SYLLABUS

FOR

FIRST YEAR

MBA PROGRAMME

(Effective from 2024-25)



2024-25 BIJU PATNAIK UNIVERSITY OF TECHNOLOGY, ODISHA ROURKELA

COURSE STRUCTURE

FIRST SEMESTER

Categ	ory	Subject Code	Subject	L-T-P	Credit	University Marks	Internal Marks				
THEORY	THEORY										
1.	PC	MBPC1001	Management Principles	3-0-0	3	100	50				
			& Organizational Behaviour (MPOB)								
2.	PC	MBPC1002	Marketing Management	3-0-0	3	100	50				
3.	PC	MBPC1003	Financial Accounting and Analysis	3-0-0	3	100	50				
4.	EV	MBEV1001	Managerial Economics	3-0-0	3	100	50				
5.	QT	MBQT1001	Quantitative Techniques	3-0-0	3	100	50				
6.	EV	MBEV1002	Business Communication	3-0-0	3	100	50				
7.	EV	MBEV1003	Universal Human Values, Ethics and Environment	3-0-0	3	100	50				
8.	EV	MBEV1004	Entrepreneurship & Legal environment	3-0-0	3	100	50				
9.	EV	MBEV1005	Management Lessons from Ancient India	2-0-0	2	100	50				
		Total		26-0-0	26	900	450				
SESSIC	NAL	/ PRACTI	CAL								
10.	PC	MBPC1201	IT Skills for Managers	0-0-2	2	-	100				
11.	EV	MBEV1201	Business Communication Lab	0-0-1	1	-	100				
			Total	26-0-3	03	-	200				
			Total Semester		29	900	650				
			Grand Total (Theory + Practical) = 1550								

SECOND SEMESTER

Cateo	gory	Subject Code	Subject	L-T-P	Credit	University Marks	Internal Marks	
THEORY								
1.	PC	MBPC1004	Corporate Finance	3-0-0	3	100	50	
2.	PC	MBPC1005	Cost and Management Accounting	3-0-0	3	100	50	
3.	PC	MBPC1006	Human Resources Management	3-0-0	3	100	50	
4.	QT	MBQT1002	Business Research	3-0-0	3	100	50	
5.	PC	MBPC1007	Operations Management	3-0-0	3	100	50	
6.	PC	MBPC1008	Business Analytics	3-0-0	3	100	50	
7.	PC	MBPC1009	Management Information System	3-0-0	3	100	50	
8.	PC	MBPC1010	Strategic Management	3-0-0	3	100	50	
9.	PC	MBPC1011	Introduction to AI	2-0-0	2	100	50	
		Total		26-0-0	26	900	450	
SESSI	ONAL	/ PRACTI	CAL					
10.	EV	MBEV1202	Health & Wellness	0-0-1	1	-	100	
			Total	26-0-1	01	-	100	
			Total Semester		27	900	550	
			Grand Total (Theory + Practical) = 1450					

MBEV1001 MANAGERIAL ECONOMICS (3-0-0)

Course Objectives:

- 1. To lay an adequate theoretical foundation to study various applied fields in economics and management.
- 2. To demonstrate the application of economic theory to business decisions.
- 3. To develop a student's ability to think analytically about the economic forces at work in society.
- 4. To develop a framework which the students may use to analyze the overall behavior of a modern mixed economy.

Module – I

Relevance of economics for business decisions, Scope of Managerial Economics, Role of Managerial Economist and Business decision making. Demand Analysis – individual demand and market demand, Determinants of demand, Elasticity of demand and its measures in business decision making, Demand Estimation and demand Forecasting, Supply Analysis.

Module - II

Production functions: Short Run Production Function – Variable Proportions, Long Run Production Function - Returns to Scale; cost minimization and output maximization, various cost concepts, cost functions, Economies of scale and economies of scope (simple numerical problems to be solved).

Module-III

Market morphology, price and output determination under different market conditions: Perfect competition, monopoly, monopolistic competition, oligopoly, Descriptive pricing approaches: Full cost pricing, product pricing; Price skimming, penetration pricing. Input pricing; Concepts of consumption, saving, and investment, Phases of business cycle, Inflation, Fiscal and Monetary policies, National Income.

Course Outcomes:

- CO-1: Adopt the managerial economics concepts for business decision making. Also know the law of demand, its exceptions and the use of different forecasting methods for predicting demand for various products and services.
- CO-2: Analyse the different costs of production and how they affect short and long run decision. Derive the equilibrium conditions for cost minimization and profit maximization. Analyse economies of scale, diseconomies of scale and economies of scope.
- CO-3: Learn about the short run and long run equilibrium of a firm and industry and also about different market structure and various pricing techniques.
- CO-4: Analyse different phases of business cycle, Analyse the impact of cyclical fluctuation on the growth of business and lay policies to control business cycle.

Reference Books:

- 1. Managerial Economics, Geetika, Ghosh, Raychoudhury, TMH
- 2. Managerial Economics, Salvatre, Srivastava, Oxford
- 3. Managerial Economics, Keat, Young, Banerjee, Pearson,
- 4. Managerial Economics, H L Ahuja, S.Chand
- 5. Managerial Economics Theory and Applications, DM MithaniHPH

- 6. Managerial Economics, PL Mehta Sultanchand&Co.
- 7. Managerial Economics, DN. Dwivedi, Vikash

MBEV1002 BUSINESS COMMUNICATION (3-0-0)

Course Objectives:

The objectives of the course are:

- 1. To provide an overview of the process and types of communication including Business Communication
- 2. To familiarize the learners with different formats of organizational communication
- 3. To infuse the correct practices and strategies of effective business writing and business presentation.
- 4. To put in use the basic mechanics of grammar, usage, and punctuation.
- 5. To create awareness of employability skills.

MODULE-1: ORAL COMMUNICATION

Communication Basics: The process of communication (2-way Model): Sender, Message, Channel, Receiver, and Feedback. Barriers to Communication, Communication Flow in Organizations: The Grape-vine; Formal Channels- Downward, Upward; Horizontal; Diagonal. Non-verbal Communication: Kinesics, Oculesics, Proxemics, Chronemics, Haptics, Paralanguage, Appearance and Artifacts.

Language Skill 1 - Listening: Listening Vs. Hearing- Importance of the listening Skill-Types of Listening: Active Listening; Empathetic Listening; Content Listening; Critical Listening- Guidelines for improving the Listening skill.

Language Skill 2- Speaking: Guidelines for improving confidence, fluency, articulation, accent and voice modulation while speaking, Cell Phone Etiquette; Meetings: Preparing a Notice- cum- Agenda; Chairperson's role; Other role functions in a meeting; Minutes of a meeting.

MODULE-II: WRITTEN COMMUNICATION

Language Skill 3 – Reading: The Process of Reading; Sub skills of Skimming, scanning, inferring, guessing word-meaning, Using appropriate speed for various kinds of reading, correction of reading faults of eye-fixation, regression, finger-pointing, sub-vocalizing, Reading aloud, and indiscriminate use of the Dictionary. Critical Reading with analytical skills.

Language Skill 4- Writing: The Writing Process- Guidelines for composing effective business messages- Persuasive Techniques: Fundamentals of Persuasion, Components of Attitude - Cognitive, Affective, Behavioural (Ethos, Pathos, Logos & Syllogism) - AIDA - NLP (VAKOG), Appeals (Emotional & Rational).

Business Letter: Form; Formats; and Types: Structure of Routine and persuasive business messages, good-will, good-news, and bad-news messages.

Business Memo; Features of an effective business E-mail; Rules of Netiquette. Preparing a Resume- Parts of a Resume- Resume Styles: Chronological, Functional, and Chrono- Functional- Resume Design- Job Application letter. Writing Business Reports: Features of a good business report. Formats- Printed form, Memo, Letter, manuscript; Structure of a short Formal Report. Steps in planning and preparing a business report.

Writing a Case Analysis

Applied English Grammarfor Business Writing: English Verb types: Stative and Dynamic; Transitive and Intransitive; Main and Auxiliary verbs. Tenses- Subject Verb Concord-Active & Passive voice- Relative Clauses & Modifier Placement-Parallel Structures-Punctuation.

MODULE-III: EMPLOYABILITY SKILLS

Group Discussion: Difference between GD and Debate- Parameters of Performance evaluation in a GD: Awareness, Reasoning ability, Discussion Skills, Leadership, Openness, Assertiveness, Attentive Listening, Motivation and Enthusiasm- How to get prepared for GD- Some Dos and Don'ts.

Interviews: Types by purpose; 3 stages of an interview; how to prepare for an interview; how to answer FAQs; Following up with a letter of thanks.

Presentations: Their importance for a manager- Features of a good business presentation. Planning, Preparing & Structuring a PPT Preparation, Rehearsal & Delivery- Answering questions after the presentation- Overcoming stage fright- Importance of Body Language in presentations.

Communication in Global Environment:

Cross cultural communication

Technology in use - Video conferencing - Google Meet - Teams – Zoom: Arranging meetings Social Media - Artificial Intelligence & Communication prompts.

Course Outcomes:

After the course, the students will be able to:

- CO-1: Distinguish among various levels of organizational communication and communication barriers while developing an understanding of communication as an organizational process.
- CO-2: Develop awareness of Techniques of active Listening and fluent speaking.
- CO-3: Apply the reading strategies of Skimming, Scanning, and Inferring in the comprehension of the reading texts of various types.
- CO-4: Demonstrate the ability to compose reasonably error-free business correspondence with brevity and clarity.
- CO-5: Apply Creative thinking as well as critical thinking in preparing his/her resume, in writing Reports, and in taking part in Group Discussions, and in designing PPTs for presentation.
- CO-6: Use appropriate communication skills in multicultural contexts, in social media, in web meetings, and in web browsing.

Text Books:

- 1. Communication Skills. Sanjaya Kumar & Pushpa lata, Oxford University Press.
- 2. Business Communication: Skills, Concepts, and Application- P.D Chaturvedi and Mukesh Chaturvedi, Pearson.
- 3. Business communication- Meenakhi Raman & Prakash Singh, OUP.

- 4. Business and Managerial Communication-Sailesh Sengupta, PHI learning
- 5. Bcom: Business Communication- A South Asian Perspective, Lehman, Dufrene & Sinha, Cengage Learning.
- 6. Effective Technical Communication, Ashraf Rizvi, McGraw Hill India.

MBEV1003 UNIVERSAL HUMAN VALUES, ETHICS AND ENVIRONMENT (3-0-0)

Course Objectives:

- 1. To develop students' understanding of the concept of Human Values and related issues.
- 2. To make students aware the importance of Harmony in self, family, society and nature.
- 3. To make the students understand the importance of ethical practices in business and governance.
- 4. To exhibit understanding of the importance of business environment and probable impact of environmental factors on a business.
- 5. To sensitize learner the link between environmental issues and business.

Module I- Universal Human Values (UHV)

Universal Human Values (UHV) – Introduction, Need for Value Education, Right Understanding, Mutual happiness and prosperity, Role of Education-Sanskar (Enabling the Transformation to Human Consciousness), Self-exploration- The Content and Process, Meaning of Happiness and Prosperity. Understanding Harmony in the Self-Harmony of the Self with the Body: Self-regulation and Health, Understanding Harmony in the Family -Feeling of Relationship as the Basis for Harmony in the Family, 'Trust' – the Foundational Value in Relationship, Respect– As the Right path to harmony in family, Affection, Care, Guidance, Reverence, Gratitude and Love as Values in Relationship. Understanding Harmony in the Society - Understanding Human Goal, Harmony from Family Order to World Family Order –Universal Human Order- From understanding self to Family order, Family cluster order, village cluster order, Nation order, and world family order. Understanding Harmony in Nature/Existence: Nature as Collection of Units: Harmony among the Four Orders- Physical order, Bio order, Animal order, and Human order. Mutual fulfilment among the Four Orders of Nature: Co-existence at all Levels. The Holistic perception of Harmony in Existence.

Case Study depicting business applications of Universal Human Values (UHV)

Module II- Business Ethics

Ethics& Business Ethics - Definition, Meaning, Importance, Nature & Scope. Factors influencing business ethics, Salient feature, Ethical principles in business. Theories of ethics-Absolutism vs. Relativism, Kohlberg stages of moral development. Managing ethical dilemmas, Ethical decision making, Employee and Business Ethics, Ethical and value-based leadership. Ethics in governance practices in corporates, Corporate scams and unethical practices. Ethical principles and practices in Marketing, Finance, HRand other disciplines. Promoting ethical culture in business organization.

Case Study depicting ethics in business to be discussed.

Module III- Environment

Natural environment; Ecology and environmental protection and sustainable development – Bio-diversity and environmental degradation issues, Managing natural disaster,

Environmental Legislations, Issues of global warming, terrorism, natural disasters. Issues relating pollution- causes, and control measures. Greening Management- Green policies and practices in corporates, Environmental Partnership, Environment Audit, Product Stewardship. Environment Management as Competitive Advantage, World Business Council for Sustainable Development (WBCSD) and its ten messages for business.

Business Environment: Meaning, nature and scope, economic and non-economic environment; internal and external environmental factors. Scanning of environmentmethods and techniques of scanning (ETOP, SWOT). Economic Environment of Business: recent developments in Indian Economy. Non-Economic Environmental Factors: Non-Economic factors influencing business. Changes in Business and Industrial policy- Recent industrial policy, trade liberalization, from a Closed to Open economy. Case Study depicting Business Environment.

Course Outcomes:

- CO-1: Develop a comprehensive understanding of Universal Human Values (UHV) and their practical applications in personal, familial, societal, and business contexts.
- CO-2: Analyze ethical principles and theories in business decision-making, fostering a culture of integrity, responsibility, and leadership.
- CO-3: Evaluate environmental issues, regulations, and sustainable business practices to mitigate ecological degradation and promote corporate responsibility.
- CO-4: Assess the dynamic business environment, including economic, political, and ethical dimensions, to navigate challenges and opportunities in diverse socio-economic landscapes.

Text Book(s)

- 1. A Foundation Course in Human Values and Professional Ethics by R R Gaur, R Asthana, G P Bagaria, Excel Books, New Delhi, 3rd Edition.
- 2. A Foundation Course in Holistic Human Health by S Asthana, A Shukla, TS Perumal- UHV Publication.
- 3. Business Environment B N Ghosh, Oxford
- 4. Business Ethics Murthy, HPH
- 5. K.S.Thakur, Business,Ethics and Environment, Publisher: Aadi Publications, Seller: Neha Publisher

Reference Books

- 1. E.F. Schumacher, 1973, Small is Beautiful: a study of economics as if people mattered, Blond & Briggs, Britain
- 2. A N Tripathy, 2003, Human Values, New Age International Publishers.

MBEV1004 ENTREPRENEURSHIP & LEGAL ENVIRONMENT (3-0-0)

Course objectives:

- 1. The aim of learning by putting business and law together is to Create and maintain functional skill spaces on spectrum of lawful insight for Learners whether they run business entities or work for the people running it.
- 2. Sensitize the students to understand entrepreneurship as a career and skills required.

Module- I

Entrepreneurship: Concept of entrepreneurship and intrapreneurship, Types of Entrepreneurs, Nature and Importance, Entrepreneurial Traits and Skills, Entrepreneurship as a career, Identification of opportunity and converting idea to reality, Role of family, Society, EDIs. Sickness of Small-Scale Industries, Causes and symptoms of sickness, cures of sickness, Role of Banks and Governments in reviving industries.

Start-up Environment: Definition and characteristics of start-ups, Types of start-ups (Social, impact based, rural start-ups), Start-up India policy, Start-up Odisha policy, Knowledge of Key Accelerators, Incubators and Mentors in India, Understanding their role and advantages and disadvantages.

Module-II

Law of Contract: Contract Act: Indian Contract Act, 1872, Agreement, Contract, Essentials of Contract (Offer & Acceptance, Consideration, Capacity of Parties, Free Consent, and Legality of Object), Performance and Discharge of Contract, Remedies for breach of contract, Quasi Contract and Contingent Contract.

Special Contract: Sale and agreement to sell, Condition and Warranty, Transfer of properties, Finder of Goods, Performance of Contract of sale, Unpaid seller and his rights.

Module-III

Company Laws: Indian Companies Act 2013, Salient features and Classes of Company. Lifting of corporate veil, Procedure of Incorporation and Certificate of commencement of business, Memorandum and Articles of Association, Doctrine of ultra vires and Indoor Management, Management of Company: Qualification, Appointment of Directors, Company Meetings, Resolutions, Winding-up of Companies and their modes.

Course Outcomes:

- CO-1: Rationalise for studying Entrepreneurship Development and realizing that entrepreneurs are wealth creators in our society.
- CO-2: Demonstrate a fundamental comprehension of business opportunities and implementing them practically.
- CO-3: Discuss unique start-up or entrepreneurial ideas in groups and present a business plan that articulates and applies financial, operational, organizational, market, and sales knowledge to identify paths to value creation through 1) company formation (for-profit); 2) social innovation (non-profit); or 3) intellectual property licensing.
- CO-4: Demonstrate an in-depth understanding of the Start-up ecosystem in India and become conversant with sources of new finances, use of technology, customer acquisition concepts, etc. The focus will be on creating sustainable businesses.

Text Books:

- Entrepreneurship Development and Management, Vasant Desai, HPH
- Entrepreneurship Management, Bholanath Dutta, Excel Books
- Entrepreneurial Development, Sangeeta Sharma, PHI
- Entrepreneurship Development by Khanka
- Entrepreneurship, Rajeev Roy, Oxford University Press
- Business Law –S R Mohapatra and S R Patra, HPH
- Business Law N D Kapoor, S Chand
- Business Law Pathak, Tata Mc Graw Hill

MBEV1005 MANAGEMENT LESSONS FROM ANCIENT INDIA (2-0-0)

Course Objectives:

- 1. To understand the evolution of management thought in ancient India and its relevance in modern times.
- 2. To analyse the management perspective present in Vedantic literature, focusing on principles applicable to contemporary management practices.
- 3. To examine the ethical and moral values, leadership qualities, and strategic management lessons derived from the Ramayana, the Mahabharata and the Bhagavad Gita.
- 4. To explore the management and economic principles elucidated in Kautilya'sArtha Sastra and the Jain texts.

Module- I

Introduction to Ancient Indian Knowledge System; Evolution of Indian management thought; Need of India oriented Approach.

Management perspective in Vedantic Literature.

Management lessons in the Ramayana: Ethical and moral values, leadership, governance, strategic alliance.

Management lessons in the Mahabharata and the Bhagavat Gita: Conflict management, Inspirational leadership, alternative perspective on work and performance

Module-II

Kautilya's management lessons: Qualities of a leader, functions and role of a leader, motivation and communication; Principles and practice of governance of a state and of a corporation; Economic Thought of Kautilya.

Management perspective in Jain Literature: Code of conduct, Four pillars of human values, Conflict resolution, Ethical management, Mahavira's Economics.

Management Lessons in Buddhist Literature: Team building, Personal development of team members, Knowledge management.

Course Outcomes:

After the course the students will be able to:

- CO-1: Demonstrate a deep understanding of the ancient Indian knowledge system, including its philosophical, spiritual, and managerial dimensions, and apply this understanding to contemporary management challenges.
- CO-2: Critically analyse the evolution of Indian management thought, recognizing key influencers and schools of thought, and synthesize these insights to develop a holistic approach to management.
- CO-3: Evaluate the management perspectives presented in Vedantic, Jain, Buddhist, and epic literature (such as the Ramayana, Mahabharata, and Bhagavad Gita), identifying common themes and principles, and apply them to address complex organizational issues.
- CO-4: Develop practical skills in leadership, governance, conflict resolution, ethical management, team building, personal development, and knowledge management, drawing from the rich tapestry of ancient Indian texts and adapting them to modern organizational contexts.

Text Books:

- 1. Management Practices and Thoughts in Ancient India, Khandelwal and Mohanty, Himalaya Publishing House
- 2. Relevance of Ramayana in Contemporary Times, Gupta, Agrawal and Sharma, IBA publications
- 3. Kautilya-The Artha Shastra, L.N. Rangarajan, Penguin books
- 4. Indian Models of Economy, Business and Management, P. Kanagasabapathi, PHI
- 5. Sri Bhagavad Gita for Managers, Khandelwal, Himalaya Publishing House.
- 6. "Indian Management and Leadership: Spiritual and Ethical Values for Corporate and Personal Success" by S. Ramaratnam: BLUEJAY BOOKS- 2007
- 7. "Indian Economic Development" by Uma Kapila: Academic Foundation; 2018
- 8. "The Mahabharata: A Modern Rendering" by Ramesh Menon Vol-1 & Vol-2, iuniverse-2006.

"The Bhagavad Gita" (translated by Eknath Easwaran), Nilagir Press, 2007

MBEV1201 BUSINESS COMMUNICATION LAB (0-0-1)

Course Objectives:

The objectives of the course are:

- 1. To improve LSRW skills.
- 2. To learn and practice communication skills in a business context.
- 3. To enhance reading and listening comprehension.
- 1. Listening exercises:
 - Listening with a focus on pronunciation: segmental sounds, stress, weak forms, intonation.
 - Listening for meaning: listening to a short talk /news bulletin.
 - Taking notes from a lecture/speech.
 - Comprehending conversation
- 2. Speaking exercises:
 - Giving a short speech on a topic of interest. Participate in debates.
 - Preparing for GDs, Interviews: Structured & Unstructured, Stress Interviews, Business Etiquette
 - Preparing Presentation, Making presentations before the top management.
 - Practice exercises on the common grammatical errors.
 - Role- plays to practice effective use of body language, para language and spatial communication.
- 3. Reading exercises :
 - Developing vocabulary, Improving reading speed & comprehension
 - Note making after reading a text.
 - Showing the main idea and supporting ideas and the relationship between them.
 - Analyzing news articles.
- 4. Writing exercises:
 - Practice in writing paragraphs, Précis writing
 - Managerial Writing: Business letters: request, invitation, proposal, sales reports
 - Managerial Writing: Ad copywriting using AIDA, appeals, cognitive dissonance, Preparing Press Releases, Press Notes

- Writing CVs and Resumes, AI Prompts & keywords
- Remedial measures to focus on correct use of English verbs, sentence structures, clause- types, Interrogation and parallel structures.

- **CO-1**: Create Documents
- CO-2: Develop group communication skills.
- CO-3: Demonstrate business etiquette.
- CO-4: Demonstrate presentation skills.
- CO-5: Understand and evaluate self to develop Emotional Intelligence
- CO-6: Develop interviewing and responding skills.

Text Books:

- 1. English Language Laboratories, Nira Konar, PHI
- 2. Guide to Managerial Communication, Mary Munter, Pearson
- 3. Cengage Learning India, English Language Communication Skill Lab Manual
- 4. Soft Skills for Everyone, Butterfield, Cengage
- 5. Campus to corporates, Sage Publication
- 6. A practical Course in Spoken English, Gangal, PHI

MBEV1202 HEALTH & WELLNESS (0-0-1)

Course Objectives:

- 1. To understand the importance of nutrition in preventing life-threatening diseases like cancer, hypertension, obesity, diabetes, and cardiovascular diseases.
- 2. To explore the components of physical fitness and differentiate between active and sedentary lifestyles, understanding their implications on health.
- 3. To examine the relevance of promoting holistic well-being in the modern world.
- 4. To learn various yogasanas, Pranayama, and meditation techniques for fostering a healthy mind-body connection and overall wellness.

Module-I: Introduction to Health & Wellness

Definition of health- WHO definition, definition as per Ayurveda; Importance of health in everyday life; Components of health- physical, social, mental, spiritual and its relevance; Concept of wellness: Mental Health & wellness; Mind- Body connection in health, concept and relation Implications of mind-body connections.

Module-II: Management of Health and Wellness

Stress Management and Relaxation Techniques: Understanding stress and its impact on health, Stress management strategies, Relaxation techniques, including yoga and meditation. Need and importance of yoga (Asanas and Pranayama), and meditation for healthy well-being. Preventive Healthcare and Disease Prevention: Role of preventive healthcare measures, Screening tests and immunizations, Lifestyle factors in disease prevention.

Course Outcomes:

- CO-1: To understand the concept of health and wellness and its relevance in daily life.
- CO-2: To be aware of the relation between mind-body and its relevance.
- CO-3: To adopt healthy physical habits and behaviours for well-being.

Books:

- 1. A Text Book on Physical Education & Health Education Fitness, Wellness and Nutrition, Dr. A. K. Uppal, Dr. P. P. Ranganathan.
- 2. Dr. R. Nagarathna and Dr. H.R. Nagendra: Yoga and Health, Swami Vivekananda Yoga Prakashana,2002
- 3. B. C. Rai Health Education and Hygiene, Published by Prakashana Kendra, Lucknow.

MBPC1001 MANAGEMENT PRINCIPLES & ORGANIZATIONAL BEHAVIOUR (MPOB) (3-0-0)

Course Objectives:

- 1. To introduce the students with the fundamentals of management and its processes.
- 2. To facilitate the students in understanding individual, group behavior and organizational culture and climate impacting learning organisation.

Module-I: Foundations of Management

Introduction to Management and Administration, Evolution of Management, Management Levels; Managerial Roles and Skills; Management Functions: Planning, Organising, Staffing, Directing and Controlling, Management Process, Decision Making, Contribution in the filed of Management by Peter F. Drucker, Michel Porter, C.K. Prahalad, Barnand, McGregor, Rensis Likert and McKinsey.

Module-II: Organisational Behaviour- I

Introduction to Organization Behaviour, Nature, Scope, OB Model, Personality: Traits and types; Perception-Factors and Process, Employee Motivation - Values and attitude; Barriers to change attitude, Developing Emotional Intelligence at the work place, Interpersonal relation and Transactional Analysis.

Module-III: Organizational Behaviour- II

Group and Team- stages and effectiveness; Conflict Management process, Leadershipskills, roles, Styles (Managerial Grid), Women leadership in India.

Organizational culture, Organizational climate VS organization culture, Factors contributing towards creating and sustaining culture, Organization Design, Change Management- Change Model and Organizational Development, Learning organisation-Organizing Knowledge Resource.

Course Outcomes:

After completing this course, students should be able to:

- CO-1: Define, remember, understand, explain and interpret various concept of Management and organizational behaviour, managerial levels, roles, and skills managerial functions. such as Planning, Organising, Staffing, Directing and Controlling.
- CO-2: Analyse and identify various aspects of individual organizational behaviour such as personality, perception, values, attitude, motivation and their impacts.
- CO-3: Evaluate group and team dynamics, including stages of development and factors influencing effectiveness, and assess leadership skills, roles, and styles, including the Managerial Grid and the role of leadership in organizational context.
- CO-4: Integrate and implement important managerial and behavioural skills to empower the students to appreciate the requirement of behavioural code of conduct in the world of business.

Text Book:

- 1. Management, Stephen P. Robbins, Mary Coulter, Agna Fernandez, Pearson Education, 2018
- 2. Organizational Behavior, Fred Luthans, McGraw Hill, 2017 References:
- 3. Organizational Behaviour: Human Behaviour at Work, John W. Newstrom, Tata McGraw Hill,2017
- 4. Organizational Behaviour –Text and cases by Aswathappa, 12th revised edition, Himalaya publication
- 5. Essentials of Management, Harold Koontz, Heinz Weihrich ,Mark V Cannice,2020
- 6. Behavior in Organizations, Jerald Green Berg & Robert A. Baron, Pearson Education,2010 5. Management and Organizational Behaviour, Subbarao P, Himalaya Publishing House,2017 6. Organizational Behaviour, Sarma, Jaico Publications,2009
- 7. Management and Organizational Behaviour, Paul Hersey and Ken Blanchard, PHI,2009
- 8. Organizational Behavior, Kavita Singh, Pearson 2010

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

MBPC1002 MARKETING MANAGEMENT (3-0-0)

Objectives:

- 1. Understand the fundamental concepts and principles of marketing, including the distinction between selling and marketing, the marketing concept, and the significance of avoiding marketing myopia.
- 2. Analyze the marketing environment, distinguishing between macro and micro factors, and evaluate the importance of environmental analysis in strategic decision-making.
- 3. Develop proficiency in market segmentation, targeting, and positioning strategies, along with an appreciation for the role of consumer behavior in shaping marketing strategies.
- 4. Gain practical knowledge of product management, pricing strategies, distribution channels, and promotional techniques, including contemporary approaches such as digital marketing, relationship marketing, and green marketing.

Module-I

Definition & Functions of Marketing, Scope of Marketing, Marketing concept, Selling versus Marketing, Concept of Marketing Myopia. 80: 20 Principle, Introduction to the Concept of Marketing Mix, Bottom of the pyramid concept; Concept of Marketing Environment: Macro and Micro, Need for analyzing the Marketing Environment.

Module-II

Market segmentation, Bases for market segmentation, Targeting , Positioning; Meaning & importance of consumer behavior, Comparison between Organizational Buying behavior and consumer buying behavior, Buying roles, Five steps buyer decision process. Contemporary Topics: Viral Marketing, Guerrilla Marketing, Societal and social Marketing, Relationship Marketing, Green Marketing , Digital Marketing, Network Marketing (Concepts only)

Module-III

Product: Classification of consumer products and industrial products, Product Mix,

NewProduct Development Process: Idea Generation to commercialization. Product Life Cycle, Strategies across stages of the PLC.Packaging&Labeling, Basicconceptof Branding Pricing Basics: Meaning, Importance of pricing, Factors Influencing pricing decisions., Pricing strategies and approaches

Place: The Role of Marketing Channels: Channel functions & flows, channel levels. Channel conflicts and resolution (Overview only) Channel Options: Introduction to Wholesaling, Retailing, Franchising, Direct marketing, E- Commerce Marketing Practices.

Promotion: The role of marketing communications, Elements of promotion mix, IMC approach (Overview)

Course Outcomes:

- CO-1: Identify the key analytical frameworks and tools used in marketing.
- CO-2: Utilize the information of a firm's external and internal marketing environment to identify and prioritise appropriate marketing strategies.
- CO-3: Examine the marketing function and the role it plays in achieving organisational success both in commercial and non-commercial settings
- CO-4: Analyse 4 Ps of marketing and its application across industries.

Books:

- Marketing:Baines, Filland Page, Sinha, Oxford
- MarketingManagement-Kotler,Keller,Koshy, Jha,Pearson,
- MarketingbyLambHair Sharma,McDanielCengage Learning
- MarketingManagement,Ramaswamy&Namakumari,McGrawHill
- MarketingManagement-KKarunakaran,Himalaya PublishingHouse
- MarketingManagement–TextandCases,TapanKPanda,ExcelBooks
- MarketingManagement–J.PMahajan, Vikas
- MarketingManagement-Rudani,S Chand

MBPC1003 FINANCIAL ACCOUNTING AND ANALYSIS (3-0-0)

Course Objectives:

- 1. To familiarize the students with accounting principles and acquaint them with accounting mechanisms, process and systems so as to develop their skills of preparing financial statements.
- 2. To develop their ability to read annual reports and develop their skills to interpret financial statements.
- 3. To familiarize the students with different financial accounting concepts affecting stakeholders.

Module-I:

Introduction to Accounting: Accounting as a language and need for Accounting, Basic Terminologies of Accounting. External and Internal users of Accounting Information, Accounting concepts and conventions, Accounting cycle, Accounting Equations, Nature of GAAP, Need for Accounting Standards, Limitations of Accounting, Ethical Issues in Accounting, Mechanics of Accounting: Introduction, Classification, Double Entry System, Preparing Journal, Subsidiary books, Ledger, preparation of Trial Balance.

Module- II:

Preparation of Financial Statements: Income statement and Balance Sheet, Corporate Accounts: Share and Share Capital, Issue of Shares, Payment in installment, Buyback of shares, Debentures and Bonds, understanding Corporate Income statement and Balance Sheet as presented in the Annual Reports of companies.

Module-III:

Financial Statement Analysis: Analysis and interpretation of Financing Statements, Common size statement, Comparative statement analysis, Trend analysis, Ratio Analysis, Cash Flow Analysis as per IND AS 7.

Course Outcomes:

- CO-1: Explain the role of accounting as a language for financial communication of businesses, and meet the needs of both external and internal users using accounting principles.
- CO-2: Illustrate the complete accounting process, including journalizing transactions, posting them to ledger, maintaining subsidiary books, preparing trial balance and drawing the financial statements for sole traders.
- CO-3: Demonstrate a comprehensive understanding of corporate accounts, including the concepts of shares, share capital, the issuance of shares, instalment payments, share buybacks, and the use of debentures and bonds in corporate financing.
- CO-4: Analyse corporate financial statements using techniques like Common Size Statement, Trend Analysis, Ratio Analysis, and Cash Flow Analysis as per IND AS 7.

Text Books:

- 1. Financial Accounting for Management; Paresh Shah, Oxford
- 2. Financial Accounting A managerial Perspective-Bapat & Raitha, McGrawHill
- 3. Financial Accounting for Managers-Sanjay Dhamija, Pearson
- 4. Accounting for Business Managers- Sakshi Vasudeva, HPH
- 5. Financial Accounting for Management, A.K. Bhattacharya
- 6. Financial Accounting for Management, Narayanswamy
- 7. Financial Accounting by S.N Maheswari Vikas Publications
- 8. Financial Accounting by Satapathy, Mohapatra, Patra, Vrinda

MBPC1004 CORPORATE FINANCE (3-0-0)

Course Objectives:

- 1. To provide students with concepts, techniques and tools of Financial Management.
- 2. To study, analyze and improve their knowledge on financial management practices of an organization

Module I:

Foundations of Finance: Nature &Scope. Organization of Financial Functions. Emerging role of FMs in India and in Global context. Financial Goal. Agency problems. Time value of money, Compounding and discounting. Short term and long-term sources of fund.

Module II:

Investment Decisions. Capital Budgeting: Features, types and Techniques of capital budgeting decision. Cost of Capital. Financing Decision: Operating Leverage, Financial

Leverage. Capital structure. Theory and Policy. Dividend Decision Dividend Theory, Dividend Policy.

Module III:

Current Assets Management: Working Capital concepts, Policies, estimation, factors affecting working capital, Sources of financing Working Capital, Management of Cash: Cash budget, Management of collections and disbursement, Investment of Surplus cash; Management of Receivables: Terms of Credit, Credit Policy decision; Management of Inventory: Techniques of Inventory planning and control.

Course Outcomes:

- CO-1: Explain the foundational concepts including finance functions, financial goals, agency problems, time value of money, risk and return concepts, and various sources of funds.
- CO-2: Interpret the concepts of cost of capital and apply various capital budgeting techniques to evaluate investment proposals.
- CO-3: Describe the capital structure and its theories, analyse the impact of leverage on financing decisions, and apply dividend theories for effective dividend policies.
- CO-4: Identify strategies for effective current assets management including cash, receivables, and inventory to take working capital decisions.

Text Books:

- Fundamentals of Financial Management, Van Horne, Pearson
- Financial Management, G Sudarsan Reddy, HPH
- Essentials of Financial Management, IM Pandey, Vikas
- Financial Management, Khan & Jain, McGraw Hill,
- Financial Management, Srivastav & Misra, Oxford.
- Financial Management Tulsian (S Chand)
- Fundamentals of Financial Management, Brigham, Cengage
- Financial Management by Prasanna Chandra, Tata McGraw Hill

MBPC1005 COST AND MANAGEMENT ACCOUNTING (3-0-0)

Course Objectives:

- 1. To understand the concept Cost accounting & Management Accounting
- 2. To familiarize the students about various methods of costing followed in different organizations
- 3. To understand and apply the various marginal costing techniques for managerial decision making

Module-I

Introduction to Cost Accounting and Management Accounting: Basic concepts: Scopes. Types of Cost, Financial Accounting, Cost Accounting and Management Accounting., Methods of Costing, Techniques of Costing, Classification of Costs, Cost Centre, Cost Unit, Profit Centre, Investment Centre, Preparation of Cost Sheet, Total Costs and Unit Costs.

Module-II

Cost Accounting System: Material Cost Management: Material Cost Valuing material issues and stock, Overheads: Meaning and Importance, production overhead, Primary distribution and Secondary distribution, allocation and apportionment of cost. Absorption by production units, Methods, over and under absorption of overhead.

Module-III

Methods and Techniques: Job Costing, Contract costing and Process Costing, Joint Product and By Products. Service Costing: Transport, Hospital, Canteen, Marginal Costing: Nature and Scope, Marginal Cost Equation, Profit Volume Ratio, Break-even Chart, Application of Marginal Costing Techniques for managerial decision making: Make or Buy decision, selection of Suitable product Mix.

Management Tools: Budgetary Control: Functional budgets, Cost budget, Master Budget, Performance budgeting and Zero based budgeting. Flexible budgets. Standard Costing: Standard cost and standard costing, standard costing and budgetary control. Analysis of variances (Material, Labour and Sales), Cost Reduction and Cost Control.

Course Outcomes:

- CO-1: Acquire, describe and explain fundamental knowledge of cost accounting concepts and identify the various elements to calculate the total cost and unit cost of a product or service.
- CO-2: Evaluate and interpret different methods costing to ascertain and control the costs in manufacturing and service industries.
- CO-3: Use costing techniques for short-term decision-making and product cost analysis.
- CO-4: Illustrate and utilize advanced management tools for budgeting, standard setting, locating variances and evaluation of performance.

Books

- A text book on Cost and Management Accounting, M.N Arora, Vikas
- Cost and Management Accounting, S P jain, K L Narang, Simmi Agrawal, Kalyani
- Cost and Management Accounting, Colin Drury, Cengage Leaning
- Morden Cost and Management Accounting, M.Hanif, Tata McGraw Hill End Pvt.Ltd

MBPC1006 HUMAN RESOURCES MANAGEMENT (3-0-0)

Course Objectives:

- 1. To introduce and explain different phenomenon of Human Resource Management (HRM).
- 2. To enrich the students' understanding on HRM, which may enable them to implement the concepts in theworkplace.

Module I

Concept, Definitions and Objectives of Human Resource Management (HRM); Functions of HRM; Process of HRM; Evolution of HRM; Strategic HRM and its role in the organization; Human Resource Planning (HRP): Meaning and Process, Job analysis: Job description and Job specification; Recruitment: Meaning, Sources, Process and Yield Ratio; Selection: Meaning and Process, Tests and Interviews, Induction and Socialization.

Module II

Performance Appraisal: Meaning, Objective, Process and Methods; Potential Appraisal; Biases in performance appraisal; Methods of job evaluation; Meaning of Compensation; Types of compensation; Types of wages and theories; Wage differentials; Pay structure, Wage Law in India, ExecutiveCompensation.

Module III

Concepts of Career, Career planning process, Career Stages; Training & Development: Concept, Training need analysis and Methods of training (on-the-job and off-the-job training), Evaluation of Training effectiveness; Concepts of Promotion, Transfer and Separation, Organization Citizenship Behaviour, HRIS, Competency mapping, Talent Management, Employee engagement.

Course Outcomes:

- CO-1: Explain & interpret different concepts, Functions & Processes of HRM.
- CO-2: Apply different tools and techniques for managing human resources in an organization.
- CO-3: Analyze, identify problems and develop skill sets in managing human resources in an organizational context.
- CO-4: Integrate the knowledge of HR concepts to Plan and design human resource intervention & strategies for an organization.

Text Books:

- 1. HRM Text &Cases, Aswathappa, TMH.
- 2. Personnel & Human Resource Management, P. Subba Rao, HPH
- 3. Human Resource Management VSP Rao ,Excel
- 4. Human Resource Management, Jyoti Venkates, Oxford
- 5. HR, Denisi and Sarkar, Cengage.

MBPC1007 OPERATIONS MANAGEMENT (3-0-0)

Course Objectives:

- 1. To understand the concepts, principles, problems, and practices of operations management.
- 2. To understand the importance of an effective operations strategy in an organization.
- 3. To understand the various production and operations design decisions and how they relate to the overall strategies of organizations.

Module I

Overview of Operations Management and Capacity Planning: Operations in Manufacturing and Services, Responsibility of Operations Manager, Operations Strategy and Competitiveness, Process Analysis, Job Design and Work Measurement; Capacity Planning – Concept, Types of capacity; Aggregate Planning – Relevant cost and strategies.

Module II

Facility Location and Layout, Inventory Management: Facility location - Factors, Techniques (single facility and multi-facility), Factor Rating Method, Centroid Method; Facility Layout - Concept, Types of layouts and Line Balancing, Inventory Management - concept, EOQ, MRP.

Module III

Scheduling, Project Management and Quality Management: Scheduling; Gantt Chart; Project Management – concept and technique PERT and CPM; Quality management – concept, quality design, control chart (X, R, P), TQM, introduction to ISO 9000 ISO14000 (EMS), ISO 18000 (OHSAS) and ISO 22000.

- CO-1: Identify the elements of operations management and various transformation processes to enhance productivity and competitiveness.
- CO-2: Analyse and evaluate various facility alternatives and their capacity decisions, develop a balanced line of production & scheduling and sequencing techniques in operation environments.
- CO-3: Develop aggregate capacity plans and MPS in operation environments.
- CO-4: Plan and implement suitable quality control measures in Quality Circles to TQM.

Text Books:

- 1. Production and Operations Management, K. Aswathappa, K. S.Bhat,HPH
- 2. Operations Management, Chase et.al Tata McGrawHill.
- 3. Production and Operations Management , Panneerselvam ,PHI
- 4. Production and Operations Management, S.N Chary, Tata McGrawHill
- 5. Operations Management, Meenakhi Kumari, Cengage
- 6. Production and Operations Management, Kaniska Bedi, Oxford
- 7. Production & Operations Management, SP Singh, VikasPublication
- 8. Essentials of Operations Management by Scott T Young SagePublication

MBPC1008 BUSINESS ANALYTICS (3-0-0)

Course Objectives:

- 1. Provide foundational knowledge of business analytics concepts (descriptive, predictive, and prescriptive) and their application to business decision-making.
- 2. Develop skills in data management and visualization using tools like R programming and exploratory data analysis (EDA).
- 3. Introduce advanced predictive analytics techniques, including regression, classification, and time-series forecasting.
- 4. Highlight real-world business analytics applications in marketing, finance, and supply chain management.

Module-I

Introduction to Business Analytics and its importance, Types of Analytics- Descriptive, Predictive, Prescriptive, Business Analytics Framework and Applications, Data Management and Governance- Data Collection, Cleaning, Integration and Data Warehousing and ETL Processes, Data-Driven Business Models

Module-II

Introduction R Programming, Descriptive Analytics Techniques- Exploratory Data Analysis (EDA), Descriptive Statistical Techniques (e.g., mean, median, mode), Data Visualization and Reporting, Predictive Analytics Techniques-Regression Analysis, Classification Models, Time-Series Forecasting, Clustering.

Module-III

Big Data Analytics Framework and Technologies, Industry Application- Marketing Analytics, Financial Analytics, Supply Chain Analytics, Customer Segmentation, Churn Analysis, and Risk Management, Real-World Case Studies in Business Analytics

The course aims to help students:

- CO-1: Apply business analytics techniques to solve practical problems.
- CO-2: Use tools like R programming to analyze and visualize data.
- CO-3: Understand predictive analysis methods such as regression and classification.
- CO-4: Gain skills in marketing, finance, and supply chain analytics.
- CO-5: Analyze big data to improve strategic decision-making.

Text Books

- 1. Prasad, R.N., & Acharya, S. (2011), Fundamentals Of Business Analytics. John Wiley & Sons.
- 2. Kumar, U.D. (2017). Business Analytics: The Science of Data-driven Decision Making. Wiley India.
- 3. JuliantPallant "SPSS Survival: A step by step guide to data analysis using IBM SPSS" McGraw Hill Education.
- 4. Daniel G. Murray "Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software" 2ndEdition

MBPC1009 MANAGEMENT INFORMATION SYSTEM (3-0-0)

Course Objectives:

- 1. Introduce foundational concepts, frameworks, and types of Management Information Systems (MIS) for effective implementation and management.
- 2. Familiarize students with strategic and operational systems like ERP, SCM, CRM, and their role in managing business functions.
- 3. Provide insights into emerging technologies, such as cloud computing and IoT, and their impact on business processes.
- 4. Develop skills in utilizing decision support and knowledge management systems for informed decision-making.

Module I

Introduction to MIS and Data Management

Introduction to MIS, Types of MIS, CCR framework, MIS capabilities, Role of Managers in IT Implementation and Adoption, Knowledge Management – Decision Support Systems, Expert Systems, Learning Management Systems, Executive Information Systems, Database Management Systems (DBMS) Concepts, Data Warehousing and Foundations of Business Intelligence

Module II

Strategic and Operational Support Systems

Strategic Enterprise Systems - ERP, SCM, CRM, SRM. Operational Support Systems - Manufacturing Systems, Sales and Marketing Systems, HRIS, Finance and Accounting Systems, Production and Inventory Systems. IT Strategy and Balanced Scorecard – IT strategies, IT- business alignment, balanced scorecard, cloud and vendor strategies

Module III

Emerging Technologies and Ethical Issues

Mobile and E-commerce – B2C, B2B and e-procurement, C2C and mobile commerce. Emerging Technologies – Cloud computing, Big Data Technologies, Internet of Things, Bring Your Own Device (BYoD,) Virtual Reality, Augmented Reality, Blockchain, Artificial Intelligence

The course aims to help students:

- CO-1: Apply MIS concepts to analyze and solve business problems using technology-drivenapproaches.
- CO-2: Align IT strategies with business goals, effectively managing enterprise systems.
- CO-3: Leverage emerging technologies to identify innovation opportunities.
- CO-4: Use decision support and knowledge management systems for effective decision-making.

Text Books:

- 1. Louden, D. (2018). Management Information Systems: Managing the Digital Firm (15th ed.). Pearson.
- 2. R. De. (2018) MIS managing information system in business, government and society, publisher: willy. Second edition
- 3. Davis, G.B., & Olson, M.H.(2016). Management Information System. Tata McGraw-Hill.

MBPC1010 STRATEGIC MANAGEMENT (3-0-0)

Course Objectives:

- 1. To learn the major initiatives taken by a company's top management on behalf of corporates, involving resources and performance in businessenvironment.
- 2. To specify the Organization's mission, vision and objectives and developpolicies.
- 3. To understand the analysis and implementation of strategic management in strategic business units.

Module I

Strategy and Process: External & Internal Environment – Strategic Advantage Profile (SAP), Environmental Threat Opportunity Profile (ETOP), SWOC Analyses -Conceptual framework for strategic management, the Concept of Strategy and the Strategic Management Process – Stakeholders in business – Vision, Mission, Purpose, Objectives and Goals – Strategic intent – hierarchy of strategy – strategic business unit.

Module II

Industry Structure & Competitive Advantage:

Industry Analysis - Porter's Five Forces Model-Strategic Groups, Competitive Changes during Industry Evolution-Globalization and Industry Structure - Capabilities and competencies-core competencies-Low cost and differentiation - Generic Building Blocks of Competitive Advantage- Distinctive Competencies-Resources and Capabilities durability of competitive Advantage- Sustainable Competitive Advantage - Casestudy.

Module III

Strategy Implementation and Evaluation:

The genericstrategic alternatives – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy- Strategy in the Global Environment-Corporate Strategy-Vertical Integration-Diversification and Strategic Alliances - Mergers & Acquisition (Concept) - Strategic analysis and choice – Business Portfolio Analysis – BCG Matrix and GE 9 Cell Model -Mc Kinsey's 7s Framework - Balance Score Card-case study.

Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic Change-Politics- Power and Conflict-Techniques of strategic evaluation & control-case study, Corporate Social Responsibility.

- CO-1: Interpret the concept of corporate strategy..
- CO-2: Analyse the inter-linkages between the strategy of the organization and the structure of the organization.
- CO-3: Identify the different levels of corporate strategy and able to chart strategies for the organisation that derive from both the external and internal analyses performed.
- CO-4: Examine the reasons for developing Strategies and analyse the resources and capabilities of the organization.

Text Books:

- 1. Strategic Management & Business Policy, Azar Kazmi, TMH,
- 2. Strategic Management, R. Srinivasana, PHI,
- 3. Strategic Management, Haberberg&Rieple, Oxford,
- 4. An Integrated approach to Strategic Management, Hill & Jones, Cengage,
- 5. Strategic Management & Entrepreneurship, D.Acharya& A. Nanda, HPH

MBPC1011 INTRODUCTION TO AI (2-0-0)

Course Objectives:

The meaning behind common AI terminology, including neural networks, machine learning, deep learning, and data science.

- 1. What AI realistically can--and cannot—do
- 2. How to spot opportunities to apply AI to problems in your own organization
- 3. What it feels like to build machine learning and data science projects
- 4. How to work with an AI team and build an AI strategy in your company
- 5. How to navigate ethical and societal discussions surrounding AI

Though this course is largely non-technical, engineers can also take this course to learn the business aspects of AI.

Module-I

What is AI?

Introduction, Machine Learning, What is data? The terminology of AI, What makes an AI company?, What machine learning can and cannot do, More examples of what machine learning can and cannot do, Non-technical explanation of deep learning, Non-technical explanation of deep learning.

Module-II

Building AI Projects

Introduction, Workflow of a machine learning project, Workflow of a data science project, Every job function needs to learn how to use data, How to choose an AI project (Part 1), How to choose an AI project (Part 2), Working with an AI team, Technical tools for AI teams.

Module-III

Building AI in your Company

Introduction, Case study: Smart speaker, Case study: Self-driving car, Example roles of an AI team

AI Transformation Playbook (Part 1), AI Transformation Playbook (Part 2), AI pitfalls to avoid, Taking your first step in AI, Survey of major AI application areas, Survey of major

AI techniques

AI & Society

Introduction, A realistic view of AI, Discrimination / Bias, Adversarial attacks on AI, Adverse uses of AI, AI and developing economies, AI and jobs.

Course Outcomes:

- CO-1: After completing the course, the students will be able to:
- CO-2: Recognize fundamental AI concepts and vocabulary, discerning prominent figures in AI enterprises.
- CO-3: Apply project methodologies in machine learning and data science, demonstrating adeptness in selecting and managing AI activities.
- CO-4: Analyze deployment of AI solutions, and integrating advanced collaborative technologies for team synergy.
- CO-5: Evaluate ethical dimensions of AI, perceptive biases, vulnerabilities, and societal consequences, development ethical awareness.

Reference Course Link

Course Link: https://www.coursera.org/learn/ai-for-everyone

MBPC1201 IT SKILLS FOR MANAGERS (0-0-2)

Course Objectives:

The aim of this course is:

- 1. Familiarize learners with essential office software tools and their applications in various settings.
- 2. Provide hands-on experience with Google Services and their integration into daily tasks.
- 3. Equip learners with Excel skills for efficient data analysis and reporting.
- 4. Introduce learners to the fundamentals of Database Management Systems (DBMS) and SQL for effective data management.

Module-I: Introduction to Office Software: Types of Office Software, Working with Google Services: Docs, Spreadsheet, Presenter, Sites, etc.

Module-II: Introduction to Advanced Excel: Getting started with Excel, working with Formulas & Functions and creating Charts & Graphs, Date Functions, Look Function. Statistical tools – use statistical functions such as average, Standard Deviation, IF function etc. Data analysis by using What IF, PIVOT table, Scenarios, Goal seek.

Module-III: Introduction to Database Management Systems (DBMS): Introduction to databases and their role in business, Types of databases (Relational, NoSQL, etc.), Database Management System (DBMS) functionalities, Advantages and limitations of using a DBMS, Entity-Relationship (ER) Diagrams for data modeling, Normalization Techniques (1NF, 2NF, 3NF)

Introduction to SQL (Structured Query Language), SQL concepts and syntax, Data Definition Language (DDL) - CREATE, ALTER, DROP statements, Data Manipulation Language (DML) - SELECT, INSERT, UPDATE, DELETE statements, working with queries (filtering, sorting, grouping, joining data).

After completing the course, the students will be able to

- CO-1: Proficiently apply the knowledge gained with essential office software tools and their diverse applications across various settings.
- CO-2: Effectively integrate Google Services into their tasks, enabling streamlined workflows and enhanced productivity.
- CO-3: Demonstrate competency in utilizing Excel for data analysis, including functions, formulas, and statistical tools.
- CO-4: Gain proficiency in the principles of DBMS, encompassing database types, normalization, and SQL syntax, for efficient data management.

Reference Books:

- Foundations of Computing, 5th Edition, Sinha and Sinha, bpb publication
- Microsoft Excel Data Analysis and Business Modeling (Office 2021 and Microsoft 365) (Seventh Edition, Wayne L. Winston, PHI
- SQL ALL-IN-ONE, dummies for A Wiley Brand, 3rd Edition

MBQT1001 QUANTITATIVE TECHNIQUES (3-0-0)

Course Objectives:

- 1. To lay an adequate theoretical foundation to study various applied fields in statistics and decision science.
- 2. To understand role of quantitative techniques in managerial decision making.
- 3. To understand applications of various quantitative techniques in managerial settings.

Module-I

Statistical Methods:

Measures of central tendency and dispersion: Standard Deviation, Simple Correlation, calculation of correlation coefficient, probable error, Rank correlation. Regression: Linear regression, calculation of regression coefficients,

Module II

Linear Programming: Concept, Formulation & Graphical and Simplex Solution, Assignment Models: Concept, Flood's Technique / Hungarian Method, applications including restricted & multiple assignments. Transportation Models: Concept, Formulation, Problem types: Balanced, Unbalanced, Minimization, Maximization Basic initial solution using North West Corner, Least Cost & VAM, and Optimal Solution using MODI.

Module-III

Queuing Theory: Concept, Single Server (M/M/I,), Markov Chains & Simulation Techniques: Markov chains: Applications related to management functional areas, Decision Theory: Concept, Decision under risk (EMV) & uncertainty, Game Theory: Concept, Two players zero sum game theory with dominance, Pure & Mixed Strategy.

Course Outcomes:

CO-1: Demonstrate proficiency with statistical analysis of data. To lay adequate theoretical foundation to study various applied fields in statistics. To know how global business decisions depends on the statistical analysis of data and specific relationship between two or more variables.

- CO-2: Develop the ability to build and assess data-based models. Quantitative analysis of data, problem solving approach and use of mathematical techniques.
- CO-3: Recognize the importance and value of Operations Research and linear programming in solving practical problems in real business world. Interpret the transportation models' solutions and infer solutions to the real-world problems. Optimize the allocation of resources to Demand points in the best possible way using various techniques and minimize the cost or time of completion of number of jobs by number of persons.
- CO-4: Recognize and solve game theory and Markove's chain. Know when simulation and dynamic programming can be applied in real world problems.
- CO-5: Learn the context around which decisions must be taken, evaluate all factors involved developing possibilities, how to assess each possibility against set criteria to identify the best option and then how to develop that into a successful decision. Develop leadership quality to handle projects in real situation by using scientific tools, and implement suitable quality control measures.

Text Books

- 1. Quantitative Techniques for Management, Levine, Krehbiel, Berenson, Pearson
- 2. Quantitative Techniques in Management by N.D. Vohra Tata, McGraw Hill
- 3. Quantitative Techniques-Davis.B, Oxford
- 4. Operations Research by R. Pannerselvam, Prentice Hall
- 5. Statistics for Business and Economics; R P Hooda, Vikas
- 6. Operations Research by Nita Shah, Ravi Gor, Hardik oni, PHI
- 7. Business Statistics : J K Sharma, Vikas

MBQT1002 BUSINESS RESEARCH (3-0-0)

Course Objectives:

- 1. To equip the students with the basic understanding of the research methodology in changing business scenario.
- 2. To provide an insight into the application of dynamic analytical techniques to face the challenges, aimed at fulfilling the objective of business decision making.
- 3. To equip the students with the basic understanding of the research methodology in changing business scenario.
- 4. To provide an insight into the application of dynamic analytical techniques to face the stormy challenges, aimed at fulfilling the objective of business decision making.
- 5. To gain practical experience in using MS Excel and SPSS for forecasting and estimation.

Module I

Introduction to RM:

Meaning and significance of research. Importance of scientific research in business decision making. Types of research and research process. Identification of research problem and formulation of hypothesis. Research Designs. Primary data, Secondary data, Design of questionnaire; Sampling fundamentals and sample designs. Measurement and Scaling Techniques, Data Processing. Ethical conduct in research.

Module II

Data Analysis – I: Hypothesis testing; Z-test, t-test, F-test, chi-square test. Analysis of variance (One and Two way). Non-parametric, Test – Sign Test, Run test, Kruskal– Wallis test.

Module III

Data Analysis – II: Factor analysis, Multiple Regressions Analysis. Discriminant Analysis (Concept)

Report writing and presentation: Research Report, Types and significance, Structure of research report, Presentation of report.

Module IV (Business Research Lab: Using MS Excel and SPSS):

Descriptive Statistics in't' test, Testing of hypothesis, Chi-square, ANOVA, Correlation, Regression, Factor Analysis.

Course Outcomes:

- CO-1: Utilize the knowledge of research methodology in solving various business problems.
- CO-2: Distinguish various alternative course of action available for a particular situation.
- CO-3: To introduce students to the tools and techniques of econometrics.
- CO-4: To develop expertise in decision-making through the use of statistical tools and techniques.
- CO-5: Judge and select best possible alternatives to solve business problems

Text Books:

- 1. Research Methodology by Khatua and Majhi, HPH.
- 2. Damodar Gujarati, Dawn C Porter, and Manoranjan Pal, Basic Econometrics, Mc Graw Hill
- 3. Research Methodology by Kothari, Newage
- 4. Research Methodology, by Deepak Chawla / NeenaSandhi (Vikas)
- 5. Management Research Methodology- Krishnaswamy, Pearson

Reference Books:

- 1. BRM by Zikmund / Babin / Carr / Adhikari / Griffin (Cengage)
- 2. Research Methodology, V. Upadade&A. Shende (S. Chand)
- 3. Business Research Methods by Prahlad Mishra, Oxford
- 4. Business Research Method by Cooper et.al, McGrawHill
- 5. Levin. Richard. I and Rubin. David. S'Statistics for Management' Prentice-Hall
- 6. Brooks, Chris., 'Introductory Econometrics for Finance' Cambridge University Press
- 7. Hair, Anderson, Tatham and Black., 'Multivariate Data Analysis' Pearson Education India
- 8. Wooldridge M., Introductory Econometrics: A Modern Approach, Cengage Learning

Open Resources:

1. https://dbie.rbi.org.in/, https://data.oecd.org/