1	-	1
<b>CO4</b>	1	2	2	1	1	1	1	-	1
<b>CO5</b>	1	2	2	1	1	1	1	-	1

**MB25E12**

**SECTORAL SEMINAR**

**L T P C**  
**0 0 4 2**

### OBJECTIVES:

- Introduction to major industry sectors, their structures, and key operational dynamics.
- Explore challenges, trends, and technological advancements in different sectors.
- Facilitate critical thinking and understanding of sector-specific regulatory, environmental, and economic factors.
- Enhance presentation and communication skills through sector-specific presentations and discussions.

### SECTORS

1. Manufacturing Sector
2. Information Technology & ITES
3. Healthcare and Pharmaceutical Sector
4. Banking, Financial Services, and Insurance
5. Retail and E-commerce
6. Energy and Environment Sector
7. Tourism and Hospitality Sector
8. Agribusiness and Food Processing Sector

**TOTAL PERIODS: 60**

### NOTE:

Each group of students (minimum 4 & maximum 6) have to prepare a report and present a detailed analysis of a sector of their choice, including: Key trends, challenges, and opportunities within the sector with real-world case examples.

### COURSE OUTCOMES:

**Upon completion of the course, students will be able to**

- CO1** Gain in-depth knowledge of various sectors and current trends.
- CO2** Analyze sector-specific challenges and opportunities.

## Master of Business Administration R 2025-CBCS

- CO3 Apply theoretical knowledge to real-world industry cases.
- CO4 Deliver presentations and participate in discussions on specific industry insights.
- CO5 Formulate strategies for industry-specific problems.

### MAPPING OF COs WITH POs AND PSOs

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO1	PSO2	PSO3
CO1	1	2	2	1	1	1	1	-	1
CO2	1	2	3	1	1	1	1	-	1
CO3	1	2	2	1	1	1	1	-	1
CO4	1	2	2	1	1	1	1	-	1
CO5	1	2	2	1	1	1	1	-	1

MB25E21

OUTBOUND TRAINING

L T P C  
0 0 4 2

#### OBJECTIVES:

- To provide experiential learning through outbound activities to foster critical thinking, decision-making, adaptability, develop leadership qualities, enhance teamwork and collaboration skills,
- To train students in stress management and enhance emotional stability, cultivate creativity and problem-solving skills.

#### ACTIVITIES:

##### 1. Experiential Learning and Outbound Training:

- Goal Setting and Personal Development Plans: Ice-breaking and Trust-building Activities

##### 2. Leadership Development

- Obstacle Course and Decision-Making Drills: Leadership under pressure, quick decision-making, and delegation.
- Role-playing for Conflict Resolution: Managing conflicts, negotiation, and communication skills.

##### 3 Team Collaboration and Communication

- Team-based Problem-solving Challenges: Communication, collaboration, and leveraging team members' strengths.
- Raft Building or Bridge-Building Challenge: Team collaboration, time management, resource allocation

##### 4 Stress Management and Emotional Resilience

- High Ropes Course or Zip Lining Challenge: Overcoming fear, managing stress, staying focused under pressure.

##### 5. Creativity and Problem-Solving

- Survival Challenge: Creativity, resourcefulness, adaptability.
- Management Games and Strategy Simulations: Strategic planning, critical thinking, and innovation.

##### 6. Reflection and Personal Growth Assessment

- Personal Growth Presentation: Individual presentations on skills developed, insights gained, and personal growth achieved.

**TOTAL PERIODS: 60**

**COURSE OUTCOMES:**

Upon completion of the course, students will be able to

- CO1 Demonstrate enhanced leadership, teamwork, and decision-making abilities.
- CO2 Exhibit improved skills in managing stress and emotions under pressure.
- CO3 Collaborate effectively within teams to achieve common goals.
- CO4 Apply creative and analytical thinking to solve complex problems
- CO5 Reflect on personal growth and skills acquired through each activity.

**MAPPING OF COs WITH POs AND PSOs**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PSO1	PSO2	PSO3
CO1	-	-	-	-	1	1	-	-	-
CO2	-	-	-	-	2	1	1	2	1
CO3	1	-	1	1	-	1	1	1	1
CO4	1	1	-	-	1	-	1	-	-
CO5	-	-	1	-	-	-	-	1	-

MB25E22

RURAL ENGAGEMENT PROGRAMME

L T P C  
0 0 4 2

**OBJECTIVES:**

- To enable the learners in understanding of the basic needs of Rural Engagement
- To foster engagement with rural communities, encouraging students understand rural issues through immersive experiences.

**ACTIVITIES:**

- 1 Health awareness programs
- 2 Skill Development Training - vocational training
- 3 Environmental Conservation Projects
- 4 Rural Entrepreneurship Development
- 5 Creating awareness about government schemes
- 6 Organize visits to rural projects

**Note:** Group of minimum 4 and Maximum 6 students have to do the activity and submit a report based on identified topic.

**TOTAL PERIODS: 60**

**COURSE OUTCOMES:**

Upon completion of the course, students will be able to

- CO1 Create health and hygienic environment for the society
- CO2 Organise Skill development programmes, Environmental Conservation projects
- CO3 Interact with the rural Entrepreneurs

**MAPPING OF Cos WITH POs AND PSOs**

Cos	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
CO1	1	1	2	2	1	1	2	2	0
CO2	1	1	2	2	1	1	2	2	0
CO3	1	1	2	2	1	1	2	2	0

**MB25E23**

**SOCIALLY SIGNIFICANT PROJECTS**

**L T P C**  
**0 0 4 2**

**OBJECTIVE:**

- To develop skills for planning and executing projects that address societal issues, foster innovation and collaboration in creating impactful solutions for community development.
1. Government schemes in different sectors
  2. Healthcare
  3. Environment
  4. Disaster Management
  5. Micro and Small Scale Enterprises
  6. Tribal Culture - Problems and Prospects
  7. Rural Women Entrepreneurs
  8. Cyber crimes
  9. Green energy
  10. Waste management
  11. Empowering Differently Abled
  12. Digital Capability

**Note :** Group of minimum 4 and Maximum 6 students have to do the study and submit a report based on identified topic

**TOTAL PERIODS: 60**

**COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

CO1 Create critical understanding of the societal problems, challenges

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	2	2	2	3	3	3	1	1	1

**MB25E31**

**CONSULTING SERVICE FOR LOCAL BUSINESS**

**L T P C**  
**0 0 4 2**

- To understand the concepts and benefits of effective consulting service for small business.
- To analyse the local business establishment and development insights.

**ACTIVITIES:**

**1. Business Analysis and Goal Setting:**

- Visit local business unit and map out the core elements of the business model, including value proposition, customer segments, and revenue streams.

**2. Market Analysis and Customer Insights**

- Market segmentation, trends, and competitive analysis.
- Creating personas using data from surveys and research.

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- SWOT analysis, PESTLE analysis, and Porter's Five Forces.
- Conducting a customer insight survey and analyzing results.

**3. Process Improvement and Operational Efficiency**

- Resource allocation, task prioritization, and process mapping.
- Identifying non-value-added activities and optimizing workflows.
- Evaluating the operational efficiency of a chosen business unit.

**4. Financial Planning and Budgeting**

- Build a cash flow forecast based on revenue and expense patterns and calculate break-even point for products/services.

**5. Growth and Scaling**

- Identify strategies for expanding products/services or market reach.

**TOTAL PERIODS: 60**

**COURSE OUTCOMES:**

**Upon completion of the course, students will be able to**

- CO 1** Provide insights on Consulting service on business.
- CO 2** Understand effective methods of market analysis and consumer insight
- CO 3** Understand the process of improvement and grab the opportunities.
- CO 4** Understand the integration of various departments with finance department.
- CO 5** Analyze the growth and scale up business

**MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
<b>CO 1</b>	1	1	1	1	-	2	1	1	1
<b>CO 2</b>	2	2	1	1	-	2	2	1	2
<b>CO 3</b>	1	1	2	2	-	2	1	2	2
<b>CO 4</b>	1	1	2	2	-	2	2	1	1
<b>CO 5</b>	2	2	1	2	-	2	1	1	1

**MB25E32**

**CREATIVITY AND INNOVATION**

**L T P C**

**0 0 4 2**

**OBJECTIVES:**

- To develop creative thinking skills through a variety of hands-on exercises and role-play sessions.
- Explore design thinking as a structured approach to problem-solving and encourage strategic thinking around innovation for achieving competitive advantage.

**ACTIVITIES**

1. Introduction to Creativity and Innovation: Brainstorming exercises
2. Creative Thinking Techniques: Role-play sessions, lateral thinking exercises, mind mapping workshops.
3. Design Thinking and Problem-Solving: Empathy mapping, ideation, prototyping, and testing workshops.
4. Managing Innovation in Organizations: Team simulations, organizational change case studies, peer

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feedback sessions.

5. Strategic Innovation and Competitive Advantage: group projects on innovative business model.

**TOTAL PERIODS: 60**

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### **COURSE OUTCOMES**

**Upon completion of the course, students will be able to**

**CO 1** Apply creative thinking techniques to generate new ideas and solve complex problems.

**CO 2** Formulate strategic innovation projects that enhance competitive advantage.

### **MAPPING OF COs WITH PO AND PSO**

COs	PROGRAMME OUTCOMES (POs)						PROGRAMME SPECIFIC OUTCOMES (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PS01	PS02	PS03
CO1	-	2	1	1	-	-	-	-	-
CO2	-	2	1	1	-	-	-	-	-

