MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(Deemed to be University)

MADANAPALLE

www.mits.ac.in

Department of Management Studies

Course Structure

&

Detailed Syllabi (R25)

For the students admitted to

Master of Business Administration from the Academic Year 2025 – 26 Batch onwards

MBA Regular Two Year P.G. Degree Course

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(Deemed to be University)

MADANAPALLE

MBA Two Year Curriculum Structure

Total Credits	86 Credits for 2025 Admitted Batch onwards

MBA - I YEAR I SEMESTER

S. No	COURSE CODE	I YEAR I SEMESTER COURSES	L	T	P	C
1	25MCMBATC01	Management and Workplace Behavior	3	0	0	3
2	25MCMBATC02	Business and Regulatory Environment	3	0	0	3
3	25MCMBATC03	Corporate Economics and Decision Making	3	0	0	3
4	25MCMBATC04	Financial Accounting and Analysis	3	1	0	4
5	25MCMBATC05	Entrepreneurship and Design Thinking	2	0	0	2
6	25MCMBATC06	Human Capital Management	3	0	0	3
7	25MCMBAEC01	Statistical Analysis for Business	2	0	2	3
8	25MCMBASC01	Data Analytics Using Excel and GS	1	0	2	2
9		**Audit Course I** *(Refer ANNEXURE - I)*	2	0	0	0
Sub Total			**22**	**1**	**4**	**23**

MBA - I YEAR II SEMESTER

S. No	COURSE CODE	I YEAR II SEMESTER COURSES	L	T	P	C
1	25MCMBATC07	Finance for Business Leaders	3	0	0	3
2	25MCMBATC08	Marketing Strategy and Planning	3	0	0	3
3	25MCMBATC09	Production and Operations Management	3	1	0	4
4	25MCMBATC10	Strategic Management	3	0	0	3
5	25MCMBAEC02	Business Data Analytics	2	0	2	3
6	25MCMBAEC03	Business Research and Econometrics	3	0	2	4
7	25MCENGSC01	Corporate Communication	1	0	2	2
8	25MCMBAPC01	Rural Immersion Project	0	0	2	1
9		**Audit Course II** *(Refer ANNEXURE - I)*	2	0	0	0
Sub Total			**20**	**1**	**8**	**23**

(L = Lecture, T = Tutorial, P = Practical, C = Credit

II Year I Semester (Tentative Structure)

S.No	COURSE CODE	II YEAR I SEMESTER COURSES	L	T	P	C
1	25MCMBATC11	Operations Research	3	1	0	4
2		Generic Elective I	2	0	0	2
3		Major – I	3	0	0	3
4		Major – II	3	0	0	3
5		Major - III	3	0	0	3
6		Minor – I	3	0	0	3
7		Minor – II	3	0	0	3
8	25MCMBAIC01	Internship*	0	0	4	2
Sub Total			**20**	**1**	**4**	**23**

* 6 Weeks Internship during I Year II Semester Summer Break and to be evaluated in II Year I Semester

II Year II Semester (Tentative Structure)

S.No	Course Code	II Year II SEMESTER COURSES	L	T	P	C
1		Major – IV	3	0	0	3
2		Minor – III	3	0	0	3
3		Open Elective - I	2	0	0	2
4	25MCMBAPC02	Comprehensive Project Work	0	0	18	9
Sub Total			**8**	**0**	**18**	**17**
Grand Total						**86**

(L = Lecture, T = Tutorial, P = Practical, C = Credit

ANNEXURE – I

LIST OF AUDIT COURSES

Audit Course I		
S. No	**Course Code**	**Course Title**
1.	25MCMBAAC01	E-Commerce and Digital Markets
2.	25MCMBAAC02	Managing Digital Innovation and Transformation
3.	25MCMBAAC03	Management Information Systems
4.	25MCMBAAC04	Business Process Re-Engineering
Audit Course II		
1.	25MCMBAAC05	Total Quality Management
2.	25MCMBAAC06	Multimedia Technologies
3.	25MCMBAAC07	Data Analysis using R
4.	25MCMBAAC08	Indian Traditional Knowledge

MBA I Year I Semester

25MCMBATC01 MANAGEMENT AND WORKPLACE BEHAVIOUR

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

Pre-requisite: **None**

Course Description: This course Provides an overview of management and organizational behavior, covering managerial functions, leadership, individual and group dynamics, ethics, and workplace well-being. Emphasizes practical strategies for improving organizational effectiveness through case studies and applications.

Course Objectives:

1. Identify key concepts and terminologies related to management, individual and group behaviour, and organizational dynamics.
2. Explain the roles and interrelationships of managerial functions in achieving organizational goals.
3. Demonstrate the use of behavioural theories to interpret individual actions and workplace responses.
4. Examine group dynamics, leadership styles, and communication patterns influencing team performance.
5. Assess organizational practices and well-being initiatives using evidence-based frameworks for enhancing employee outcomes.

UNIT I FOUNDATIONS OF MANAGEMENT 9 hours

Concept & Evolution of Management, Comparative Management Styles and approaches, Benchmarking & Best Practices, Management Levels & Roles, Hybrid Workplace & Challenges, Ethics & Social Responsibility, Management: Art or Science or Profession; Organization vs Administrations Management

UNIT II MANAGERIAL FUNCTIONS 9 hours

Planning**:** Process, problems, essentials, MBO (concept & applications), Organizing**:** Process, design, structure determinants, authority & responsibility, delegation, centralization vs decentralization, span of control; structures – Line & Staff, Functional, Divisional, Matrix, Network. Decision-Making**:** Process & techniques., Controlling**:** Process and techniques

UNIT III INDIVIDUAL BEHAVIOUR 9 hours

Human Behavior in Organizations – Nature & Scope, Personality: Major traits & types, Johari Window, Perception: Process & factors, Attitude – overview & workplace implications, Learning in organizations – key theories & applications, Concept and Theories of Motivation

UNIT IV GROUP BEHAVIOUR 9 hours

Groups-Types & formation of groups, group norms, cohesiveness, effectiveness. Conflict: Types & basic resolution methods (brief on Transactional Analysis), Leadership: Overview of styles & major theories – Likert's System Theory, Managerial Grid. Women in Leadership-Indian context

UNIT V ORGANIZATIONAL BEHAVIOUR & WORKPLACE WELL-BEING **9 hours**

Stress Management: Sources, consequences, coping strategies, Work–Life Balance (overview & best practices). Organizational Culture: Concept, types, sustaining culture, Organizational Climate vs Culture – differences & significance.

Course Outcomes:

CO1: Able to recall and define foundational concepts, terminologies, and principles of management and organizational behaviour.

CO2: Explain the interrelated functions of management and their contribution to organizational effectiveness.

CO3: Apply behavioral theories to interpret individual actions and workplace responses in varied organizational contexts.

CO4: Critically examine group dynamics, leadership approaches, and communication strategies influencing team outcomes.

CO5: Assess organizational practices and workplace well-being initiatives using evidence-based frameworks to recommend improvements.

Text Books:

1. Harold Koontz, Heinz Weihrich, Mark V. Cannice, (2020), Essentials of Management McGraw Hill Education (India) Private Limited
2. Stephen P. Robbins, Mary Coulter, Agna Fernandez, (2018) Management, Pearson Education

Reference Books:

1. John W. Newstrom, Organizational Behaviour: Human Behaviour at Work, , Tata McGraw Hill, 2017
2. Jerald Green Berg & Robert A. Baron(2010) Behavior in Organizations, , Pearson Education,
3. Subbarao P(2017) Management and Organizational Behaviour, Himalaya Publishing House

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year I Semester

25MCMBATC02 BUSINESS AND REGULATORY ENVIRONMENT

L	T	P	C
3	0	0	3

Pre-requisite: **None**

Course Description:

This course provides a foundational understanding of the external environment and legal framework impacting business operations in India. It explores key economic policies, regulatory institutions, and analytical tools like PESTEL and SWOT. The legal segment covers essential business laws including contract law, partnership, agency, and major commercial legislations. The course aims to equip students with the skills to make informed and legally compliant business decisions in a dynamic economic landscape

Course Objectives

1. To enable students to recall key concepts, terminologies, and legal provisions related to the Indian business environment, environmental policies, and foundational business laws.
2. To facilitate comprehension of the interrelationship between business operations and legal frameworks, including environmental regulations, contract law, and partnership structures.
3. To equip students with the ability to apply legal principles to real-world scenarios involving contracts, agency relationships, and business partnerships.
4. To develop analytical skills for examining the implications of business laws and environmental policies on organizational decision-making and stakeholder responsibilities.
5. To encourage critical evaluation of legal cases, policy frameworks, and ethical considerations in the Indian business context, enabling informed judgments and recommendations.

UNIT I INTRODUCTION TO BUSINESS ENVIRONMENT **9 hours**

Definition, Scope and Significance of Business Environment - Components of Business Environment - Environmental analysis: Need and importance – Techniques of environmental analysis: PESTEL analysis – SWOT analysis.

UNIT II POLICIES RELATED TO ENVIRONMENT **9 hours**

Economic Environment of Business – Introduction to economic systems – Indian Economy – Basic Characteristics of Indian Economy; Economic Planning – Objectives & Strategies of Economic Planning. NITI AYOG, GST, Industrial Policy Resolutions – 1948, 1956, 1991 (NIP) and FEMA. - Monetary Policy – Fiscal Policy

UNIT III LAW OF CONTRACT **9 hours**

Indian contract Act, 1872: Contract Element of valid contract: Offer and Acceptance, Consideration Capacity to contract, Free consent, Coercion, undue influence, Misrepresentation, fraud, Legality of the object - classification of contract-performance of contract - Discharge of contract – breach of contract Quasi contract .

UNIT IV AGENCY AND PARTNERSHIP **9 hours**

Law of Agency: Essentials, kinds of agents, Rights and Duties of Agent and Principal, Creation of Agency, Termination of Agency. Law of Partnership 1932: Definition, Essentials of Partnership, Formation of Partnerships, Kinds of Partners, Authorities, Rights and Liabilities of Partners, Registration of Partnership, Dissolution of Partnership Firm

UNIT V BUSINESS LAWS IN INDIA **9 hours**

Sale of goods Act, 1930 – Negotiable Instruments Act, 1881- Limited liability partnership (LLP) act, 2008 - Consumer Protection Act, 2019-Competition Act, 2002 – Companies Act, 2013 – Information Technology Act, 2000.

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Recall key concepts, definitions, and foundational theories relevant to the subject.
CO2: Explain the principles and processes underlying core topics using appropriate examples.
CO3: Use theoretical frameworks to solve structured problems or analyse case scenarios.
CO4: Examine data, arguments, or models to identify patterns, relationships, or inconsistencies.
CO5: Critically assess alternative approaches or design original solutions based on evidence and reasoning.

Text Books:

1. Kapoor, N. D. (2023). *Elements of Mercantile Law* (30th ed.). New Delhi: Sultan Chand & Sons.
2. Pathak, A. (2020). *Legal Aspects of Business* (7th ed.). New Delhi: Tata McGraw Hill Education.
3. Paul, J. (2021). *Business Environment: Text and Cases* (4th ed.). New Delhi: McGraw Hill Education.
4. Fernando, A. C. (2020). *Business Environment* (2nd ed.). New Delhi: Pearson Education India.
5. Tulsian, P. C., & Tulsian, B. (2022). *Business Law* (3rd ed.). New Delhi: Tata McGraw Hill Education
6. Cherunilam, Francis (2021): *Business Environment*, Himalaya Publishing House

Reference Books:

1. Tulsian, P. C. (2022). Business Law. Tata McGraw Hill.
2. Fernando, A. C. (2020). Business Environment. Pearson Education.
3. Ghosh, P. K. & Kapoor, G. K. (2021). Business and Corporate Laws. New Age International Publishers.

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year I Semester

25MCMBATC03 CORPORATE ECONOMICS AND DECISION MAKING

L	T	P	C
3	0	0	3

Pre-requisite: None

Course Description:

Managerial Economics applies economic principles to business decisions, covering demand and supply analysis, cost and production functions, market structures with pricing strategies, optimization techniques, elasticity, forecasting, and break-even analysis. It also reviews key economic indicators such as Inflation, and the Consumer Price Index to guide managerial choices

Course Objectives:

1. Describe the scope, significance, and core principles of managerial economics in business decision-making.
2. Apply demand and supply analysis to interpret market dynamics and forecast equilibrium outcomes.
3. Analyse cost behaviour and production functions to determine optimal input-output combinations and efficiency.
4. Evaluate different market structures and pricing strategies to assess their impact on firm performance and consumer welfare.
5. Design strategic business responses using macroeconomic indicators such as GDP, inflation, and interest rates.

UNIT I INTRODUCTION TO MANAGERIAL ECONOMICS 9 hours

Economics: Nature, Scope, and Significance - Relationship with Other Areas: Production Management, Marketing, Finance, and Personnel - Role of Managerial Economist in the Modern Business World - Objectives of the Firm and introduction to Optimization Techniques - Economic Principles: Opportunity Cost, Incremental Concept, Scarcity, Marginalism, Equi-Marginalism, Time Perspective, Discounting Principle, Risk, and Uncertainty

UNIT II THEORY OF DEMAND AND SUPPLY 9 hours

Demand Analysis: Significance, Determinants, Demand Functions, Law of Demand, Exceptions to the Law of Demand, Elasticity of Demand (Types) - Demand Forecasting: Need and Techniques – Supply Analysis: Supply Function, Law of Supply, Elasticity of Supply.

UNIT III COST AND PRODUCTION ANALYSIS 9 hours

Cost concepts and Cost-Output Relationship, Economies of Scale and Scope, Production Function - Short-and long run production functions, Isoquant types & Properties, Laws of returns to scale, ISO-Cost line, least cost combination factor and Cobb-Douglas Production Function.

UNIT IV MARKET STRUCTURE AND PRICING PRACTICES 9 hours

Competitive Situations: Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly (Short Run and Long Run) - Pricing Methods: Cost-Based, Demand-Based, Competition-Based, Other Pricing, Methods - Break-Even Analysis: Meaning, Assumptions, Determination, Limitations, Uses in Managerial Decisions (Simple Problems)

UNIT V ECONOMIC INDICATORS 9 hours

National Income: Concepts and various methods of its measurement – Gross Domestic Product, Gross National Income, Gross National Product, Per Capita Income, Consumer Price Index and Inflation– Meaning, Definition, Significance and Types.

Course Outcomes:

CO1: Explain the scope, principles, and relevance of managerial economics in business decision-making.
CO2: Apply demand and supply concepts to analyze market behaviour and predict equilibrium changes.
CO3: Analyze cost structures and production functions to determine optimal resource utilization and output levels.
CO4: Evaluate various market structures and pricing strategies to assess their implications for firm strategy and consumer welfare.
CO5: Develop strategic business insights by integrating macroeconomic indicators into managerial planning and forecasting.

Text Books:

1. Ivan k Cohen (2015); Economics for Business: A guide to decision making in a complex global macro economy; Kogan Page Ltd; 1st edition
   Mehta, P.L(2013); Managerial Economics Analysis, Problems and Cases;: S. Chand & Co Publisher
2. Hirschey, Mark (2009), "Fundamentals of Managerial Economics", 9th edition, Cengage Learning.
3. Suma Damodaran(2010); "Managerial Economics", Oxford University Press.2nd Edition
4. G.S. Gupta,(2017) "Managerial Economics", Tata McGraw-Hill.2nd Edition

Reference Books:

1. DN Dwidvedi, Managerial Economics, Vikas, New Delhi
2. Dean,Joel: Managerial Economics, PHI., New Delhi
3. Trivedi M.L: Managerial Economics, Theory and Applications, Tata McGraw-Hill.2nd Edition
4. Mark Hirschey(2010), Managerial Economics: An Integrative Approach, Cengage Learning New Edition

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year I Semester

25MCMBATC04 FINANCIAL ACCOUNTING AND ANALYSIS

L	T	P	C
3	1	0	4

Pre-requisite: None

Course Description:

This course will acquaint the students with the language of accounting and develop the ability to read, analyze, interpret, and use accounting data as an aid to decision making. Emphasis is laid on analysis and utilization of financial and accounting data for planning, controlling,
problem solving and decision making in the financial area

Course Objectives:

1. Explain the fundamental principles, concepts, and regulatory framework of financial accounting.
2. Apply accounting procedures to prepare final accounts including trading, profit & loss, and balance sheet.
3. Analyze financial statements using ratio analysis and other tools to assess organizational performance.
4. Evaluate cost structures and profit relationships to support managerial decision- making under varying business scenarios.
5. Design and operate computerized accounting systems using relevant software to automate financial processes and reporting.

UNIT I INTRODUCTION TO FINANCIAL ACCOUNTING 12 hours

Nature and Scope of Accounting – Need for Accounting – Definition, Functions and Branches of Accounting - Accounting concepts & conventions - Uses and users of accounting information - Generally Accepted Accounting Principles – Accounting Standards [Issued by ICAI] – IGAAP, IFRS The role of Accounting in global business environment. The Accounting Process: Brief overview of Accounting Cycle - Recording of business transaction, classification of accounts, the double entry system, journal, Ledger, subsidiary books and trail balance.

UNIT II PREPARATION OF FINAL ACCOUNTS 12 hours

Classification of capital and revenue expenses - Final Accounts of Joint Stock Companies – contents, and preparation of Trading and Profit and Loss Account, Profit and Loss Appropriation Account and Balance sheet with adjustments as per Schedule III of the Companies Act, 2013, Provisions for Statutory Audit. (horizontal and vertical form)

UNIT III FINANCIAL STATEMENT ANALYSIS 12 hours

Financial Statement Analysis- Objectives - Need – Importance -tools and techniques - Funds flow statement Cash Flow Statement – Ratio Analysis – Meaning, Need, Advantages and Limitations of Ratio Analysis, Classification of Ratios

UNIT IV COST-VOLUME-PROFIT ANALYSIS 12 hours

Cost, Costing, Cost Control, and Cost Reduction; Elements of Cost, Components of total Cost, Cost Sheet– Absorption costing and Marginal Costing - Cost-Volume-Profit Analysis: Contribution, Profit-Volume Ratio, Margin of safety, Cost Breakeven Point, Composite Break-even Point, Cash Break- even Point, Key Factor, Break-even Analysis. Relevant Costs and Decision Making

UNIT V COMPUTERISED ACCOUNTING SYSTEM 12 hours

Need and Requirements of Computerized Accounting – Features, Merits and Demerits of Computerized Accounting – Process of Computerized Accounting – Differences between Manual Accounting System and Computerized Accounting System - Components of Computerized Accounting system – Computerized Accounting Package – Tally – Features of Tally – Recording of Business Transactions through Tally.

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Explain the principles, concepts, and regulatory framework of financial accounting and its role in business operations.

CO2: Prepare final accounts including trading, profit & loss, and balance sheet using standard accounting procedures.

CO3: Analyze financial statements using ratio analysis and comparative techniques to assess organizational performance.

CO4: Evaluate cost-volume-profit relationships to support managerial decisions under varying business scenarios.

CO5: Develop and operate computerized accounting systems using relevant software to automate financial processes and reporting.

Text Books:

1. Narayanaswamy, R(2023),. Financial accounting - A management perspective, 7th edition, Tata McGraw-Hill.2nd Edition.
2. P C Tulsian, Bharat Tulsian, (2023); Financial Accounting Tushar Tulsian Edition
3. Maheshwari S.N. & Maheshwari S.K(2024)., "An Introduction to Accountancy", 14th Edition, Vikas Publishing House.

Reference Books:

1. S. P. Jain and K. L. Narang(2024); Financial Accounting, Kalyani Publishers.
2. Ashish K. Bhattacharya(2022); "Essentials of Financial Accounting", 6th Edition, , PHI, New Delhi.
3. Gupta R. L & Radhaswamy M(202); "Advanced Accountancy", 13th Edition, 2, Sultan Chand Publications

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year I Semester

25MCMBATC05 ENTREPRENUERSHIP AND DESIGN THINKING

L	T	P	C
2	0	0	2

Pre-requisite: None

Course Description:

Entrepreneurship and Design Thinking is a dynamic course that blends creative problem-solving with strategic business development. It introduces students to the principles of design thinking—empathy, ideation, prototyping, and testing—while cultivating an entrepreneurial mindset geared toward innovation and impact. Through hands-on projects, Case Studies, and Collaborative Exercises, Learners explore how to identify real-world challenges, generate user-centered solutions, and transform ideas into viable ventures. This course empowers aspiring entrepreneurs, designers, and change makers to think boldly, act iteratively, and build with purpose in today's fast-evolving world

Course Objectives:

1. Explain the core concepts, traits, and roles of entrepreneurs in economic development
2. Develop a comprehensive business plan integrating ethical and sustainable practices
3. Analyze various business models and evaluate funding options for venture growth
4. Apply design thinking principles to identify user-centric problems and opportunities
5. Construct innovative entrepreneurial solutions using iterative design thinking tools

UNIT I INTRODUCTION TO ENTREPRENEURSHIP 9 hours

Introduction to entrepreneurship: Definition, significance, features and motivation theories for entrepreneurs and key concepts. Historical perspectives and success stories in entrepreneurship -Role of science and technology in driving innovation and economic development: **Opportunity Identification and Evaluation** Evaluating market potential, customer needs, and competitive landscape -Techniques for assessing feasibility and viability of business ventures

UNIT II BUSINESS DEVELOPMENT PLAN AND ETHICAL ENTREPRENEURSHIP 9 hours

Crafting a Comprehensive Business Plan, Components of a Business Plan: Executive Summary, Market Analysis, Financial Projections, Operational Plan, Structuring and Formatting: Professional layout and documentation standards-Team Composition and Dynamics: Roles in start-ups (founders, advisors early hires), Psychological safety and trust-building, Hiring and Retention: Recruitment strategies for early-stage ventures, Incentivization: equity, benefits, and growth paths, Culture Creation: Innovation, collaboration, and learning, Preserving culture during scaling and transitions Ethical Entrepreneurship and Responsible Innovation, Ethical Considerations: Privacy, data security, and social impact, Stakeholder responsibility and transparency, Responsible Innovation: Environmental sustainability, Inclusivity and ethical design principles, Case Studies: Real-world dilemmas and decision-making frameworks.

UNIT III BUSINESS MODELS, FUNDING AND INVESTMENT STRATEGIES 9 hours

Understanding different types of business models and revenue streams - developing innovative business models -Lean start-ups methodology and iterative approach to business model refinement. **Market Analysis and Validation**-Techniques for conducting market research and Analysis-Customer segmentation, persona development, and value proposition Design-Lean experimentation and MVP (Minimum Viable Product) testing for market validation. **Funding and Investment Strategies**-Overview of funding options for ventures: Grants, equity financing, debt financing Pitching to investors: Crafting a pitch deck and delivering an effective pitch presentation-Due diligence process and negotiation strategies in securing investment

UNIT IV INTRODUCTION TO DESIGN THINKING 9 hours

Evolution and Critical Perspectives of Design Thinking - Open-mindedness; Developing Design Thinking Mindset; Principles of Design Thinking; Primer on Design Thinking; Advanced Standards and IDEO. Definition and Components of Empathy; Steps in Empathy process; Assessment tools; Roots of Empathy (Case studies) Innovation Creativity, Divergent and Convergent Thinking Models, Ideation Techniques - Role-play; Brainstorming; Analyzing; Synthesizing and integrating the ideas. Mind-mapping the experiences, Flaring & Focus; Impact of Visuals; Exploring resources, Timeline. and Competitive uniqueness; Building artifacts; Real time evaluation; Bringing idea to the life. Testing and feedback

UNIT V DESIGN THINKING APPLICATIONS IN ENTREPRENUERSHIP 9 hours

Design Thinking Mind-set for Entrepreneurs, Embracing ambiguity and failure, Bias toward action and experimentation, Reframing problems as opportunities, Empathy and User-Centric Discovery, Techniques: interviews, observation, immersion, Empathy maps and persona development, Identifying unmet needs and pain points, Opportunity Identification through Design Thinking, Problem-solution fit, Mapping stakeholder journeys, Defining a compelling problem statement, Case Studies and Applications, Real-world examples of start-ups using design thinking, Social entrepreneurship and inclusive innovation- Lessons from Creative Business Legends: CEOs of Alibaba, Facebook, Apple, Microsoft, Space-X etc.

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Demonstrate understanding of entrepreneurial traits, functions, and their impact on economic systems.

CO2: Design and present a viable business plan incorporating ethical values and sustainability principles.

CO3: Critically assess business models and appraise funding mechanisms for entrepreneurial ventures

CO4: Employ design thinking techniques to discover and define user-driven entrepreneurial challenges.

CO5: Generate and refine innovative solutions through iterative prototyping and feedback loops.

Text Books:

1. Tim Mazzarol & Sophie Roboud, (2019), Entrepreneurship and Innovation: Theory, Practice and Context, Springer Publications, USA
2. Hisrich, Peters, Shepherd, (2016), Entrepreneurship, 10th edition. McGraw Hill.
3. Tim Brown, (2009), Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation, Harper Business.
4. Roger L. Martin, (2009), The Design of Business: Why Design Thinking is the Next Competitive Advantage, Harvard Business Review Press; Third Edition.
5. Stanford University's Hasso Plattner Institute of Design(2018) “Design Thinking-A Practical Approach” proprietary material-2018, Stanford Tool Kit

Reference Books:

1. Kuratko, Hodgetts, (2014), Entrepreneurship - Theory, Process and Practice,10th edition. Cengage Learning
2. Eric Ries, (2011), The Lean Start-Up, Penguin Publishers, UK
3. "Action Research" by Eileen Ferrance, "Themes in Education" Northeast and Islands Regional Educational Laboratory Brown University.

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year I Semester

25MCMBATC06 HUMAN CAPITAL MANAGEMENT

L	T	P	C
3	0	0	3

Pre-requisite: None

Course Description:

This course introduces students to the principles of Indian ethos, values, and cultural heritage, and their relevance to modern business practices. It emphasizes ethical decision- making, corporate governance, and the integration of moral values in business. The course blends insights from Indian philosophical thought, scriptures, and traditions with contemporary management
and ethical frameworks to foster responsible and sustainable leadership.

Course Objectives:

1. Explain foundational concepts of Indian philosophical thought and its relevance to ethical and managerial frameworks.
2. Apply principles from Indian cultural heritage to contemporary management practices and organizational behavior.
3. Analyze leadership models in light of cosmic laws and dharmic principles to evaluate ethical decision-making.
4. Evaluate classical and modern ethical theories to assess their applicability in diverse business contexts.
5. Develop ethically sound business strategies by integrating traditional wisdom and modern ethical frameworks.

UNIT I INTRODUCTION **9 hours**

Ethics v/s Ethos, Indian v/s Western Management, Work Ethos and Values for Indian Managers-Production and Consumption, Relevance of Value Based Management in Global Change- Impact of Values on Stakeholders, Trans Cultural Human Values, Secular v/s Spiritual Values, Value System in Work Culture, Stress Management, Meditation for mental health, Yoga.

UNIT II CULTURAL HERITAGE OF INDIA AND ITS RELEVANCE FOR MODERN MANAGEMENT **9 hours**

Principles Practiced by Indian Companies, Role of Indian Ethos in Managerial Practices, Management Lessons from Vedas, Mahabharata, Bible, Quran, Kautilya's Artha Shastra, Role of scriptures in understanding ethics.

UNIT III LEADERSHIP AND COSMIC LAWS **9 hours**

Indian Systems of Learning-Gurukul System of Learning, Advantages- Disadvantages of Karma, importance of Karma to Managers-Nishkama Karma- Laws of Karma, Law of Creation- Law of Humility- Law of Growth- Law of Responsibility- Law of Connection-Corporate Karma Leadership

UNIT IV THEORIES AND APPROACHES OF ETHICS **9 hours**

Understanding the need for ethics, Ethical values, myths and ambiguity, ethical codes, Ethical Principles in Business; Theories of Ethics, Absolutism versus Relativism, Teleological approach, the Deontological approach, Kohlberg's six stages of moral development (CMD), Managing Ethical Dilemma.

UNIT V ETHICS IN BUSINESS 9 hours

Characteristics, ethical decision making, ethical reasoning, the dilemma resolution process; ethical dilemmas in different business areas of finance, marketing HRM and international business, Ethical Culture in Organization, developing codes of ethics and conduct, Ethical and value-based leadership. Indian wisdom & Indian approaches towards business ethics, Cognitive barriers to a good ethical judgement - Whistle Blowing.

Course Outcomes:

CO1: Describe the foundational concepts of Indian philosophical thought and its relevance to ethical and managerial frameworks.

CO2: Apply principles from India's cultural heritage to contemporary management practices and leadership models.

CO3: Analyze leadership approaches in the context of cosmic laws and dharmic principles to assess ethical decision-making.

CO4: Evaluate classical and contemporary ethical theories to determine their applicability in business and organizational settings.

CO5: Formulate ethically sound business strategies by integrating traditional Indian wisdom with modern ethical frameworks.

Text Books:

1. Chakraborty, S.K(1998); Foundations of Managerial Work – Contributions from Indian Thought, Himalaya Publishing House, Delhi

Reference Books:

1. Chakraborty, S.K(1995.); Ethics in Management: Vedantic Perspectives, Oxford University Press, Delhi
2. Boatright, John R(2000); Ethics and the Conduct of Business, Pearson Education, New Delhi
3. Kumar, S. and N.K.Uberoi(2000); Managing Secularism in the New Millenium, Excel Books
4. Trevion and Nelson(1995); Managing Business Ethics, John Wiley and Sons Publications
5. Bhaskar R.K(2011); Man Management: A Value Based Management Perspectives, Sri Satya Sai Students and Staff Welfare Society
6. Griffiths, B(1985) The Marriage of East and West, Colling, London.

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination. /Quiz/Presentation. Case studies are compulsory for each unit

MBA I Year I Semester

25MCMBAEC01 STATISTICAL ANALYSIS FOR BUSINESS

L	T	P	C
2	0	2	3

Pre-requisite: **None**

Course Description:

"Statistical Analysis for Business" provides a practical and comprehensive introduction to statistical analysis in business contexts. It teaches how to use SPSS software to manage data, perform descriptive and inferential statistics, visualize findings with charts and graphs, and conduct various analyses like hypothesis testing, correlation, and regression. The course is structured to build confidence in handling real business data, drawing meaningful insights, and supporting data-driven decision-making.

Course Objectives:

1. Explain fundamental statistical concepts, types of data, and methods of data organization and visualization using SPSS
2. Apply probability rules and distribution models to solve business-related uncertainty problems using SPSS
3. Analyze sample data using statistical inference techniques to test hypotheses and draw valid conclusions using SPSS
4. Evaluate relationships between variables using correlation and regression models to support business forecasting using SPSS
5. Design and interpret multivariate statistical models including ANOVA, reliability testing, and factor analysis for complex decision-making using SPSS

UNIT I INTRODUCTION TO BUSINESS STATISTICS AND DATA HANDLING **12 hours**

Overview of Business Statistics and Managerial Applications, Types and Sources of Data: Primary & Secondary, Data Collection Methods and Questionnaire Design, Data Classification, Tabulation, and Summarization, Graphical Data Presentation: Bar Charts, Pie Charts, Histograms, Introduction to SPSS: Interface, Data View, Variable View, Descriptive Statistics: Measures of Central Tendency (Mean, Median, Mode), Measures of Dispersion (Range, Variance, Standard Deviation, CV)

Experiments

1. Data Entry & Descriptive Statistics in SPSS – Enter a given business dataset (e.g., sales records), compute mean, median, mode, range, variance, and standard deviation; interpret the results.
2. Graphical Data Presentation in SPSS – Create bar charts, pie charts, and histograms for the data, and compare visual insights from each chart type.

UNIT II PROBABILITY CONCEPTS AND PROBABILITY DISTRIBUTIONS **12 hours**

Basic Probability Theory: Rules & Axioms, Conditional Probability and Bayes' Theorem, Random Variables: Discrete vs. Continuous, Discrete Distributions: Binomial, Poisson, Continuous Distributions: Normal Distribution & Applications.

Experiments

1. Binomial Distribution Using SPSS
2. Poisson Distribution Using SPSS

UNIT III STATISTICAL INFERENCE AND HYPOTHESIS TESTING 12 hours

Sampling Methods and Sampling Distributions, Central Limit Theorem & Practical Implications, Point & Interval Estimation, Hypothesis Testing Process & Types of Errors, t-tests (One-sample, Independent, Paired), Chi-square Test for Independence & Goodness of Fit, Introduction to ANOVA, Applying Hypothesis Testing in SPSS.

Experiments:

1. Chi-Square Test for Goodness of Fit
2. Chi-Square Test for Independence of Attributes
3. t-Test for Single Mean
4. t-Test for Difference of Means
5. Paired t-Test

UNIT IV CORRELATION, REGRESSION ANALYSIS, AND FORECASTING 12 hours

Understanding and Interpreting Correlation (Pearson, Spearman), Scatterplots and Relationship Patterns, Simple Linear Regression: Model Building and Coefficients Interpretation, Multiple Regression: Basics and Applications in Business, Regression Assumptions and Diagnostics, Time Series Analysis: Trend, Seasonality & Moving Averages.

Experiments

1. Correlation Analysis in SPSS
2. Simple Regression and Multiple Regression in SPSS.

UNIT V ANOVA, RELIABILITY TESTING, AND FACTOR-BASED ANALYSIS 12 hours

ANOVA-One-Way Classification, ANOVA-Two- Way Classification, Reliability analysis, and Factor Analysis.

Experiments:

1. ANOVA-One-Way Classification
2. ANOVA-Two-Way Classification
3. Factor Analysis

Course Outcomes:

CO1: Explain fundamental statistical concepts, classify types of data, and demonstrate data organization and visualization techniques using SPSS.

CO2: Apply probability rules and probability distribution models to solve business uncertainty problems using SPSS.

CO3: Analyze sample datasets using statistical inference and hypothesis testing procedures to draw valid conclusions with SPSS.

CO4: Evaluate relationships between variables through correlation and regression analysis to support business forecasting using SPSS.

CO5: Design and interpret multivariate statistical models including ANOVA, reliability testing, and factor analysis for complex decision-making using SPSS.

Text Books:

1. Pallant, J(2020). SPSS Survival Manual: A Step-by-Step Guide to Data Analysis using IBM SPSS (7th ed.). Routledge,
2. Levin, R. I., & Rubin (2017)., Statistics for Management (8th ed.). Pearson Education,
3. Digital Design, (2020), 6th Edition, M. Morris Mano, Pearson Education

Reference Books:

1. Field, A. (2017)., Discovering Statistics Using IBM SPSS Statistics (5th ed.). SAGE Publications Ltd,
2. George, D., & Mallery, P(2019).. IBM SPSS Statistics 26 Step by Step: A Simple Guide and Reference (16th ed.). Routledge,
3. Aczel, A. D., & Sounderpandian, J. (2009). Complete Business Statistics (7th ed.). McGraw-Hill Education,

Mode of Evaluation: Assignments, Mid Term Tests, Continuous Internal Evaluation (Record) and End Semester Examination

MBA I Year I Semester **Skill Enhancement Course - I**

25MCMBASC01 DATA ANALYTICS USING EXCEL AND GS

L	T	P	C
1	0	2	2

Pre-requisite: None

Course Description:

This course equips students with essential and advanced Microsoft Excel skills for data analytics. It covers workbook management, shortcut keys, formulas, functions, data visualization, and statistical analysis using the Analysis Tool Pak, enabling learners to efficiently organize, analyze, and present data for informed decision-making.

Course Objectives:

The main objectives of the course are to

1. Explain the basic interface, features, and functionalities of MS Excel for data entry and formatting.
2. Apply commonly used shortcut keys to enhance productivity and navigate Excel efficiently.
3. Analyze spreadsheet requirements to implement basic formulas and built-in functions for data computation.
4. Evaluate complex formula structures and nested functions to solve business-related analytical problems.
5. Design dynamic spreadsheets using advanced Excel tools such as pivot tables, data validation, and conditional formatting for decision support.

UNIT I GETTING STARTED WITH EXCEL **9 hours**

Workbook and Worksheets, Navigation with Keyboard, Tabs and Ribbons, Quick Access Toolbar, Excel Options, Create a New Workbook, Print and Save, Understanding Worksheet Basics, Protecting Excel Workbook and Worksheet, importing data into excel, Sharing in Excel.

EXPERIMENTS:

1. **Create & Protect Workbook**
2. **Import & Share Data**

UNIT II PERFORM FUNCTIONS WITH SHORTCUT KEYS **9 hours**

Keys for Menus-Move on a worksheet or Workbook-Select Cells, Columns, Rows or Objects-Select Cells with Special Characteristics, Format Data, filling data in cells, Working on Tables. Excel Data Types.

EXPERIMENTS:

1. **Shortcut Keys & Special Selection**
2. **Create & Format an Excel Table**

UNIT III FORMULAS AND FUNCTIONS-1 **9 hours**

Understanding Formulas, Operators in Formula, Defined Names, Calculations, Functions in Formula, Relative and Absolute addressing, Referencing Cells Outside the Worksheet, Referencing Cells Outside the Workbook, Logical Functions- Using IF, Using nested IF, Writing conditional expressions: IF combined with AND/OR-Using IFS, Using SWITCH.Data Entry Shortcuts.

EXPERIMENTS:

1. **Nested IF for Grading System**
2. **VLOOKUP**

UNIT IV FORMULAS AND FUNCTIONS-2 **9 hours**

Summarizing Functions, Text functions, Lookup and Reference functions, Date and time functions, Math Functions, Financial Functions, Error Handling Functions, Formula Auditing, Data Visualization with

New chart types- Waterfall charts, Histogram, Pareto Chart, Sparkline chart, Gantt and Milestone Chart, Putting Data in perspective with Pivots.

EXPERIMENTS:

1. **Pivot Table Analysis**
2. **Data Visualization with New Chart Types**

UNIT V MS-EXCEL ADVANCED **9 hours**

Statistical Functions- Frequency, MEDIAN, MODE.SNGL, MODE.MUTL, STDEV.P(/.S), VAR.P(./S), CORREL, COVARIANCE.P(/.S), Complex Data Analysis using Tool Pack-Enabling Analysis Tool Pak in Excel, Descriptive Statistics in Excel, ANOVA in Excel-ANOVA: Single factor, t-Test following ANOVA.

EXPERIMENTS:

1. **Descriptive Statistics using Analysis Tool Pack**
2. **ANOVA: Single Factor**

Course Outcomes:

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

CO1: Describe the basic interface, features, and functions of MS Excel for data entry, formatting, and navigation.

CO2: Use shortcut keys and built-in functions to perform routine spreadsheet operations efficiently.

CO3: Analyze business data using formulas and logical functions to derive meaningful insights.

CO4: Evaluate spreadsheet models using advanced functions such as lookup, conditional logic, and error handling to solve business problems.

CO5: Design dynamic and interactive spreadsheets using advanced Excel tools like pivot tables, charts, and data validation for decision support.

Text Books:

1. **Winston, Wayne L(**2019)**;** *Microsoft Excel Data Analysis and Business Modeling* (5th Edition), Microsoft Press,
2. **Frye, Curtis D (2022)** *Microsoft Excel 365 Step by Step*, Microsoft Press,
3. **Jelen, Bill & Alexander, Michael (**2021); *Excel 2021 Bible*, Wiley Publications

Reference Books:

1. **Walkenbach, John** (2018); *Excel 2019 Power Programming with VBA*, Wiley Publications
2. **Collie, Rob & Singh, Avichal** (2016.); *Power Pivot and Power BI: The Excel User's Guide to DAX, Power Query, Power BI & Power Pivot in Excel 2010–2016*, Holy Macro! Books,
3. **Proctor, Bernard L.**(2021); *Data Analysis with Microsoft Excel: Updated for Office 365*, Cengage Learning, 2021.
4. **Alexander, Michael(**2022); *Excel Dashboards and Reports*, Wiley,

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination.

MBA I Year II Semester

MBA I Year II Semester

25MCMBATC07 FINANCE FOR BUSINESS LEADERS

L	T	P	C
3	0	0	3

Pre-requisite: None

Course Description: This course introduces the fundamental principles and practices of corporate financial management. It focuses on the primary goal of wealth maximization and the three core decisions of finance—investment (capital budgeting), financing (capital structure and cost of capital), and dividend policy. The course also covers the effective management of short-term working capital within the context of the Indian economic environment.

Course Objectives:

1. Define key concepts and terminologies in financial management, including capital budgeting, capital structure, cost of capital, dividend policy, and working capital.
2. Explain the interrelationships among financial decisions and their impact on firm value, liquidity, and profitability.
3. Apply capital budgeting techniques (NPV, IRR, Payback) to evaluate investment proposals and recommend viable options.
4. Analyze the effects of different capital structures and dividend policies on cost of capital and shareholder wealth.
5. Evaluate working capital strategies and design an optimal financial plan that balances short-term liquidity with long-term growth objectives.

UNIT I INTRODUCTION TO FINANCIAL MANAGEMENT 9 hours

Meaning, nature, and scope of financial management - Evolution of the finance function and its contemporary role – The goal of the firm: the debate on Profit vs. Wealth vs. Welfare maximization; The Risk-Return trade off - The Time Value of Money (TVM): compounding, discounting, annuities and perpetuities (Simple Problems) - The core finance functions: the investment, financing, and dividend decisions – The agency problem, agency costs, and the debate on maximizing vs satisfying behavior.

UNIT II CAPITAL BUDGETING 9 hours

The Capital Budgeting Process and its significance - Estimation of Relevant Cash Flows - Capital Budgeting Techniques: Payback, Accounting Rate of Return, NPV, IRR, and PI (Problems); The NPV vs. IRR debate - Risk Analysis in Capital Budgeting: Sensitivity Analysis, Scenario Analysis, Risk-Adjusted Discount Rate (RADR) method, and Decision Tree Analysis

UNIT III CAPITAL STRUCTURE 9 hours

Operating and Financial Leverage – Measurement of Leverages – Effects of Operating and Financial Leverage on Profit –Combined Financial and Operating Leverage (Problems) – Capital Structure Theories: Traditional approach, M.M. Hypotheses – without Taxes and with Taxes, Net Income Approach (NI), Net Operating Income Approach (NOI) – EBIT-EPS Analysis (Problems) - Factors determining capital structure.

UNIT IV COST OF CAPITAL AND DIVIDEND DECISION 9 hours

Meaning and significance of cost of capital: Calculation of cost of debt, preference capital, equity capital and retained earnings; Combined cost of capital (WACC) based on Historical and Market weights (Problems) - Dividend Decisions: Dividend Policy and its types-Theories of dividend- Gordon model, Walter model, MM model- Forms of dividend.

UNIT V WORKING CAPITAL MANAGEMENT **9 hours**

Definition and Objectives – Sources of Working Capital, Working Capital Policies– Factors affecting Working Capital requirements-Calculating Operating Cycle Period and Estimation of Working Capital Requirements (Problems) –Management of Cash: Preparation of Cash Budget; Cash management technique (Lock box, concentration banking), Receivables Management –Credit Policy, Cash Discount, Debtors Outstanding and Ageing Analysis; Inventory Management (Very Briefly) – ABC Analysis; Minimum Level; Maximum Level; Reorder Level; Safety Stock; EOQ (Basic Model).

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Recall and define fundamental concepts of financial management, including time value of money, risk-return trade-off, and financial decision-making frameworks.

CO2: Interpret the principles and techniques of capital budgeting and explain their relevance in long-term investment decisions.

CO3: Use financial models to compute cost of capital, evaluate capital structure alternatives, and assess their impact on firm valuation.

CO4: Examine the implications of dividend policies and working capital strategies on liquidity, profitability, and shareholder value.

CO5: Formulate integrated financial decisions by synthesizing capital budgeting, capital structure, and working capital management strategies to optimize organizational performance.

Text Books:

1. Ehrhardt & Brigham(2017) Financial Management: Theory and Practices, 15th Edition, Cengage.
2. Pandey, I.M(2015) Financial Management, 11th Edition, Vikas Publishing House, New Delhi.
3. Prasanna Chandra(2022), Financial Management: Theory & Practice, 11th Edition, McGraw Hill

Reference Books:

1. Keown, Arthur J., Martin, John D., Petty, J. William and Scott, David F(2004), Financial Management, Pearson Education
2. Van Horne, James C(2001); Financial Management and Policy, Prentice Hall of India
3. Brigham & Houston(2019), Fundamentals of Financial Management, Thomson Learning, Bombay. Kishore, R., Financial Management, Taxman's Publishing House.

Online Learning Resources

1. https://nptel.ac.in/courses/110107144

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year II Semester

25MCMBATC08 MARKETING STRATEGY AND PLANNING

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

Pre-requisite: None

Course Description:

Marketing Strategy & Planning covers the analysis, formulation, and implementation of marketing strategies. Topics include market analysis, STP, product and pricing strategies, distribution planning, and integrated marketing communications, with emphasis on creating actionable marketing plans in dynamic environments.

Course Objectives:

1. Define core concepts and frameworks in marketing strategy, product lifecycle, pricing models, and communication planning.
2. Describe the strategic role of product, pricing, and distribution decisions in shaping market competitiveness and customer value.
3. Apply segmentation, targeting, and positioning principles to develop product and pricing strategies for diverse market contexts.
4. Analyze go-to-market and integrated communication strategies to assess their coherence, effectiveness, and alignment with brand objectives.
5. Design a comprehensive marketing plan that integrates product, pricing, distribution, and communication strategies to achieve business goals.

UNIT I MARKETING FOUNDATIONS & STRATEGIC FRAMEWORK **9 hours**

Introduction to Marketing: Nature, scope, and importance; core concepts; philosophies of marketing – Strategic Role of Marketing – Marketing Mix & Extended Ps in strategy formulation – Marketing Environment Analysis: India and global contexts; scanning tools (PESTEL, SWOT) – Market Segmentation, Targeting & Positioning (STP): Strategic basis for segmenting and selecting markets; positioning strategy and brand differentiation – Marketing Planning Process: Steps in developing a marketing plan (situation analysis, objectives, strategy, action programs, budgets, controls).

UNIT II PRODUCT STRATEGY & MANAGEMENT **9 hours**

Product Strategy: Levels of product; product mix and portfolio strategy – Product Life Cycle (PLC) as a Strategic Tool: Linking PLC stages to marketing strategy – Product Line & Brand Strategy: Decisions on product lines, brand equity, and brand extension – New Product Development (NPD): Strategic NPD process – Product Differentiation & USP Development – Packaging & Labelling: Strategic role in positioning and customer perception.

UNIT III PRICING STRATEGY & PLANNING **9 hours**

Strategic Objectives of Pricing – Pricing Methods & Models: Cost-based, value-based, competition-based (with simple problems) – Factors Influencing Pricing Decisions – Adapting Prices: Segmented, promotional, and geographical pricing – Price Changes: Initiating and responding strategically – Psychological & Dynamic Pricing – Legal & Ethical Issues in Pricing.

UNIT IV SALES, DISTRIBUTION & GO-TO-MARKET STRATEGY **9 hours**

Channel Strategy: Functions, flows, and levels – Channel Management: Selection, motivation, and conflict management – Retailing & Wholesaling Trends – Sales Force Strategy: Objectives, structure, size, and compensation – Sales Force vs. Sales Agency Decisions – Go-to-Market Planning: Integrating channels, partners, and sales teams into overall strategy.

UNIT V MARKETING COMMUNICATION STRATEGY & PLAN IMPLEMENTATION **9 hours**

Integrated Marketing Communications (IMC): Role in delivering value – 5 M's of Advertising (Mission, Money, Message, Media, Measurement) – Communication Mix Planning: Advertising, sales promotion, PR, direct marketing, events, content marketing – Digital & Social Media Strategies – Socially Responsible & Internal Marketing – Rural Marketing Strategy – Implementation & Control: Tracking KPIs, feedback loops, and adaptive strategy.

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Recall foundational marketing concepts, strategic frameworks, and key terminologies related to product, pricing, distribution, and communication.

CO2: Explain the strategic role of product lifecycle, pricing decisions, and channel design in shaping customer value and market positioning.

CO3: Apply segmentation, targeting, and positioning principles to develop coherent product and pricing strategies for competitive markets.

CO4: Analyze sales, distribution, and go-to-market strategies to assess their alignment with brand objectives and market dynamics.

CO5: Design an integrated marketing communication plan that synthesizes product, pricing, and channel strategies to achieve business and brand goals.

Text Books:

1. Kotler, P., Keller, K. L., & Chernev, A. (2021). Marketing Management (16th ed.). Pearson
2. Saxena, R. (2019). Marketing Management (5th ed.). McGraw Hill Education.

Reference Books:

1. Kerin, Hartley, & Rudelius (2022). Marketing: The Core (9th ed.). McGraw Hill.
2. Lamb, Hair, & McDaniel (2020). Marketing (14th ed.). Cengage.
3. Ramaswamy, V. S., & Namakumari, S. (2018). Marketing Management (6th ed.). McGraw Hill.

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year II Semester

25MCMBATC09 PRODUCTION AND OPERATIONS MANAGEMENT

L	T	P	C
3	1	0	4

Pre-requisite: None

Course Description:

This course introduces the fundamentals of Production and Operations Management, emphasizing the nature, scope, and strategic role of operations in manufacturing and services. Topics include facility and process design, production planning and control, productivity improvement, maintenance systems, materials management, and quality assurance techniques. The course equips students with analytical tools and decision-making skills to enhance operational efficiency
and competitiveness in organizations.

Course Objectives:

1. Define key concepts and functions of production and operations management, including facility layout, process types, and quality systems.
2. Explain the principles of facilities design, production planning, and maintenance strategies in relation to operational efficiency.
3. Apply scheduling techniques, inventory models, and productivity tools to solve operational problems in manufacturing and service environments.
4. Analyze the interdependencies among process design, material management, and quality control to optimize resource utilization.
5. Design an integrated operations strategy that aligns production planning, maintenance, and quality systems to meet organizational goals.

UNIT I INTRODUCTION TO PRODUCTION AND OPERATIONS MANAGEMENT **12 hours**

Nature, Scope, and Importance - Historical Evolution of Production and Operations - Types of Manufacturing Systems (Job, Batch, Mass, Continuous, Project) - Manufacturing vs. Service Operations - Role and Responsibilities of Production and Operations Manager – Decisions in Operations.

UNIT II FACILITIES AND PROCESS DESIGN **12 hours**

Facility Location: Introduction, steps in location selection and factor affecting plant location decision, Multiple Location Theories and Layout Planning –Types of Layouts: Product, Process, Fixed position and combined layouts – Process Design: Manufacturing and Service Process Types- Material Handling: objectives, Principles and types – Product design process.

UNIT III PRODUCTION PLANNING AND CONTROL **12 hours**

Production Planning and Control: Stages in PPC – Gantt chart – PPC in Mass, Batch, and Job Order Manufacturing, Lean Manufacturing -Aggregate Planning- Designing Product Layouts: Line balancing, computerized line balancing - Job sequencing algorithms Johnson's rule: Sequencing Jobs through Two Serial Processes

UNIT IV PRODUCTIVITY AND MAINTANANCE **12 hours**

Productivity: Concept, Measurement, Factors Affecting Productivity - Job Design Approaches Work Study: Method Study and Work Measurement Techniques - Maintenance Management: Objectives and types) - Industrial Safety: Principles, Causes of Accidents, Safety Programs – ergonomics and workplace design

UNIT V MATERIALS AND QUALITY MANAGEMENT 12 hours

Materials Management: Functions, Costs Associated with Inventory - Inventory Control techniques: EOQ, ABC, VED, FSN, HML Analysis - Materials Requirement Planning - Just-In-Time (JIT) and Kanban System - Quality Management: Concepts of TQM, Quality Circles, Zero Defects Programme, Six Sigma - Statistical Quality Control (SQC): Control Charts, Acceptance Sampling – Introduction to ISO Standards

Course Outcomes:

By the end of the course students will be able to

CO1: Recall key concepts, functions, and terminologies related to production systems, facility layout, and quality standards.

CO2: Explain the principles of process design, production planning, and maintenance strategies in relation to operational efficiency.

CO3: Apply scheduling techniques, inventory models, and productivity tools to solve operational challenges in manufacturing and service contexts.

CO4: Analyze the interdependencies among facilities design, material flow, and quality control to optimize resource utilization and output consistency.

CO5: Develop an integrated operations strategy that aligns production planning, maintenance systems, and quality assurance to meet organizational performance goals.

Text Books:

1. Chary, S. N. (2020). Production and Operations Management (6th ed.). McGraw Hill Education India
2. Panneerselvam, R. (2012). *Production and Operations Management* (3rd ed.). PHI Learning Pvt. Ltd
3. Heizer, J., Render, B., & Munson, C. (2023). Operations Management: Sustainability and Supply Chain Management (14th ed., Global Edition). Pearson publication house
4. Mahadevan, B. (2015). Operations Management: Theory and Practice (3rd ed.). Pearson Education India

Reference Books:

1. Bedi, K. (2018). *Production and operations management* (3rd ed.). Oxford University Press
2. Goel, B. S. (2019). *Production operation management* (28th ed.). Pragati Prakashan
3. Stevenson, W. J. (2022). Operations Management (13th ed.). McGraw-Hill Education

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year II Semester

25MCMBATC10 STRATEGIC MANAGEMENT

L	T	P	C
3	0	0	3

Pre-requisite: None

Course Description: The course imparts the students with an overview of Strategic Management process and also it develops the skills required to formulate and evaluate the strategies required for organizations.

Course Objectives:

1. To enable students to define and frame objectives, vision and mission for organizations.
2. To discuss various tools and techniques of strategic analysis and choices.
3. To explain strategy formulation and various kinds of strategies
4. To familiarize the process of Strategy implementation and issues related to it.
5. To examine strategy evaluation and control.

UNIT I INTRODUCTION 9 hours

Concept and Role of Strategy; The Strategic Management Process; Approaches to Strategic Decision Making; Strategic Role of Board of Directors and Top Management; Strategic Intent; Concept of Strategic Fit, Leverage and Stretch; Global Strategy and Global Strategic Management; Strategic flexibility. Corporate Sustainability as strategy

UNIT II STRATEGIC ANALYSIS AND CHOICE: TOOLS AND TECHNIQUES 9 hours

Porter's Five Force Model, BCG Matrix, Ge Model, Tows Matrix, Market Life Cycle Model And Organizational Learning And The Experience Curve. Environment Analysis And Diagnosis. Balanced Scorecard, Sustainable Advantage Design Thinking in Strategy (BCG Matrix Using Templates.

UNIT III STRATEGY FORMULATION 9 hours

Strategic options at Corporate Level –Growth, Stability and Retrenchment Strategies; Corporate Restructuring Strategic options at Business Level and at functional level- Strategies for emerging industries-maturing- declining industries, fragmented industries- hyper –competitive industries and turbulent industries-offensive-defensive strategies. Hybrid Business Models and strategies for dealing in Various Situations.

UNIT IV STRATEGY IMPLEMENTATION 9 hours

Interdependence of Formulation and Implementation of Strategy; Issues in global strategy implementation-Planning and allocating resources; Organization Structure and Design; Budgets and support system commitment; culture and leadership. Reasons for Strategy Failure and Methods to Overcome. Role of digital technologies in strategy execution

UNIT V STRATEGY EVALUATION AND CONTROL 9 hours

Establishing strategic Controls-Role of the strategist -benchmarking to evaluate performance strategic information systems–Guidelines for proper control-Strategic surveillance –strategic audit- Strategy and Corporate Evaluation and feedback in the Indian and international context Reasons and process of firms internationalization; Multi-country and global strategies; Outsourcing strategies. Ethical dilemmas in strategy execution across borders

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Apply knowledge acquired during the course to develop clear objectives, vision and mission for organizations

CO2: Design various tools and techniques of strategic analysis as appropriate

CO3: Formulate strategy to address organization's needs

CO4: Implement Strategy for organization's success.

CO5: Ability to analyze and predict the impact of strategic decisions.

Text Books:

1. Exploring Corporate Strategy: Text &Cases by Gerry Johnson and Kevan Scholes,8th edition PHI
2. Strategic Management and Business Policy by Azhar Kazmi, 5th edition Tata Mcgraw Hill

Reference Books:

1. Crafting and Executing Strategy: Concepts and Cases, Thompson, Gamble, Jain, 21/e TMH, 2019
2. Strategic Management Concepts and Cases, Fred R.David 17/e,PHI,2019
3. Concepts in Strategic Management and Business Policy, Wheelen & Hunger, Pearson Education, NewDelhi, 2018.

Mode of Evaluation: Assignments, Mid Term Tests and End Semester Examination

MBA I Year II Semester

25MCMBAEC02 BUSINESS DATA ANALYTICS

L	T	P	C
2	0	2	3

Pre-requisite: **None**

Course Description: This course blends theoretical understanding with hands-on exercises, enabling learners to handle real business datasets efficiently, perform trend analysis, build predictive models, and automate analysis processes using Excel tools. By the end, students will be confident in leveraging Excel for a wide variety of business analytics tasks, making data-driven decisions in marketing, finance, operations, and strategy.

Course Objectives:

1. To understand the importance of business analytics and Business Intelligence
2. To understand different types of Analytics and its applications.
3. To learn various statistical methods for data analysis, including probability concepts and distributions.
4. To understand predictive analytics and forecasting techniques
5. To understand the role of machine learning in Business Intelligence

UNIT I INTRODUCTION TO BUSINESS ANALYTICS 12 hours

Introduction to Business Analytics (BA) - Need, Features and Use of Business Intelligence (BI) – BI Components – Data Warehouse, Business Analytics, Business Performance Management, User Interface - Business Intelligence versus Business Analytics.

UNIT II INTRODUCTION TO TYPES OF ANALYTICS 12 hours

Sales & Marketing Analytics - HR Analytics- Financial Analytics - Production and operations analytics – Analytics in Industries: Telecom, Retail, Healthcare – Use Excel Pivot tables for case studies - Use Excel Pivot tables for case studies

Experiments:

- **1.Sales & Marketing Analytics: Analyse** sales performance by region, product, and time using Excel Pivot Tables.
- **HR Analytics:** Examine employee performance and retention by department and demographics with Excel Pivot Tables.
- **Financial Healthcare Analytics:** Analyse billing, service usage, and insurance coverage using Excel Pivot Tables.

UNIT III STATISTICS FOR BUSINESS ANALYTICS 12 hours

Types of Data - Definition, Sources, Storage and Characteristics of Structured, Unstructured and Semi Structured Data - Review of descriptive and inferential statistics, Graphical representation of data - What if analysis, Data tables, Scenario manager and Goal Seek.

Experiments:

1. Statistics with Excel: Explore descriptive and inferential statistics with graphical data representations.
2. What-if Analysis: Use Data Tables, Scenario Manager, and Goal Seek in Excel for decision-making.
3. Data Visualization: Create charts, Pivot Tables, and visualizations in Excel for data insights.

UNIT IV PREDICTIVE ANALYTICS WITH STATISTICS 12 hours

Regress models and prediction - Statistical forecasting techniques - Estimation of trend, seasonality and cyclical components. Smoothing models for forecasting – moving average, exponential smoothing methods, time series analysis.

Experiments:

1. Build linear regression model for seasonal trends.
2. Time Series Analysis: Estimate trend, seasonality, and cycles using forecasting techniques.
3. Forecasting with Smoothing Models: Apply moving averages and exponential smoothing in predictions

UNIT V INTRODUCTION TO MACHINE LEARNING 12 hours

Types of machine learning – Supervised, Unsupervised Learning. Classification Techniques – K nearest Neighbour, Decision Tree – Clustering concept - k-means

Experiments:

1. Supervised Learning: Implement K-Nearest Neighbours
2. Unsupervised Learning: Perform clustering with K-Means

Course Outcomes:

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

CO1: Understand the use of Business Intelligence and analytics in getting insights from the data
CO2: Recognize the role of business intelligence in the domain.
CO3: Extract insights from data with the use of various descriptive statistics tools.
CO4: Implement regression technique to build predictive models.
CO5: Apply various machine learning techniques to make complex business decisions

Text Books:

1. Jeffrey Camm, James Cochran(2019); Essentials of Business Analytics,

2. Levin, R. I., & Rubin, D. S. (2017). Statistics for Management (8th ed.). Pearson Education

3. Digital Design, 6th Edition, M. Morris Mano, Pearson Education.

Reference Books:

1. Ramesh Sharda, Dursun Delen, and Efraim Turban (2017) "Business Intelligence: A Managerial Perspective on Analytics," Pearson, 3rd edition.

2. Albright C. S., Winston Wayne L. and Zappe C. J (2009). Decision Making Using Microsoft Excel (India Edition). Cengage Learning.

3. Evans J. R (2013). Business Analytics Methods, Models and Decisions. Pearson, Upper Saddle River, New Jersey

Mode of Evaluation: Assignments, Mid Term Tests, Continuous Internal Evaluation (Record) and End Semester Examination

MBA I Year II Semester

25MCMBAEC03 BUSINESS RESEARCH AND ECONOMETRICS

L	T	P	C
3	0	2	4

Pre-requisite: None

Course Description:
This course provides a comprehensive introduction to business research methods and econometrics. It aims to equip students with the necessary tools and techniques for conducting effective business research and applying econometric models to analyze economic data. The course covers various research methodologies, data collection methods, and advanced econometric techniques, with practical applications in business decision-making.

Course Objectives:
1. Define key concepts and terminologies related to business research, econometrics, and time series analysis.
2. Explain the components of research design, data collection methods, and the role of econometric models in empirical analysis.
3. Apply appropriate research methodologies and statistical tools to collect, organize, and analyze business data.
4. Analyze time series data using econometric techniques to identify trends, patterns, and causal relationships in business contexts.
5. Develop a structured research report that adheres to academic integrity standards, incorporates plagiarism checks, and presents evidence-based conclusions.

UNIT I INTRODUCTION TO BUSINESS RESEARCH AND PROCESS — 15 hours

Business research – Definition – Types of Research– Role of Business Research in Managerial Decisions – Information needs of Business – Commonly used Technologies in Business Research such as Groupware, Neural Networks, CAM, CAD, ERP, SPSS – Steps involved in research process - Problem Identification – Preliminary Data Gathering – Literature Survey – Theoretical Framework – Sampling: Probability and non – probability sampling methods – Hypothesis Development – Applications of Bivariate and Multivariate statistical techniques.
Lab Experiment: Correlation and Multiple regression

UNIT II INTRODUCTION TO ECONOMETRICS — 15 hours

Definitions, Importance and scope of econometrics, Mathematics vs Statistics vs Econometrics – the methodology of econometric research – Desirable properties of estimators: - Unbiasedness, Efficiency, Consistency and Sufficiency – Estimation Theory – OLS method Assumptions, Heteroscedasticity – Auto correlation (first order), Multicollinearity.
Lab Experiment: Residual Tests (Multicollinearity Test, Auto correlation and Heteroscedasticity test)

UNIT III RESEARCH DESIGN AND COLLECTION OF DATA 15 hours

Types of Research Designs: Exploratory, Descriptive, Experimental Designs and Case Study – Measurement of Variables:– Rating Scales, Ranking Scales – Reliability and Validity – Sources of Data: Primary Sources of Data , Secondary Sources of Data – Data Collection Methods :– Interviews (Structured Interviews, Unstructured Interviews, Face to face and Telephone Interviews) – Observational Surveys - Questionnaire Construction: (Organizing Questions, Structured and Unstructured Questionnaires, Guidelines) Multivariate Analysis – Logistic Regression, Discriminant Analysis and Cluster Analysis.

Lab Experiment: Logistic Regression, Discriminant Analysis and Cluster Analysis

UNIT IV TIME SERIES ANALYSIS 15 hours

Basics of Time Series; Unit Root Test, Correlogram, ARMA and ARIMA – Box – Jenkins Methods - Error Measurements – Univariate Time Series Modelling – Integration Test – Causality Test – Estimation of VAR, ARCH/GARCH-EGARCH/TGARCH models.

Lab Experiment: Unit Root Test, ARMA – ARIMA, VAR, ARCH/GARCH and EGARCH/TGARCH models.

UNIT V RESEARCH REPORT WRITING AND PLAGIARISM CHECK 15 hours

Research Report: (Components, Title Page, Table of Contents, Executive Summary, Introductory Section, Body of the Report, Conclusion of the Report, References, Appendix) – Guidelines for Preparing a Good Research Report – Oral Presentation- Handling Questions. Introduction to Plagiarism check – Ethics in Business Research – Subjectivity and Objectivity in research.

Course Outcomes:

At the end of this course students will be able to:

CO1: Recall fundamental concepts of business research, econometrics, and time series analysis.

CO2: Explain the components of research design, data collection methods, and the role of econometric models in empirical inquiry.

CO3: Apply appropriate statistical and econometric techniques to analyze business data and interpret results.

CO4: Analyze time series data to identify trends, seasonality, and causal relationships relevant to business decision-making.

CO5: Develop a comprehensive research report that demonstrates methodological rigor, analytical depth, and adherence to academic integrity standards including plagiarism checks.

LIST OF EXPERIMENTS

1. Correlation
2. Multiple Regression
3. Residual Tests (Multicollinearity, Heteroscedasticity, Auto Correlation)
4. Logistic Regression
5. Cluster Analysis
6. Multiple Discriminant Analysis
7. Unit Root Test (Augmented Dicky Fuller Test)
8. Auto Regressive Moving Average (ARMA)
9. Auto Regressive Integrated Moving Average (ARIMA)
10. Vector Auto regression (VAR)
11. Autoregressive Conditional Heteroscedasticity (ARCH) and Generalized Autoregressive Conditional Heteroscedasticity (GARCH)
12. Exponential EGARCH and Threshold GARCH (TGARCH)

Text Books:

1. Richard I. Levin, David S. Rubin(1998) Statistics for Management, 7th Edition, Pearson Education

2. S.P. Gupta(2001) Business Statistics, Sultan Chand & Sons

3. James T. McClave, P. George Benson, Terry Sincich(2017) Statistics for Business and Economics, 13th Edition, Pearson Education

Reference Books:

1. N.D. Vohra (2017) Quantitative Techniques for Management, Tata McGraw Hill

2. David M. Levine, Kathryn A. Szabat, David F. Stephan(2019),: Business Statistics: A First Course, 8th Edition, Pearson

3. Paul Newbold, William Carlson, Betty Thorne,(2022) Statistics for Business & Economics, 8th Edition, Pearson Education

Mode of Evaluation: Assignments, Mid Term Tests, Continuous Internal Evaluation (Record) and End Semester Examination

MBA I Year II Semester **Skill Enhancement Course - I**

25MCENGSC01 CORPORATE COMMUNICATION

L	T	P	C
1	0	2	2

Pre-requisite: **None**

Course Objectives:

1. Define key concepts and terminologies related to corporate communication, employability quotient, and professional etiquette.
2. Describe the dimensions of corporate communication and their role in shaping organizational identity and stakeholder engagement.
3. Apply principles of effective report writing, presentation techniques, and interpersonal communication in professional contexts.
4. Analyze the impact of communication strategies, etiquette practices, and employability skills on workplace performance and career advancement.
5. Design a comprehensive communication plan that integrates written, verbal, and behavioral competencies to enhance corporate presence and employability.

UNIT I INTRODUCTION TO CORPORATE COMMUNICATION **9 hours**

Corporate Communication: Definition, Nature, Scope, Principles and functions of corporate communication, Importance, Historical Overview, Evolution of Corporate Communication, Role of Corporate Communication. Flow of Communication in organizations: Bottom-up, top down, Vertical and horizontal, Barriers to communication, Importance of Listening, Ethical Considerations in Corporate Communication

UNIT II DIMENSIONS OF CORPORATE COMMUNICATION **9 hours**

Self Confidence – Self Esteem - Body language - Perception - Decision-making skills – Negotiating Skills – Positive Attitude - Qualities of a successful leader – Time management - Work ethics- Feedback on Communication in the Corporate Setting.

UNIT III CORPORATE EMPLOYABILITY QUOTIENT **9 hours**

Resume building- The art of participating in Group Discussion – Facing the Personal (HR & Technical) Interview -Frequently Asked Questions - Employability Skills - Mock Interview Sessions

UNIT IV REPORT WRITING AND PRESENTATION SKILLS **9 hours**

Business Letters and Reports Writing: Principles of effective business letters, format and types of Business letter, Report Writing: Progress report, Annual report and Analysis of sample reports from industry. Presentation Skills: Elements of presentation, designing a presentation and presentation of charts & graphs, appearance & posture, practicing delivery of presentation.

UNIT V BUSINESS & SOCIAL ETIQUETTE **9 hours**

Business & Social Etiquette: Professional conduct in a business setting: proper way to make introductions. Professional Image: appropriate business attire; Meeting Etiquettes, Email Etiquettes, Table Etiquettes - Telephone Etiquette- situation based telephonic conversations

Course Outcomes:

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

CO1: Recall key concepts, principles, and terminologies related to corporate communication, employability, and professional etiquette.

CO2: Explain the dimensions of corporate communication and their role in enhancing organizational

reputation and stakeholder engagement.

CO3: Apply effective report writing and presentation techniques in professional and academic contexts.

CO4: Analyze the impact of communication strategies and behavioral competencies on employability and workplace effectiveness.

CO5: Design a professional communication plan that integrates written, verbal, and behavioral elements to enhance corporate presence and career readiness.

Text Books:

1. Paul A Agrenti (2012). Corporate Communication, Mc Graw-HILL, New York, United States

2. Hurlock, E.B (2006). Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill.

Reference Books:

1 M.K. Sehgal & V. Khetrapal (2007); Business Communication; Excel Books

2 Rajendra Pal(2011).Business Communication; Sultan Chand & Sons Publication

3 P.D. Chaturvedi (2006); Business Communication; Pearson Education, 1st Edition

4 Andrews, Sudhir(1988); How to Succeed at Interviews. 21st (rep.) New Delhi. Tata McGraw-Hill

5 Heller, Robert (2002); Effective leadership. Essential Manager series. Dk Publishing

6 Joep Cornelissen(2023) Corporate communication: A Guide to Theory and Practice; Erasmus University Rotterdam, Netherlands

Mode of Evaluation: Continuous Internal Evaluation (Record) and End Semester Examination

AUDIT COURSE

Audit Course – I

25MCMBAAC01 E-COMMERCE AND DIGITAL MARKETS

L	T	P	C
2	0	0	0

Pre-requisite: None

Course Description:

This course introduces the concepts, models, and technologies of e-commerce, covering B2B, B2C, C2C, P2P, and m-commerce. It explores e-commerce infrastructure, supply chain and CRM integration, ethical and legal issues, and e-markets, with emphasis on pre- and post- COVID-19 business strategies and trends. Students gain practical insights into designing and managing successful e-business solutions.

Course Objectives:

1. Define key concepts and terminologies related to e-commerce models, digital enablers, and online marketplaces.
2. Explain the role of technological, logistical, and regulatory enablers in shaping e- commerce ecosystems and supply chain efficiency.
3. Apply e-commerce frameworks to assess business models, supply chain configurations, and digital platform strategies.
4. Analyze the impact of social, political, and ethical issues on e-commerce operations, consumer trust, and regulatory compliance.
5. Design a comprehensive e-commerce strategy that integrates business models, enablers, supply chain logistics, and ethical considerations to optimize digital market performance.

UNIT I E – COMMERCE BUSINESS MODELS 6 hours

Introduction E-Business - Origin and Need of E-Commerce, – E– commerce v/s Traditional Commerce Factors affecting E -Commerce, Business dimension and technological dimension of E-Commerce, E -Commerce frame work Electronic Commerce Models, Value Chains in Electronic Commerce. The Revolution Continues, E-commerce Business Models and Concepts, B2C business models, B2Bmodels, B2G, G2C, Business models for emerging Ecommerce area – customer to customer business model, P2P business model, M-commerce models. IT in business – functional business systems – cross-functional enterprise systems and applications – e-Business models - Enterprise e-Business systems

UNIT II E – COMMERCE ENABLERS 6 hours

E- Commerce enablers, internet and its impact on business strategy Pre and Post Covid-19 Pandemic – industry structure, industry value chain, firm value chain. E-commerce Infrastructure: The Internet, Web, and Mobile Platform

UNIT III SUPPLY CHAIN MANAGEMENT IN E – COMMERCE 6 hours

B2B E-commerce: Supply Chain Management and Collaborative Commerce. – Introduction to Customer relationship management (CRM) -Building an E-commerce Presence: Web Sites, Mobile Sites, and Apps, E-commerce Marketing Communications -Pre and Post Covid-19 Pandemic. Impact of E-commerce on Traditional Retail Business. Quick commerce

UNIT IV SOCIAL, POLITICAL, AND ETHICAL ISSUES 6 hours

Ethical, Social, and Political Issues in E-commerce, Online Retailing and Services, Online Content and Media, Social Networks, Auctions, and Portals. The Concept of Privacy, Legal protections Intellectual Property Rights: Types of Intellectual Property protection, Governance.

UNIT V E-MARKETS **6 hours**

E-Markets Vs Traditional Market, e-Markets Success factors, e-Market Technology Solutions. E-Procurements: The purchasing process, Developments in IT purchasing, e-Procurement-Models, e-procurement- Solutions – E-Commerce systems: E-Commerce systems – Essential e-Commerce processes – electronic payment processes - e-Commerce application trends – Web store requirements – clicks-and-bricks in e-Commerce- Electronic payment systems- impact on the e-business in the pre and post COVID 19 era.

Course Outcomes:

CO1: Recall key terminologies, structures, and types of e-commerce business models and digital marketplaces.

CO2: Explain the role of technological enablers, supply chain systems, and digital platforms in facilitating e-commerce operations.

CO3: Apply e-commerce frameworks and supply chain strategies to evaluate business performance and customer engagement.

CO4: Analyze the impact of social, political, and ethical factors on e-commerce governance, consumer trust, and regulatory compliance.

CO5: Design a sustainable e-commerce strategy that integrates business models, digital enablers, supply chain logistics, and ethical considerations to optimize market competitiveness.

Text Books:

1. Laudon Kenneth C(2019)., E-Commerce: Business, Technology, Society, prentice Hall of India, 15th Edition
2. Bhaskar, B. (2009). Electronic commerce: Framework, technologies and applications (3rd ed.). New Delhi: Tata McGraw Hill Education.

Reference Books:

1. Erisman, P. (2017). Six Billion Shoppers: The Companies Winning the Global ECommerce Boom. Macmillan.
2. Kalakota, R., & Whinston, A. B. (2009). Electronic commerce: A manager's guide. New Delhi: Pearson Education.
3. Vaitheeswaran, K.(2017). Failing to Succeed: The Story of India's First E-Commerce Company. India: Rupa Publications.
4. Kamalesh K Bajaj & Debjani Nag(2008), e-Commerce, the Cutting Edge of BusinessTMH,

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course – I

25MCMBAAC02 MANAGING DIGITAL INNOVATION AND TRANSFORMATION

L	T	P	C
2	0	0	0

Pre-requisite: None

Course Description:

This course introduces strategies and technologies for digital transformation, covering business models, platform growth, process digitization, customer engagement, and IT delivery. It explores social media, cloud computing, value chain evolution, and technology-driven disruptions through case studies, while addressing innovation, virtual organization, and governance in the digital era.

Course Objectives:

1. Define key concepts and terminologies related to digital transformation, innovation, and social media evolution.
2. Explain the drivers, challenges, and organizational implications of managing digital innovation and transformation.
3. Apply digital frameworks and transformation models to assess business readiness and strategic alignment.
4. Analyze the impact of emerging digital trends and social media transformations on consumer behavior and enterprise strategy.
5. Design a forward-looking digital transformation strategy that integrates innovation, platform shifts, and ethical considerations to enhance organizational competitiveness.

UNIT I OVERVIEW OF DIGITAL TRANSFORMATION 6 hours

Digital Transformation Concepts: Markets, Environment and Structure, designing your Digital Business Model, Launching and Growing a Digital Platform. Understanding Transformation**:** Business process transformation, Product or service digitization, customer engagement and experience, ecosystem and business model, IT delivery and transformation

UNIT II MANAGING DIGITAL INNOVATION AND TRANSFORMATION 6 hours

Introduction to digital transformation and innovation-classification of digital transformation and innovation – Managing digital innovation and transformation: Need for the transformation; Benchmarking the current digital capabilities, Analyze the results and Optimize performance - Apple case study. Technological developments leading to digital innovation.

UNIT III SOCIAL MEDIA TRANSFORMATIONS 6 hours

Social Media Transformations-Building Digital Capabilities-Challenges in Going Digital-Digital Transformations in the space of cloud computing-Prepare and Drive Digital Transformations - Online business models – technology mediated platform networks -Raymond's Case Study

UNIT IV DIGITAL TRANSFORMATION – NEW TRENDS 6 hours

Digital Transformation: From Products to Platforms, Linear Vs. Triangular Value Chains, The product Service Model: marketing, Finance and Supply Chains. Technological enabled disruptions in today's business environment, and Appraisal of response of incumbents to the technological disruptions – Paytm Case Study and Facebook Case Studies.

UNIT V DIGITAL INNOVATION AND REVOLUTION 6 hours

Organization and cultural issues - building and managing a virtual organization, Leveraging Open innovation, Governing Your Digital Platform, Strategy and Competition in the Digital Age, Factors for Digital Innovation and Revolution, Service Innovation Initiatives –Google Case Study

Recommended software's for Data Analysis

1. Dronahq
2. Pivotal
3. Adlib software

Course Outcomes:

At the end of this course students will demonstrate the ability to

CO1: Recall foundational concepts of digital transformation, innovation management, and social media platforms.

CO2: Describe the strategic role of digital technologies and innovation in reshaping business models and stakeholder engagement.

CO3: Apply digital transformation frameworks to evaluate organizational readiness and innovation capabilities.

CO4: Analyze the influence of social media and emerging digital trends on market dynamics, consumer expectations, and brand positioning

CO5: Develop a comprehensive digital strategy that synthesizes innovation, transformation models, and ethical considerations to drive sustainable growth.

Text Books:

1. Thomas Hess(2022); Managing the Digital Transformation -A Guide to Successful Organizational Change; Springer Nature Link

Reference Books:

1. ByM. Affan Badar, Ruchika Gupta, Priyank Srivastava, Imran Alin, Elizabeth A. Cudney(2024) Handbook of Digital Innovation, Transformation, and Sustainable Development in a Post-Pandemic Era; CRC Press

2. Richard Pettinger, Brij B. Gupta, Alexandru Roja, and Diana Cozmiuc(2022); Handbook of Research on Digital Transformation Management and Tools, IGI Global Scientific Publications

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course – I

25MCMBAAC03 MANAGEMENT INFORMATION SYSTEMS

L	T	P	C
2	0	0	0

Pre-requisite: **None**

Course Description: This course provides an overview of information systems in business, covering their components, resources, strategic roles, and applications. Topics include database management, systems development processes, and types of information systems across functional areas. Students will also explore IT-enabled business strategies, information security, ethical and global management challenges, with emphasis on using information systems for competitive advantage.

Course Objectives:

1. Define and explain the fundamental concepts of data, information, database systems, and MIS in organizational contexts.
2. Describe and illustrate the MIS development process, including planning, analysis, design, implementation, and stakeholder involvement.
3. Identify and compare the use of information systems across functional departments such as marketing, finance, HR, and operations.
4. Apply foundational principles of database management and MIS integration to demonstrate support for decision-making and operational efficiency.
5. Evaluate and critique system audit practices and management challenges in MIS implementation, focusing on compliance, risk mitigation, and governance.

UNIT I INTRODUCTION AND FOUNDATION CONCEPTS 6 hours

Foundations of information systems (IS) in business System concepts, Components of an IS, IS Resources, fundamental roles of IS applications in business – trends in IS – types of IS – managerial challenges of information technology. Competing with information technology (IT) Fundamentals of strategic advantage – strategic uses of IT – the value chain and strategic IT – using IT for strategic advantages – the basics of doing business on the Internet.

UNIT II DATA BASE AND INFORMATION MANAGEMENT 6 hours

Data in a Traditional file Environment, The Database Approach to Data Management; Role of databases in business performance and decision making, Manage data Resources. The Role of Information System in Business Today, Perspectives on Information Systems, Contemporary Approaches to Information Systems, Organization and Information Systems.

UNIT III MIS DEVELOPMENT PROCESS 6 hours

System development – System Life cycle method, Structured Development method, Developing Business/IT Strategies Planning for competitive advantage – business models and planning – Business/IT planning – Business application planning – Implementing IT–IS development – the Systems approach – the Systems Development Cycle – Prototyping – Systems development process – End-user development – implementing new systems – Software development.

UNIT IV INFORMATION SYSTEMS IN FUNCTIONAL DEPARTMENTS **6 hours**

Computers in Management – Types of information system: basing on levels of management – Transaction processing systems – Management Information system – Decision support system– executive support systems - Applications: Human Resource information system – Financial information system –Marketing information system – production and operations information system- Technologies and Tools for Protecting Information Resources.

UNIT V SYSTEM AUDIT & MANAGEMENT CHALLENGES **6 hours**

Security and ethical challenges– computer crime – privacy issues –health issues – Security management of IT – tools of security management -Verification and Validation— security measures - Ethical and Social Issues in Information System - Enterprise and global management of IT Managing the IS function – failures in IT management – the international dimension in IT management – Cultural, political, and geo-economic challenges Global business/IT strategies and applications – global IT platforms.

Course Outcomes:

CO1: Recall and explain the basic concepts of data, information, database systems, and MIS, highlighting their role in organizational contexts

CO2: Describe the MIS development process and apply structured methodologies to illustrate system planning, design, and implementation phases.

CO3: Analyze the application of information systems across functional departments and assess their impact on operational and strategic outcomes

CO4: Demonstrate the use of database management principles to support decision-making and cross-functional integration in business environments.

CO5: Evaluate system audit practices and management challenges in MIS implementation, proposing solutions for governance and risk mitigation.

Text Books:

1. C. Laudon Kenneth , P. Laudon Jane (2018). Management Information System Pearson Publications.

2. A. O'Brien, George M. Marakas, Ramesh Behl (2017). Management Information 11 edition ; McGraw Hill Education

3. Stair, R. M. & Reynolds, G. W. (2001). Principles of Information Systems, 5e, Singapore: Thomson Learning.

Reference Books:

1. Gordon B. Davis & Margrethe H. Olson(2006); Management Information Systems, Tata McGrawHill,

2 W S Jawadekar (2009);Management Information Systems Text & Cases, Tata McGraw-Hill ,

3 James A. O brein(2009), Management Information Systems; Tata McGraw-Hill , 10/e,.

4 Dharminder and Sangeetha(2006) Management Information Systems, 1/e, Excel books,

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course -1

25MCMBAAC04 BUSINESS PROCESS RE-ENGINEERING

L	T	P	C
2	0	0	0

Pre-requisite: None

Course Description:

Business Process Re-Engineering (BPR) focuses on radically redesigning organizational workflows to improve efficiency, quality, and responsiveness. The course covers BPR principles, tools, and change management strategies, enabling learners to analyze existing processes, identify inefficiencies, and implement transformative solutions aligned with strategic goals and technological advancements.

Course Objectives:

1. To **introduce** the foundational concepts, definitions, and importance of Business Process Reengineering (BPR).
2. To **develop** the ability to map and analyze existing business processes for identifying inefficiencies.
3. To **explore** and **apply** various BPR methodologies and tools for process redesign.
4. To **evaluate** the impact of BPR on organizational structure, culture, and performance.
5. To **design** and **implement** a BPR initiative using real-world or simulated case studies.

UNIT I INTRODUCTION TO BUSINESS PROCESS REENGINEERING 6 hours

Business process reengineering-an overview: Historical background Fundamentals of BPR Concepts and techniques. Changing business processes: the importance of technology as a driver for organization: Nature, significance and rationale of business process reengineering (BPR)

UNIT II PROCESS MAPPING AND ANALYSIS: 6 hours

Identifying core business processes- Process mapping techniques (Flowcharts, SIPOC, Value Stream Mapping)- Performance metrics and KPIs- Identifying bottlenecks and inefficiencies. Process redesign: Major issues in process redesign: Business vision and process objectives, Processes to be redesigned, measuring existing processes, Role of information technology (IT) and identifying IT levers.

UNIT III BPR METHODOLOGIES AND TOOLS 6 hours

Hammer and Champy's methodology -- Davenport's approach- Tools: ERP, Workflow Automation, Simulation - Case studies of successful BPR projects. BPR phases, Relationship between BPR phases. BPRE & TQM, benchmarking, ISO standards. Implementation of BPRE-business process management, principles, Business models, barriers.

UNIT IV ORGANIZATIONAL IMPACT OF BPR 6 hours

Change management in BPR- Role of leadership and Communication-Cultural and structural Implications-Risk assessment and Mitigation-Redesigning processes for agility and Efficiency-Implementation planning- Monitoring and continuous improvement- **Change management:** Change and the manager: change and the human resource: the cultural web and the past: the cultural attributes of change Typical BPR activities within phases: Change management, Performance management, and programme management.

UNIT V DESIGNING AND IMPLEMENTING BPR 6 hours

Redesigning processes for agility and efficiency - Implementation planning - Monitoring and continuous improvement- BPR and continuous improvement: Co-ordination and complementary efforts, IT capabilities and their organizational -impacts, Implementation of BPR, Stages of implementation and critical aspects, Case studies on BPR. The concept of the learning organization and its influence on systems development: restructuring the organization. The importance of communication and the resistance to change: building the culture for successful strategy implementation; the influence IT will have on the internal appearance of organizations in the future.

Course Outcomes:

CO1: Students will be able to **define** and **explain** the core concepts and principles of BPR.
CO2: Students will be able to **apply** process mapping techniques to analyze and improve business workflows.
CO3: Students will be able to **use** BPR tools and **compare** different methodologies for process redesign.
CO4: Students will be able to **evaluate** the impact of BPR on organizational structure and performance.
CO5: Students will be able to **design** and **implement** a BPR strategy in a simulated or real-world context.

Text Books:

1. Omar El Sawy(2010), Business Process Re-engineering, Tata McGraw Hill
2. R. Srinivasan,(2011) Business Process Re-engineering, Tata McGraw Hill
3. Warner Winslow(1996) Strategic Business Process Transformation through BPR, , Tata McGraw Hill ,
4. R. Radhakrisnan(2008) Business Process Reengineering, Prentice Hall of India.
5. Harmon, P. (2007), Business Process Change : A Guide for Business Managers and BPM and Six Sigma Professionals, Elsevier/Morgan Kaufmann Publishers.
6. R. Anupindi et al. (2006), Managing Business Process Flows: Principles of Operations Management, Pearson Education Inc.
7. Kock, N.F., 1999, Process Improvement and Organizational Learning: The Role of Collaboration Technologies, Idea Group.
8. Walford, R.B., 1999, Business Process Implementation for IT Professionals and Managers, Artech House.
9. Hammer, M. and Stanton, S.A., 1995, The Re-engineering Revolution, Harper Business.

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course – 2

25MCMBAAC05 TOTAL QUALITY MANAGEMENT

L	T	P	C
2	0	0	0

Pre-requisite: **None**

Course Description:

This course introduces the foundations of Total Quality Management (TQM**)**, its evolution, frameworks, and key contributors. It emphasizes principles of customer focus, employee involvement, supplier partnerships, and continuous improvement. Students learn tools and techniques including QC tools, Six Sigma, benchmarking, FMEA, QFD, DOE, and TPM. The course also covers implementation **practices** like Kaizen, 5S, JIT, Poka-Yoke, robust design, and ISO standards with case studies.

Course Objectives:

1. Study comprehensive knowledge about the principles, practices, tools and techniques of total quality management
2. Gain knowledge on leadership, customer satisfaction, addressing customer complaints, team work, employee involvement, related to customer and supplier partnership.
3. Gather information on various tools and techniques, concept on Six Sigma, bench marking and Failure Mode Effective Analysis (FMEA).
4. Know the importance of Quality circle, Quality Function Deployment, Taguchi design and case studies related to TQM.
5. Implement TQM

UNIT I INTRODUCTION 6 hours

Introduction - Need for quality - Evolution of quality - Definition of quality – Quality control,Quality management and Quality Assurance - Definition of TQM – Basic concepts of TQM – TQM Framework - Contributions by Deming, Juran and Crosby – Dimensions of quality – Benefits of quality and Barriers

UNIT II TQM Principles 6 hours

TQM principles - Strategic quality planning, Quality statements - Customer focus– Customer orientation, Customer satisfaction, Customer complaints Customer retention - Employee involvement – Motivation, Empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal - Continuous process improvement – Supplier partnership – Partnering, Supplier selection, Supplier Rating.

UNIT III TOOLS AND TECHNIQUES I 6 hours

The seven traditional tools of quality – New management tools – Six-sigma: Concepts, methodology, applications to manufacturing, service sector including IT – Bench marking – Reason to bench mark, Bench marking process – FMEA.

UNIT IV TOOLS AND TECHNIQUES II 6 hours

Quality circles – Quality Function Deployment (QFD) – Design of Experiments-Taguchi quality loss function – TPM – Concepts, improvement needs – Cost of Quality Performance measures.

UNIT V IMPELMENTATION OF TQM 6 hours

Steps, KAIZEN, 5S, JIT, POKAYOKE, I - Introduction to Robust Design, ISO Standards and Case studies.

Course Outcomes:

CO1: Understand the various principles and practices of TQM to achieve quality. CO2: Identify the various statistical approaches for Total Quality Control.

CO2: Demonstrate the TQM tools for continuous process improvement. CO4: Adopt the importance of ISO and Quality systems.

CO3: Make use of the concepts of TQM to solve case studies

CO4: Understand the various principles and practices of TQM to achieve quality. CO2: Identify the various statistical approaches for Total Quality Control.

CO5: Demonstrate the TQM tools for continuous process improvement. CO4: Adopt the importance of ISO and Quality systems.

Text Books:

1. Dale H. BesterField, et al., Total Quality Management, Pearson Education Asia, Third Edition, Indian Reprint (2003).

Reference Books:

1. James R. Evans and William M. Lindsay, The Management and Control of Quality, (6th Edition), South- Western (Thomson Learning), 2005.

2 Oakland, J.S. TQM – Text with Cases", Butterworth – Heinemann Ltd., Oxford, Third Edition (2003).

3 Suganthi,L and Anand Samuel, Total Quality Management, Prentice Hall (India) Pvt. Ltd. (2006).

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course – 2

25MCMBAAC06 MULTIMEDIA TECHNOLOGIES

L	T	P	C
2	0	0	0

Pre-requisite: **None**

Course Description:

This course introduces multimedia technologies, covering elements, applications, system architecture, and standards. It explains compression techniques and file formats for text, image, audio, and video data. Students learn about multimedia I/O devices, networks, protocols, and streaming technologies**.** The course also explores security, encryption, watermarking, and digital forensics with case studies.

Course Objectives:

1. To provide the foundation knowledge of multimedia computing
2. To provide the knowledge about media characteristics compression standards, multimedia representation, data formats, multimedia technology development.
3. To understand Multimedia, I/O technologies
4. To understand Multimedia Networks
5. To understand Multimedia security and forensics

UNIT I INTRODUCTION TO MULTIMEDIA TECHNOLOGIES 6 hours

Introduction to Multimedia: Multimedia Elements – Multimedia applications – Multimedia System Architecture – Evolving technologies for Multimedia – Defining objects for Multimedia systems – Multimedia Data interface standards – Multimedia Databases.

UNIT II COMPRESSION AND FILE FORMATS 6 hours

Compression and Decompression: Need for Data Compression – Types of Compression – Binary Image Compression Schemes – Image Compression – Video Compression – Audio Compression. Data and File Format Standards: Rich Text Format – TIFF File Format – Resource Interface File Format – MIDI File Format - JPEG DIB File Format – AVI Indeo File Format – MPEG Standards –TWAIN.

UNIT III MULTIMEDIA I/O TECHNOLOGIES 6 hours

Input and Output Technologies: Multimedia I/O Technologies: Image Scanners – Digital Voice and Audio– Digital Camera – Video Images and Animation – Full Motion Video -Video Motion Analysis.

UNIT IV MULTIMEDIA NETWORKS 6 hours

Protocol - QOS Issues - RTP, RTCP, RTSP, SIP - Media on demand –ITV - STB Broadcast Schemes for VoD Buffer Management- Multimedia over wireless networks.

UNIT V MULTIMEDIA SECURITY AND FORENSICS 6 hours

Multimedia encryption - Digital Watermarking Security Attacks- Digital Forensics taxonomy, goals/requirements - Forensic Data Acquisition -Forensics Analysis and Validation.

(Relevant Case Studies to be discussed)

Course Outcomes:

CO1: Understand the characteristics of different media and the representations of different multimedia data formats.

CO2: Understand the characteristics of Image, Audio and Video systems and takes into considerations in multimedia techniques design and implementation.

CO3: Describe different coding and compression principles and compare different compression techniques.

CO4: Design multimedia components efficiently

CO5: Develop integrated, collaborative multimedia systems

Text Books:

1. K. Andleigh, Kiran Thakrar , Multimedia Systems Design, PHI, 2007

2 ZeNian Li, S. Drew, "Fundamentals of Multimedia", PHI, 2006

3 Li, Ze-Nian and Mark S. Drew, "Fundamentals of Multimedia", Prentice Hall of India, 2004.

4 Steinmetz Ralf and K. Nahrstedt "Multimedia: Computing, Communications & Applications", Pearson Education, 1995.

Reference Books:

1. Ralf Steinmetz and Klara, "Multimedia Computing, Communications andApplications", Pearson Education, 2009

2 Min Wu, Bede Liu, "Multimedia Data Hiding", Springer-Verlag, 2002

3 I.Cox, M. Miller, and J. Bloom, "Digital Watermarking", Morgan Kaufman Publishers, 2001

4 Chun-Shien Lu, "Multimedia Security : Steganography and Digital Watermarkingtechniques forProtection of Intellectual Property", Springer Inc 2007

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course – 2

25MCMBAAC07 DATA ANALYSIS USING R

L	T	P	C
2	0	0	0

Pre-requisite: **None**

Course Description: This course is an applied statistics course focusing on data analysis. The course will begin with an overview of how to organize, perform, and write-up data analyses. Instead of focusing on mathematical details, the lectures will be designed to help you apply these techniques to real data using the R statistical programming language, interpret the results, and diagnose potential problems in your analysis. This course covers practical issues in statistical computing which include programming in R, reading data into R, accessing R packages, writing R functions, debugging, profiling R code, and organizing and commenting R code.

Course Objectives:

1. To learn fundamental concepts of R programming and its utility in data analysis, including working with various data types, objects, and structures.
2. To understand the role of control structures and develop the ability to write custom functions with appropriate scoping rules in R.
3. To master loop functions for repetitive tasks and learn debugging techniques to ensure error-free code execution.
4. To learn simulation fundamentals and code profiling techniques to analyze and optimize R scripts.
5. To expertise in working with vectors and variables in R and apply vectorized operations for efficient programming.

UNIT I INTRODUCTION **6 hours**

Gain a comprehensive overview of R, its applications, and utility in data analysis. Explore the various data types and objects available in R, understanding their properties and uses. Learn to efficiently read data from different file formats and write data outputs using R. R Data Structures – Vectors – Lists – Arrays – Matrice - Data Frames - Factors.

UNIT II CONTROL STRUCTURES AND FUNCTIONS **6 hours**

Understand the role of control structures in programming, such as conditional statements and loops, to manage the flow of execution. Develop and utilize custom functions in R, along with a deep dive into scoping rules for variable accessibility. Learn to handle and manipulate dates and times for temporal data analysis.

UNIT III LOOP FUNCTIONS AND DEBUGGING **6 hours**

Learn the fundamentals of simulation to model and analyze real-world scenarios. Acquire skills in code profiling to evaluate the performance of R scripts, identify bottlenecks, and optimize the efficiency of code for computational tasks.

UNIT IV PROFILING R CODE **6 hours**

Master the application of loop functions in R, such as apply, lapply, sapply, and their variants, to streamline repetitive tasks. Discover effective debugging tools and techniques to identify and resolve errors in your R code, ensuring robust and efficient Discover effective debugging tools code execution.

UNIT V VECTOR AND VARIABLES **6 hours**

Engage with the R interpreter to execute and test code interactively, gaining real-time feedback. Understand the structure and manipulation of vectors and variables, which form the backbone of R programming. Explore the creation and application of R functions for a deeper insight into vectorized operations.

Course Outcomes:

CO1: Understand basic R data structures like vectors, lists, arrays, matrices, data frames, and factors for data handling.

CO2: Use control structures and functions to manage program flow and handle date- time data in R.

CO3: Utilize loop functions such as apply, lapply, and sapply, and debug code to ensure robust and efficient execution.

CO4: Analyze profiling R code, identify performance bottlenecks, and optimize computational efficiency.

CO5: Demonstrate various operations on vectors and variables, leveraging R's interpreter for interactive testing and execution.

Text Books:

1. R Programming for Data Science by Roger D.Peng, Lean publisher.

2 25 Recipes for Getting Started with R, Publisher: O'Reilly Media, January 2011.

3 Learning R Paperback by Richard Cotton, Publisher: O'Reilly; 1 edition (20 September 2013).

Reference Books:

1. R for Data Science By Hadley Wickham, Mine Çetinkaya-Rundel and Garrett Grolemund, Publisher: O'Reilly Media, Inc., 2nd Edition, June 2023.

Web Resources

1 https://www.coursera.org/course/rprog

2 https://www.coursera.org/course/dataanalysis

3 https://adv-r.hadley.nz/

Mode of Evaluation: Assignments and Mid Term Tests

Audit Course – 2

25MCMBAAC08 INDIAN TRADITIONAL KNOWLEDGE

L	T	P	C
2	0	0	0

Pre-requisite: **None**

Course Description:

This course introduces the Indian Knowledge System (IKS)**,** its historical roots, philosophical schools, and scientific contributions. It explores linguistics, number systems, astronomy, mathematics, medicine, and sustainable technologies**.** Learners study human values, leadership, governance, art, architecture, and education systems like Nalanda and Gurukula. The course emphasizes the ethical, cultural, and global relevance of IKS**,** with renewed focus under NEP 2020**.**

Course Objectives:

1. To introduce the scope, significance, and interdisciplinary nature of Indian Knowledge Systems and their relevance in the modern world.
2. To explore the philosophical and epistemological foundations of Indian Knowledge Systems, including key concepts like Pramāṇa, Dharma, and Rta.
3. To examine the scientific contributions of ancient India in fields such as mathematics, astronomy, medicine, and engineering.
4. To understand Indian perspectives on society, governance, literature, and aesthetics through classical texts and traditions.
5. To appreciate the cultural richness, ethical values, and traditional educational systems that shaped Indian civilization.

UNIT I **INDIAN KNOWLEDGE SYSTEM: AN INTRODUCTION** **6 hours**

Indian Knowledge System: An Overview- Historical evolution and contemporary Relevance-Interdisciplinary approach and integration in education-The Vedic Corpus, The Four Vedas and their components, Oral transmission and cultural continuity--Philosophical Systems, Orthodox (Āstika) and Heterodox (Nāstika) schools, Logic, metaphysics, and epistemology in Indian philosophy -Wisdom through the Ages- Scientific and Mathematical Contributions, Ayurveda, Astronomy, Metallurgy, Mathematics, Key scholars: Charaka, Sushruta, Aryabhata, Bhaskaracharya

UNIT II **FOUNDATIONAL CONCEPTS IN INDIAN KNOWLEDGE SYSTEMS** **6 hours**

Shaping India's intellectual traditions- Ancient Indian linguistics, highlighting phonetics, grammar, and language philosophy-traditional number systems, units of measurement, and their practical applications in science and trade -indigenous frameworks for organizing and classifying knowledge, offering insights into how Indian scholars approached learning, epistemology, and the systemic cultivation of wisdom across disciplines.

UNIT III **SCIENCE AND TECHNOLOGY IN INDIAN KNOWLEDGE SYSTEMS** **6 hours**

India’s classical achievements in mathematics, astronomy, architecture, and science. Learners explore ancient texts and applications—highlighting concepts like zero, planetary motion, and structural design. integration of science with philosophy and sustainability. Through notable scholars and indigenous techniques, how Indian scientific thought continues to influence contemporary innovations-offering wisdom for solving modern challenges.

UNIT IV **HUMANITIES AND SOCIAL SCIENCES IN INDIAN KNOWLEDGE SYSTEMS** **6 hours**

Indian insights on leadership, wellbeing, and governance through ancient texts like the Srimad Bhagavad Gita. Topics include holistic management principles, psychological well-being, ethical governance, and traditional administrative models—emphasizing their relevance to modern society, personal growth, and nation-building.

UNIT V **CULTURAL, EDUCATIONAL, AND ETHICAL DIMENSIONS OF INDIAN KNOWLEDGE SYSTEMS** **6 hours**

Art, Architecture, and Aesthetics-Temple architecture and sculpture-Music, dance, and literary traditions-**Education Systems and Institutions,** Gurukula system and pedagogical practices, Ancient universities: Nalanda, Takshashila-**Ethics and Values in Indian Thought**-Dharma, Karma, Moksha — principles of righteous living, Sustainability, harmony, and spiritual ecology-**Contemporary Relevance and Global Influence,** Indian knowledge systems in modern science and culture, Resurgence through NEP 2020 and academic initiatives

Course Outcomes:

CO1: Learners will be able to **describe** the scope and interdisciplinary relevance of Indian Knowledge Systems in contemporary contexts.

CO2: Learners will be able to **analyze** foundational philosophical concepts such as *Pramāṇa*, *Dharma*, and *Rta* within Indian epistemology

CO3: Learners will be able to **apply** ancient Indian scientific principles to understand traditional practices in mathematics, astronomy, and medicine

CO4: Learners will be able to **evaluate** classical Indian texts to interpret perspectives on governance, society, and aesthetics.

CO5: Learners will be able to **design** culturally informed ethical frameworks and educational models inspired by traditional Indian systems.

Reference Books:

1. Introduction to Indian knowledge system: concepts and applications
By B. Mahadevan , Nagendra Pavana , Vinayak Rajat Bhat, PHI publications

2 Bhagavad Gita: As It Is" by A.C. Bhaktivedanta Swami Prabhupada Published by The Bhaktivedanta Book Trust

3 "Indian Philosophy, Volume 1 and 2 by S. Radhakrishnan Published by Oxford university press.

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